From: <u>Darcy Eggeman</u>
To: <u>DOH WSBOH</u>

Subject: RE: Información actualizada sobre la reunión y aviso de alerta sobre las normas: Formulario CR-102, Propuesta

de reglamentación con excepción para el WAC (por su sigla en inglés, Código Administrativo de Washington)

246-500-055, Reducción de restos humano

Date: Wednesday, February 22, 2023 10:40:31 AM

Attachments: <u>image001.png</u>

External Email

Isn't this still the United States of America?

From: DOH WSBOH < WSBOH@SBOH.WA.GOV> Sent: Wednesday, February 22, 2023 10:38 AM

Subject: Información actualizada sobre la reunión y aviso de alerta sobre las normas: Formulario CR-102, Propuesta de reglamentación con excepción para el WAC (por su sigla en inglés, Código Administrativo de Washington) 246-500-055, Reducción de restos humanos me

Ha recibido este correo electrónico porque recientemente le llegó un aviso de la Mesa Directiva de Salud del Estado de Washington (Mesa Directiva) sobre la reciente presentación de un formulario CR-102, Propuesta de reglamentación con excepción para el WAC 246-500-055, Reducción de restos humanos mediante reducción orgánica natural.

Este correo electrónico es para informarle que el personal de la Mesa Directiva ha cambiado la información del seminario web por Zoom para la audiencia sobre normas al 8 de marzo de 2023. El nuevo enlace para la reunión se incluye en el aviso actualizado que figura a continuación.

La Mesa Directiva de Salud del Estado de Washington (Mesa Directiva), ha presentado una CR-102, Propuesta de elaboración excepcional de norma, para el artículo 246-500-055 del WAC (por su sigla en inglés, Código Administrativo de Washington), "Restos humanos reducidos mediante reducción orgánica natural". Las enmiendas a esta sección de la norma incluyen ediciones administrativas efectuadas a través del proceso de elaboración excepcional de normas de acuerdo con el artículo 34.05.310(4)(d) del RCW (por su sigla en inglés, Código Revisado de Washington) con el fin de corregir errores tipográficos en la norma y aclarar su texto sin cambiar su efecto deseado.

La CR-102 anuncia al público que se propone una norma e incluye el texto propuesto para esta. Se adjuntan las normas propuestas (en inglés).

Puede presentar sus comentarios sobre la norma propuesta de las siguientes maneras:

- 0. Se aceptan **comentarios por escrito** hasta el 27 de febrero de 2023 a través de las opciones indicadas a continuación.
 - 1. Puede enviarlos a la persona de contacto de la Mesa Directiva para esta propuesta de elaboración de norma: molly.dinardo@sboh.wa.gov.
 - 2. Puede enviarlos mediante el servicio postal de EE. UU. a la siguiente dirección:
 - Washington State Board of Health PO Box 47990
 Olympia, WA 98504-7990
- 0. Se aceptarán **comentarios presentados verbales** el 8 de marzo de 2023 durante la audiencia sobre normas abierta al público a partir de la 1:30 p. m.
 - Puede asistir a la reunión en persona y presentar sus comentarios de manera presencial en el lugar físico de la reunión ubicado en la siguiente dirección:

Washington State Department of Labor & Industries 7273 Linderson Way SW Tumwater, WA 98501

O BIEN

 Puede hacer comentarios de forma verbal en línea registrándose en la reunión a través de la plataforma Zoom: https://us02web.zoom.us/webinar/register/WN has7tGYeQ9uKBC9EUwsD9g

Aclaración: Todos los comentarios por escrito que se presenten ante la Mesa Directiva se considerarán parte del expediente oficial de elaboración de la norma, se pondrán a disposición de los miembros de la Mesa Directiva para su consideración y se publicarán en el sitio web de la Mesa Directiva.

Información importante para la audiencia sobre normas:

- La audiencia sobre normas se celebrará de forma presencial en la dirección mencionada anteriormente, y de forma virtual mediante el seminario web por Zoom
- Para formular una declaración verbal a través del seminario web por Zoom, deberá acceder a la reunión utilizando su computadora de escritorio, computadora portátil o dispositivo móvil. Su computadora de escritorio, computadora portátil o dispositivo móvil debe contar con parlantes y un micrófono.
- Si desea solicitar servicios de interpretación al español para la audiencia, comuníquese con Melanie Hisaw, miembro del personal de la Mesa Directiva, por correo electrónico a Melanie. Hisaw@sboh.wa.gov.

Para obtener más información sobre esta norma, puede:

- 1. Visitar el sitio web de la norma sobre manipulación de restos humanos ; o
- Enviar un correo electrónico al personal de la Mesa Directiva a <u>Molly.Dinardo@sboh.wa.gov</u>.

Gracias.



(360) 236-4110

P.O. Box 47990, Olympia, WA 98504-7990

<u>Ubicación</u> <u>Sitio web</u> <u>Correo electrónico</u> <u>Facebook</u> <u>Twitter</u> <u>Subscríbase</u>

Este anuncio se envía tanto a la lista de distribución general de la Mesa Directiva como a la lista de distribución relativa a la norma sobre manipulación de restos humanos. Nos disculpamos por cualquier duplicación.

From: Henry Callahan
To: DOH WSBOH

Subject: Re: Información actualizada sobre la reunión y aviso de alerta sobre las normas: Formulario CR-102, Propuesta

de reglamentación con excepción para el WAC (por su sigla en inglés, Código Administrativo de Washington)

246-500-055, Reducción de restos hum...

Date: Saturday, February 25, 2023 8:32:27 AM

Attachments: image001.png image001.png

External Email

English please

On Wed, Feb 22, 2023, 10:38 AM DOH WSBOH < WSBOH@sboh.wa.gov > wrote:

Ha recibido este correo electrónico porque recientemente le llegó un aviso de la Mesa Directiva de Salud del Estado de Washington (Mesa Directiva) sobre la reciente presentación de un formulario CR-102, Propuesta de reglamentación con excepción para el WAC 246-500-055, Reducción de restos humanos mediante reducción orgánica natural.

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de las opciones indicadas a continuación.

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Gracias.



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Este anuncio se envía tanto a la lista de distribución general de la Mesa Directiva como a la lista de distribución relativa a la norma sobre manipulación de restos humanos. Nos disculpamos por cualquier duplicación.

Bill Osmunson DDS MPH bill@teachingsmiles.com

1418 112th Ave NE, Bellevue, WA. 98004. 425.466.0100

January 10, 2023

Dear Washington State Board of Health Members Keith Grellner, Chair; Kelly Oshiro, JD, Vice Chair; Socia Love-Thurman, MD; Stephen Kutz, BSN, MPH; Dimyana Abdelmalek, MD, MPH; Patty Hayes, RN, MN; Melinda Flores, Elisabeth Crawford, and Umair Shah Umair Shah, MD, MPH, wsboh.wa.gov.

RE: The FDA (US Food and Drug Administration) has not approved (through the drug approval process) the ingestion of fluoride, with intent to prevent dental caries, in any form or dosage.

Attachment: FDA warning letter to Kirkman Labs, 1/13/16 their fluoride products are unapproved and misbranded.

Attachment: FDA warning letter to DS Waters of America, June 8, 2009. "Your product label has serious violations. . . ." "Health claims may not be made for food products, including bottled water, for which the label represents or purports that the food is for infants or toddlers less than two years of age. . . "

The WSBOH in the FOI request, responded with 26,000+ pages, does not have any empirical published studies to demonstrate the FDA is in error, that the WSBOH has jurisdiction over drug approval or exempt, that fluoride ingestion is safe, or evidence the Board has attempted to make any label for fluoridation, etc. Endorsements are not empirical evidence.

Remember, the Board of Pharmacy determined fluoride to be a legend (prescription drug) to be dispensed by a licensed health care provider to their patient of record. The WSBOH is promoting a product which is well known to the public to be dispensed with intent to prevent disease and if fluoride is not a drug then it is a poison according to Washington statutes, (documentation previously sent to the WSBOH).

Dosage is uncontrolled; although concentration is controlled. Some drink no public water and others drink over 10 liters/day. Dosage is uncontrolled. Current published research has report about 70% of our young have dental fluorosis, a biomarker of excess fluoride ingestion. I treat dental fluorosis a known risk of harm from too much fluoride ingestion which the WSBOH is causing.

With FDA approval of a drug, the dosage (milligrams per kilogram of body weight per day) is controlled and risks which may be known at that time are stated in the label so the patient and clinician can make an individual judgment based on the best available science. Fluoridation of public water is without a label of dosage and adverse effects, is misbranded and adulterated and contaminated with the waste product of the fertilizer industry.

The ingestion of fluoride has not gone through the FDA drug approval process. The FDA has stated that the evidence for efficacy is incomplete. A judgment of harm and dosage comes after the determination of efficacy. The WSBOH has failed to determine efficacy, dosage, or label.

Without FDA approval, the Board of Health in Washington State has assumed the oversight drug approval role of the US Food and Drug Administration for scientific efficacy, dosage and safety approval of fluoride ingestion. And it gets worse. The WSBOH approves the administration of fluoride to every person without patient consent, without control of dosage (not everyone drinks the same amount of

water), without knowing how much the patient already ingests from other sources such as toothpaste, and without regards for age or health of the patient or even if the patient has teeth.

Proponents will counter that bottled water with fluoride and label is FDA approved. Yes, Congress provided manufacturers a method to circumvent the drug approval process if other agencies of the government approve. Fluoride in bottled water did not go through the drug approval process and does not have an NDA number.

There are many streams of evidence which need to be considered to build an understanding for judgment on fluoride ingestion. Science is and should be controversial, that is how we discover. Science should never be stagnant and always questioned so we can improve. Protecting the public requires careful analysis of the science as more is constantly published.

We all intend to do good. We profit from selling our research to demonstrate efficacy to promote our pills and surgeries. Risk and harm provide little financial incentive for research or to stop our pills or avoid our surgeries. Harm and risk tend to be minimized, ignored, set aside, and glossed over in our enthusiasm to celebrate our good intentions. After all, no one makes money not selling their product.

When a clinician treating a patient makes a mistake, the patient can be harmed and has recourse in the courts. When Public Health makes a policy mistake, millions can be harmed, and the public has no realistic recourse.

My request is for the WSBOH to review science rather than the endorsements of believers and clearly provide the public on the Board's web site the primary research on efficacy, dosage, safety, with a label. That is your job with jurisdiction over fluoridation of public water. I am very willing to help or an Ad Hoc Committee can be set up to write a label. At a minimum, the WSBOH must at least accept the FDA's warnings.

Sincerely,

Bill Osmunson DDS MPH

Bill Osmunson DDS MPH bill@teachingsmiles.com

1418 112th Ave NE, Bellevue, WA. 98004. 425.466.0100 January 12, 2023

Dear Washington State Board of Health Members Keith Grellner, Chair; Kelly Oshiro, JD, Vice Chair; Socia Love-Thurman, MD; Stephen Kutz, BSN, MPH; Dimyana Abdelmalek, MD, MPH; Patty Hayes, RN, MN; Melinda Flores, Elisabeth Crawford, and Umair Shah Umair Shah, MD, MPH, wsboh@sboh.wa.gov.

RE: Community Water Fluoridation Dental Fluorosis Harm: Dental fluorosis is caused by excess fluoride ingestion prior to tooth eruption and is both known and undisputed cosmetic and functional damage. A label or legend for community water fluoridation is requested.

Some gang members scratched their logo on the hood of my car. Just cosmetic damage, but the cost to repair was estimated at about \$5,000. Damage is the cost not the repairs. The car ran fine and the damage only "cosmetic," but indeed damage.

Dental fluorosis is usually considered a cosmetic blemish by dentists. . . compared to the black mercury and gold fillings we have placed. However, patients often disagree.

However, an EPA study¹ funded by the EPA with fluoride concentrations between 1.0-4.0 mg/L, the same dosage as many drinking fluoridated water but more than the mean amount of water, evaluated the cost of treating dental fluorosis, reporting:

"A mean cost for all consultants shows that the estimated costs for restoring function exceeds the cosmetic costs in all categories except the minimum later costs. This represents a new finding and raises an issue that has been overlooked or ignored by previous investigators and the profession. i.e. that repair of the cosmetic discoloration was the only cost involved; or that repair of dysfunction was never considered to be a problem."

¹Collins, E., V. Segreto, H. Martin, AND H. Dickson. ANALYSIS OF COSTS FOR THE TREATMENT OF DENTAL FLUOROSIS. U.S. Environmental Protection Agency, Washington, D.C., EPA/600/5-87/001 (NTIS PB87170817), 1987. Revised 2005. [EPA Link], However, Data Revised 08/02/2022 and no longer contains all original data.

All consultants do not appear to have been cosmetic dentists nor did they estimate lifetime costs.

A normal ideal smile with healthy teeth, no fluorosis detected is below. She was raised predominantly on mother's milk and no formula was made with fluoridated water.



For comparison, the patient below was diagnosed with Dean's Fluorosis Index of 4, "discrete or confluent pitting," moderate to severe dental fluorosis and functional damage having chipped, pitted, and warn teeth.



He was raised mostly on formula made with fluoridated water. Although the timing suggests he

ingested fluoride from other sources, mom was confident significant fluoridated toothpaste was

not swallowed and no fluoride supplements ingested. Lifetime repairs estimated at \$72,000.

Although public health professionals and many dentists suggest he only has cosmetic blemishes,

the patient and mother considered the dental fluorosis to be actual harm.

Treatment options can be expensive, and damage estimated at 30 times the cost savings of dental

caries mitigation. A study ² of adolescents at 12 years of age reported 52% had fluorosis at a

fluoride concentration of 0.7 mg/. Of the subjects, 95% wished to remove the spots. In contrast to

the subjects reported concern, only 14.5% had professionally diagnosed mild, moderate or severe

dental fluorosis. The NHANES CDC published studies report even more children have dental

fluorosis in the USA, about 70%. Clearly, patients do not like the stigmatic harm caused by the

WSBH policy. The contribution of fluoride to total exposure is authority administered iatrogenic

harm.

The WSBH must protect the public with a legend/label for the prescription drug they add to

public water with the intent to prevent dental caries. My comment to the Board of 1/10/2023

contains FDA language which is a good starting point.

Sincerely,

Bill Osmunson DDS MPH



U.S. Food and Drug Administration



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CFSAN/Office of Nutritional Products, Labeling, and Dietary Supplements October 14, 2006

Health Claim Notification for Fluoridated Water and Reduced Risk of Dental Caries

Under section 403(r)(3)(C) (21 U.S.C. §343(r)(3)(C)) of the Federal Food, Drug, and Cosmetic Act (Act), a manufacturer may submit to the Food and Drug Administration (FDA) a notification of a health claim based on an authoritative statement from an appropriate scientific body of the United States Government or the National Academy of Sciences (NAS) or any of its subdivisions. The notification must be submitted to FDA at least 120 days before the food is introduced into interstate commerce. The claim may be made after 120 days from the date of submission of the notification until such time as 1) FDA issues a regulation prohibiting or modifying the claim or finding that the requirements for making the claim have not been met, or 2) a district court in an enforcement proceeding has determined that the requirements for making the claim have not been met.

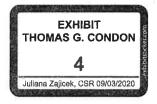
On June 16, 2006, the FDA received a notification (the June 16 notification) from the law firm of Covington and Burling regarding a health claim for the relationship between fluoridated water and a reduced risk of dental caries. The 120-day period from the date of submission of the June 16 notification was October 14, 2006. Therefore, after October 14, 2006, manufacturers may use the claim specified in the notification, as modified by the notifier in a letter to FDA dated October 13, on the label and in labeling of any food product that meets the eligibility criteria described below, unless or until FDA or a court acts to prohibit the claim.

The June 16 notification cites statements from several sources as authoritative statements for the claim. FDA reviewed the sources and cited statements in their context and in light of existing authorized health claims and current science. The following three statements are considered authoritative for purposes of this notification.

Recommendation for Using Fluoride to Prevent and Control Dental Caries in the U.S. (Centers for Disease Control, 2001):

"Widespread use of fluoride has been a major factor in the decline in the prevalence and severity of dental caries (i.e., tooth decay) in the United States and other economically developed countries. When used appropriately, fluoride is both safe and effective in preventing and controlling dental caries. All U.S. residents are likely exposed to some degree of fluoride, which is available from multiple sources." (Summary section, page 1)

"Continue and extend fluoridation of community drinking water: Community water fluoridation is a safe, effective, and inexpensive way to prevent dental caries. This modality benefits persons in all age groups and of all SES," (Recommendation section, page 24)



DS-006370

Oral Health in America: A Report of the Surgeon General (2000):

"Community water fluoridation is safe and effective in preventing dental caries in both children and adults. Water fluoridation benefits all residents served by community water supplies regardless of their social or economic status. Professional and individual measures, including the use of fluoride mouth rinses, gels, dentifrices, and dietary supplements and the application of dental sealants, are additional means of preventing dental caries." (Executive summary)

Review of Fluoride: Benefits and Risks (Public Health Service, 1991):

"Extensive studies over the past 50 years have established that individuals whose drinking water is fluoridated show a reduction in dental caries. Although the comparative degree of measurable benefit has been reduced recently as other fluoride sources have become available in non-fluoride areas, the benefits of water fluoridation are still clearly evident." (Conclusions section, page 87)

According to the June 16 notification and the letter to FDA dated October 13, the food eligible to bear the claim is bottled water meeting the standards of identity and quality set forth in 21 CFR 165.110, containing greater than 0.6 and up to 1.0 mg/L total fluoride, and meeting all general requirements for health claims (21 CFR 101.14) with the exception of minimum nutrient contribution (21 CFR 101.14 (e) (6)). The claim language is: "Drinking fluoridated water may reduce the risk of [dental caries or tooth decay]." In addition, the health claim is not intended for use on bottled water products specifically marketed for use by infants.

The notification and materials regarding the claim are publicly available from the FDA Division of Dockets Management (Docket No.2006Q-0418). Persons interested in these documents may view them at the Division of Dockets Management from 9am to 4pm, Monday through Friday at 5630 Fishers Lane, room 1061, Rockville, MD 20852. The Division of Dockets Management may be contacted at 301-827-6860. FDA also intends to make the documents available on the Dockets web site at http://www.fda.gov/ohrms/dockets/dockets/dockets.htm, under Docket No. 2006Q-0418.

Food Labeling and Nutrition

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FDA/Center for Food Safety & Applied Nutrition Hypertext updated by dav/cim October 18, 2006

U.S. FOOD & DRUG

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Inspections, Compliance, Enforcement, and Criminal Investigations DS Waters of America, LP 6/8/09



Department of Health and Human Services

Public Health Service Food and Drug Administration 5100 Paint Branch Parkway College Park, MD 20740

JUN - 8 2009

WARNING LETTER

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. Stewart E. Allen Mr. Dillon Schickli Chief Executive Officers DS Waters of America, Inc. 5660 New Northside Drive, Suite 500 Atlanta, GA 30328

Re: CFSAN-OC-WL09-03

Dear Mr. Allen and Schickli:

EXHIBIT THOMAS G. CONDON Juliana Zajicek, CSR 09/03/2020

The Food and Drug Administration (FDA) has reviewed the label for the 1 Gal (3.78L) package of your NURSERY@ Purified Water with added fluoride, and your website at www.nurserywater.com in April 2009. Based on our review, we have found that your product label has serious violations of the Federal Food, Drug, and Cosmetic Act (the Act) and the applicable regulations in Title 21, Code of Federal Regulations (21 CFR). You can find the Act and these regulations through links on FDA's Internet website at www.fda.gov.

Your significant violations are as follows:

Your product is misbranded within the meaning of section 403(r)(1)(B) of the Act [21 U.S.C. 343(r)(1)(B)], because it bears an unauthorized health claim in its labeling. We have determined that your website www.nurserywater.com. the address for which appears on your product's label, is labeling for your product under section 201(m) of the Act [21 U.S.C. 321(m)]. This website bears the following unauthorized health claim: "Drinking water with added fluoride in the proper amounts has been shown to be so effective that the ADA supports municipal water fluoridation and refers to this as the single most effective measure to prevent tooth decay." Health claims may not be made for food products, including bottled water, for which the label represents or purports that the food is for infants or toddlers less than two years of age, unless FDA has provided for such claim by regulation. 21 CFR 101.14(e)(5), 1

Your product is misbranded within the meaning of section 403(q) of the Act [21 U.S.C. 343(q)] in that nutrition facts information is not in an appropriate format as defined in 21 CFR 101.9. The Nutrition Facts panel uses abbreviations for serving size and servings per container that are not in accordance with 21 CFR 101.9(j)(13)(ii)(B), which provides that the use of specific abbreviations to list nutrients is only for packages that have a total surface area available to bear labeling of 40 or less square inches. In addition, the correct heading on the Nutrition Facts panel for declaring the quantity of a nutrient is "% Daily Value" (not "Amount") in accordance with 21 CFR 101.9(d)(6).

This letter is not meant to be an all-inclusive review of your NURSERY® Purified Water product and its labeling. It is your

responsibility to ensure that all of your products are in compliance with the laws and regulations enforced by FDA. You should take prompt action to correct the violations described above and prevent their recurrence. Failure to promptly correct these violations may result in regulatory action without further notice, such as seizure and/or injunction.

Please respond in writing within fifteen (15) working days from your receipt of this letter. Your response should include each step that has been or will be taken to completely correct the labeling violations and to prevent the recurrence of similar violations, the time within which the correction will be completed, and any documentation necessary to show that the correction has been achieved. If applicable, please include a copy of your revised label. If corrective actions cannot be completed within fifteen (15) working days, state the reason for the delay and the time within which the corrections will be completed.

In addition, we have the following comments:

- The serving size of your NURSERY® Purified Water product is based on 8 fluid ounces. While FDA has not established a reference amount customarily consumed (RACC) for water by infants and toddlers, we recommend that you use the infant and toddler RACC for juices, which is 4 fl oz (120 mL) [21 CFR 101.12(b), Table I (Juices, all varieties)].
- Although minerals are added for taste, the statement of identity does not include this information (e.g., "purified water with minerals added for taste") [60 FR 57076 at 57080 and 57082, November 13, 1995].

If you need additional information or have questions concerning any products distributed through your website, please contact FDA. You may respond in writing to Felicia Binion Williams, Compliance Officer, Division of Enforcement, Center for Food Safety and Applied Nutrition, Food and Drug Administration, 5100 Paint Branch Parkway, College Park, MD 20740.

Sincerely,

/s/

Roberta F. Wagner Director Office of Compliance Center for Food Safety and Applied Nutrition

(b)(4)

1. FDA notes that the following claim regarding fluoridated water and reduced risk of dental caries or tooth decay may be made consistent with a health claim notification under section 403(r)(3)(C) of the Act [21 U.S.C. 343(r)(3)(C)]: "Drinking fluoridated water may reduce the risk of [dental caries or tooth decay]." [www.cfsan.fda.gov/~dms/flfluoro.html]. However, the prohibition under 21 CFR 101.14(e)(5) applies to these health claim notifications, and this notification explicitly excluded bottled water products that are specifically marketed for use by infants, and therefore your product is not eligible to bear this health claim. Furthermore, the language of the claim on your website differs significantly from the language in the claim in the notification.

Page Last Updated: 11/17/2009

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4

U.S. Department of Health & Human Services

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U.S. Food and Drug Administration

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CFSAN/Office of Nutritional Products, Labeling, and Dietary Supplements October 14, 2006

Health Claim Notification for Fluoridated Water and Reduced Risk of Dental Caries

Under section 403(r)(3)(C) (21 U.S.C. §343(r)(3)(C)) of the Federal Food, Drug, and Cosmetic Act (Act), a manufacturer may submit to the Food and Drug Administration (FDA) a notification of a health claim based on an authoritative statement from an appropriate scientific body of the United States Government or the National Academy of Sciences (NAS) or any of its subdivisions. The notification must be submitted to FDA at least 120 days before the food is introduced into interstate commerce. The claim may be made after 120 days from the date of submission of the notification until such time as 1) FDA issues a regulation prohibiting or modifying the claim or finding that the requirements for making the claim have not been met, or 2) a district court in an enforcement proceeding has determined that the requirements for making the claim have not been met.

On June 16, 2006, the FDA received a notification (the June 16 notification) from the law firm of Covington and Burling regarding a health claim for the relationship between fluoridated water and a reduced risk of dental caries. The 120-day period from the date of submission of the June 16 notification was October 14, 2006. Therefore, after October 14, 2006, manufacturers may use the claim specified in the notification, as modified by the notifier in a letter to FDA dated October 13, on the label and in labeling of any food product that meets the eligibility criteria described below, unless or until FDA or a court acts to prohibit the claim.

The June 16 notification cites statements from several sources as authoritative statements for the claim. FDA reviewed the sources and cited statements in their context and in light of existing authorized health claims and current science. The following three statements are considered authoritative for purposes of this notification.

Recommendation for Using Fluoride to Prevent and Control Dental Caries in the U.S. (Centers for Disease Control, 2001):

"Widespread use of fluoride has been a major factor in the decline in the prevalence and severity of dental caries (i.e., tooth decay) in the United States and other economically developed countries. When used appropriately, fluoride is both safe and effective in preventing and controlling dental caries. All U.S. residents are likely exposed to some degree of fluoride, which is available from multiple sources." (Summary section, page 1)

"Continue and extend fluoridation of community drinking water: Community water fluoridation is a safe, effective, and inexpensive way to prevent dental caries. This modality benefits persons in all age groups and of all SES," (Recommendation section, page 24)

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THIERS Zajicek, CSR 09/03/2020

DS-006370

http://www.cfsan.fda.gov/~dms/flfluoro.html

Oral Health in America: A Report of the Surgeon General (2000):

"Community water fluoridation is safe and effective in preventing dental caries in both children and adults. Water fluoridation benefits all residents served by community water supplies regardless of their social or economic status. Professional and individual measures, including the use of fluoride mouth rinses, gels, dentifrices, and dietary supplements and the application of dental sealants, are additional means of preventing dental caries." (Executive summary)

Review of Fluoride: Benefits and Risks (Public Health Service, 1991):

"Extensive studies over the past 50 years have established that individuals whose drinking water is fluoridated show a reduction in dental caries. Although the comparative degree of measurable benefit has been reduced recently as other fluoridation are still clearly available in non-fluoride areas, the benefits of water fluoridation are still clearly evident." (Conclusions section, page 87)

According to the June 16 notification and the letter to FDA dated October 13, the food eligible to bear the claim is bottled water meeting the standards of identity and quality set forth in 21 CFR 165.110, containing greater than 0.6 and up to 1.0 mg/L total fluoride, and meeting all general requirements for health claims (21 CFR 101.14) with the exception of minimum nutrient contribution (21 CFR 101.14) (e) (b)). The claim language is: "Drinking fluoridated water may reduce the risk of [dental caries or tooth decay]." In addition, the health claim is not intended for use on bottled water products specifically marketed for use by infants.

The notification and materials regarding the claim are publicly available from the FDA Division of Dockets Management (Docket Mo.2006Q-0418). Persons interested in these documents may view them at the Division of Dockets Management from 9am to 4pm, Monday through Friday at 5630 Fishers Lane, room 1061, Rockville, MD 20852. The Division of Dockets Management may be contacted at 301-827-6860. FDA also intends to make the documents available on the Dockets web site at http://www.fda.gov/ohrms/dockets/dockets/dockets.htm, under Docket Mo. 2006Q-0418.

Food Labeling and Mutrition

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FDA/Center for Food Safety & Applied Nutrition Hypertext updated by davicim October 18, 2006

US EPA "The MCLG is the maximum level of a contaminant in drinking water at which no known or anticipated adverse effect on the health of persons would occur, allowing an adequate margin of safety." Fluoride, under WSBH jurisdiction, is a contaminant of water and EPA has a 1:1 margin of safety for fluoride, none. In other words, there is no margin of safety for those drinking more than the mean amount of water.

The product chemical HFSA is a contaminated waste product of phosphate fertilizer manufacturing and much is coming from China with known contaminants. For example, Univar Solutions: HFS (fluoride added to public water) has from 5 to 50+ ppm of arsenic. Although a small amount when diluted in water, any arsenic increases the dosage from other sources and other toxins. The WSBH is contaminating public water with a contaminated product.

RISKS: Potential harms are reported by the National Research Council in 2006 (NRC), such as cell function, teeth, skeleton, chondrocyte metabolism, arthritis, reproductive and developmental effects, neurotoxicity, neurobehavioral effects, endocrine system, gastrointestinal, renal, hepatic, immune systems, genotoxicity and carcinogenicity, more recently potential low birth weight. I treat dental fluorosis a known risk of excess fluoride exposure. EPA's 4 ppm for fluoride is not protective when Seattle at 0.7 ppm fluoride (added to water) causes dental fluorosis harm.

Additional research since 2006 has confirmed and strengthened the NRC 2006 report, fluoride ingestion is contributing and causing harm.

Judgment is required to evaluate the scientific facts. Endorsements are not science Simply following industry and associations or cherry-picked reviews and biased reviewers has harmed the public.

FLUORIDATION IS NOT COST EFFECTIVE: In order to demonstrate fluoridations dental benefit, dental and public health researchers generally fail to include the cost of harm.

- A. **NO randomized controlled trials** (RCT) for fluoride ingestion (post-natal) have been published. Low quality research has serious risks of error.
- B. Claims of cost benefit do not include any costs for treating harm, such as dental fluorosis. Almost no research on fluoride ingestion from fluoridated water included cost of treating harm. One reported more cost to treat the harm than saved. [PubMed] (One prenatal fluoride supplement RCT reported no benefit). The Board has failed to include the cost of treating harm caused by fluoridation.

Bill Osmunson DDS MPH

bill@teachingsmiles.com

Smiles of Bellevue

1418 112th Ave NE, Bellevue, WA. 98004. 425.466.0100 January 12, 2023

Dear Washington State Board of Health Members Keith Grellner, Chair; Kelly Oshiro, JD, Vice Chair; Socia Love-Thurman, MD; Stephen Kutz, BSN, MPH; Dimyana Abdelmalek, MD, MPH; Patty Hayes, RN, MN; Melinda Flores, Elisabeth Crawford, and Umair Shah Umair Shah, MD, MPH, wsboh@sboh.wa.gov.

The National Toxicology Program's 2019 (NTP) draft monograph¹ of fluoride's neurodevelopmental and cognitive health effects included 159 human studies, 339 non-human studies, 60 in vitro, and many other publications. The "NTP concludes that fluoride is presumed to be a cognitive neurodevelopmental hazard to humans.".

Subsequent research and reviews are reasonably consistent with the NTP report,² "0.5 mg increase in fluoride intake from infant formula corresponded to an 8.8-point decrement in Performance IQ" and a "4.4 FSIQ (Full Scale IQ) points among preschool children who were

And Connett E. American Environmental Health Studies Project. Unpublished. <u>Link</u> and <u>Fluoride and IQ</u> Accessed Dec. 27, 2022.

¹. US Department of Health and Human Services, Office of Health Assessment and Translation, Division of the National Toxicology Program, National Institute of Environmental Health Sciences, National Institutes of Health. Systemic Review of Fluoride Exposure and Neurodevelopmental and Cognitive Health Effects, Draft NTP Monograph. September 6, 2019. (Note: an NTP final determination or Policy has been blocked from release politically and should be available in May) ASDWA Accessed December 1., 2022.

² Bashash M, Thomas D, Hu H, et al. Prenatal fluoride exposure and cognitive outcomes in children at 4 and 6 – 12 Years of age in Mexico. *Environmental Heal Perspect*. 2017;125(9):097017. doi: 10.1289/EHP655. [PMC free article] [PubMed] [CrossRef] [Google Scholar]

And Green, R., Lanphear, B., Hornung, R., Flora, D., Martinez-Mier, E.A., Neufeld, R., Ayotte, P. and Muckle, G., 2019. Till C Fluoride Exposure during Fetal Development and Intellectual Abilities in a Canadian Birth Cohort. *JAMA Pediatr*, 173(10), pp.940-8. [Google Scholar] [PubMed]

And Till C, Green R, Flora D, Hornung R, Martinez-Mier EA, Blazer M, Farmus L, Ayotte P, Muckle G, Lanphear B. Fluoride exposure from infant formula and child IQ in a Canadian birth cohort. Environ Int. 2020 Jan;134:105315. doi: 10.1016/j.envint.2019.105315. Epub 2019 Nov 16. PMID: 31743803; PMCID: PMC6913880. [PubMed]

formula-fed in the first six months of life for each 0.5 mg/L increase in water fluoride concentration. "Till (2020)

Currently, nine mother-child neurotoxicity studies have been published (Connett 2022). Eight of the studies (the first of USA/Canadian cohorts in 2020) report neurotoxicity at low concentrations.

Over 90% of the higher quality studies reported by the NTP at exposure levels of <1.5 mg/L fluoride in water or urine, reported significant adverse neurotoxic effects.

Remember, concentration is not dosage.

The WSBH's silence for ten years has cost over a quarter billion dollars in lost wages, with significant additional costs in special education, incarceration, job loss, homeless, and grief.

PLEASE Warn pregnant mothers and care givers to not drink fluoridated water or make infant formula with fluoridate water.

Here is the math.

In light of the known harm and lack of benefit for fluoride ingestion, the WSBH refusal to protect the brains of the developing fetus, infants and children borders on a criminal action. For over a decade I have been requesting the Board to protect the developing brains. Based on current research, the Board's failure has resulted in an estimated "

Over 83,000 live births in Washington state each year. (March of Dimes) X 10 years = 830,000 infants, since the science has become clear, fluoridation probably lowers IQ, assume 46% on fluoridated water (380,000 fluoridated infants) assume half of mothers drink the water and make formula with the fluoridated water =190,000. Times an assumed 3 IQ point loss =570,000 IQ points lost.

Each IQ point represents an estimated \$500 lower income a year. X 57,000 IQ points = \$280,500,000

Bill Osmunson DDS MPH

From: Cascade Climber

Sent: 2/13/2023 11:19:34 AM To: DOH WSBOH, Inslee, Jay

(GOV),barry.moore@mail.house.gov,gary.palmer@mail.house.gov,david.schweikert@mail.house.gov,eli.cra Chamber of Commerce, Nic Bacetich, editor@methowvalleynews.com, DNR RE NORTHEAST

REGION, electhawleysheriff@gmail.com, info@cspoa.org, info@codyhart.org, Ferguson, Bob

(ATG), secretary of state@sos.wa.gov, cacord@okanogancountyfd6.com, secretary@okanogancountyfd6.com, s Neal (ATG), Abbarno, Peter, Barkis, Andrew, Bateman, Jessica, Berg, April, Bergquist, Steve, Berry, Liz, Billig, Andy, Boehnke, Matt, Braun, John, Bronoske, Dan, Caldier, Michelle, Callan, Lisa, Chambers, Kelly, Chandler, Bruce, Chopp, Frank, Cleveland, Annette, Conway, Steve, Corry, Chris, Davis, Lauren, Dent, Tom, Dhingra, Manka, Dolan, Laurie, Donaghy, Brandy, Dozier, Perry, Duerr, Davina, Dye, Mary, Entenman, Debra, Eslick, Carolyn, Fey, Jake, Fitzgibbon, Joe, Fortunato, Phil, Frame, Noel, Gildon, Chris, Goehner, Keith, Goodman, Roger, Graham, Jenny, Gregerson, Mia, Griffey, Dan, Hackney, David, Hansen, Drew, Harris, Paul, Hasegawa, Bob, Hawkins, Brad, Holy, Jeff, Hunt, Sam, Jacobsen, Cyndy, Jinkins, Laurie, Keiser, Karen, King, Curtis, Klicker, Mark, Kloba, Shelley, Kretz, Joel, Kuderer, Patty (LEG), Leavitt, Mari, Lekanoff, Debra, Liias, Marko, Lovelett, Liz, Lovick, John, MacEwen, Drew, Macri, Nicole, Maycumber, Jacquelin, McCune, Jim, McEntire, Joel, Morgan, Melanie, DOR Gina Mosbrucker, Mullet, Mark, Muzzall, Ron, Nguyen, Joe, Nobles, T'wina (LEG), Orcutt, Ed, Ormsby, Timm, Ortiz-Self, Lillian, Orwall, Tina, Padden, Mike, Paul, Dave, Pedersen, Jamie, Peterson, Strom, Pollet, Gerry, Ramel, Alex, Ramos, Bill, Randall, Emily, Riccelli, Marcus, Rivers, Ann, Robertson, Eric, Robinson, June, Rolfes, Christine, Rude, Skyler, Rule, Alicia, Ryu, Cindy, Saldana, Rebecca (LEG), Salomon, Jesse, Santos, Sharon Tomiko, Schmick, Joe, Schoesler, Mark, Senn, Tana, Shewmake, Sharon, Short, Shelly, Simmons, Tarra, Slatter, Vandana, Springer, Larry, Stanford, Derek, Steele, Mike (LEG), Stokesbary, Drew, Stonier, Monica, Taylor, Jamila, Thai, My-Linh, Tharinger, Steve, Trudeau, Yasmin, Valdez, Javier, Van De Wege, Kevin, Volz, Mike, DOR Keith Wagoner, Walen, Amy, Walsh, Jim, Warnick, Judy, Wellman, Lisa, J.T. Wilcox@leg.wa.gov, Wilson, Claire, Wilson, Jeff, Wylie, Sharon, Ybarra, Alex, Alvarado, Emily, Barnard, Stephanie, Christian, Leonard, Cortes, Julio, Couture, Travis, Doglio, Beth, Kauffman, Claudia, Low, Sam, McClintock, Stephanie, Mena, Sharlett, Reed, Julia, Reeves, Kristine, Schmidt, Suzanne, Sandlin, Bryan, Shavers, Clyde, Street, Chipalo, Timmons, Joe, Torres, Nikki, Waters, Kevin, Wilson, Lynda, Stearns, Chris Subject: *****URGENT EMERGENCY ALERT**** Possible NUCLEAR WAR 2.14.23 -

2.15.23 - FIRST STRIKE? DNA (NAU)?

External Email

US warns citizens to LEAVE RUSSIA IMMEDIATELY

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https://i.imgflip.com/7atq6x.jpg

"The Deep State is hitting us from all sides and their attacks are changing everything!"

https://beforeitsnews.com/alternative/2023/02/fema-releases-doomsday-map-as-u-sshoots-down-another-chinese-spy-balloon-video-3788448.html https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fbeforeitsnews.com%2Falternative releases-doomsday-map-as-u-s-shoots-down-another-chinese-spy-balloon-video-3788448.html&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C45c22564b6f7423c94f208db0df73b40%7

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Remember that "VIGILANT GUARDIAN" 'exercise' on 9/11?

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notice-of-air-defense-exercise-around-washington-dc-set-for-tuesday

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"NORAD Gives Notice of Air Defense Exercise Around Washington, DC, Set for Tuesday!

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The announcement comes after a fourth "unidentified Object" is shot down over North America.

The North American Aerospace Defense Command, (NORAD) will conduct an air defense exercise on Tuesday, February 14, between midnight and 2:30 a.m. EST, according to officials, around the Washington, D.C. area.

Officials said some flights may take place at 2,500 feet, making them visible from the ground, and if weather interferes with operations, they will commence the next day at the same time.

The agency said it conducts routine exercises that include a variety of scenarios, whether it is a hijacking, response to unknown aircraft, or airspace restriction violations, and that all exercises are controlled and planned out.

(HT Remark: I don't recall them ever announcing these exercises around the White House before. Strange.)"

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164342&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C45c22564b6f7423c94f208db0df73b40%7C11d0

Can anyone say 9/11-type false flag? This one really smells.

+2

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<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fnews-nation%2Fnorad-gives-notice-of-air-defense-exercise-around-washington-page%2Fnews-nation%2Fnorad-gives-notice-of-air-defense-exercise-around-washington-page%2Fnews-nation%2Fnorad-gives-notice-of-air-defense-exercise-around-washington-page%2Fnews-nation%2Fnorad-gives-notice-of-air-defense-exercise-around-washington-page%2Fnews-nation%2Fnorad-gives-notice-of-air-defense-exercise-around-washington-page%2Fnews-nation%2Fnorad-gives-notice-of-air-defense-exercise-around-washington-page%2Fnews-nation%2Fnorad-gives-notice-of-air-defense-exercise-around-washington-page%2Fnews-nation%2Fnorad-gives-notice-of-air-defense-exercise-around-washington-page%2Fnews-nation%2Fnorad-gives-notice-of-air-defense-exercise-around-washington-page%2Fnews-nation%2Fnorad-gives-notice-of-air-defense-exercise-around-washington-page%2Fnews-nation%2Fnorad-gives-notice-of-air-defense-exercise-around-washington-page%2Fnews-nation%2Fnorad-gives-notice-of-air-defense-exercise-around-washington-page%2Fnorad-gives-page%2F

dc-set-for-tuesday%23comment-

164341&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C45c22564b6f7423c94f208db0df73b40%7C11d0 RE: NORAD Gives Notice of Air Defense Exercise Around Washington, DC, Set for

Tuesday! — pwalz12 2023-02-12 22:08

<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fnews-nation%2Fnorad-gives-notice-of-air-defense-exercise-around-washington-aroun

 $\label{lem:continuous} dc\text{-set-for-tuesday} \% 23 comment-\\ 164341\& data = 05\%7C01\%7CWSBOH\%40 sboh.wa.gov\%7C45c22564b6f7423c94f208db0df73b40\%7C11d0$

Double I believe the fline chieste are instructed distruction on their second money to demand 2

Really I believe the fling objects are just a distraction so they can m9ve to depcon 2 without everyone thinking Russia is about to nuke us

+1

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https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fnews-nation%2Fnorad-gives-notice-of-air-defense-exercise-around-washington-dc-set-for-tuesday%23comment-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fnews-nation%2Fnorad-gives-notice-of-air-defense-exercise-around-washington-dc-set-for-tuesday%23comment-

164340&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C45c22564b6f7423c94f208db0df73b40%7C11d0 Yep — gjones7777 2023-02-12 22:03

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fnews-nation%2Fnorad-gives-notice-of-air-defense-exercise-around-washington-dc-set-for-tuesday%23comment-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fnews-nation%2Fnorad-gives-notice-of-air-defense-exercise-around-washington-dc-set-for-tuesday%23comment-

164340&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C45c22564b6f7423c94f208db0df73b40%7C11d0

False flag written all over it

+4

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https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fnews-nation%2Fnorad-gives-notice-of-air-defense-exercise-around-washington-dc-set-for-tuesday%23comment-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fnews-nation%2Fnorad-gives-notice-of-air-defense-exercise-around-washington-dc-set-for-tuesday%23comment-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fnews-nation%2Fnorad-gives-notice-of-air-defense-exercise-around-washington-dc-set-for-tuesday%23comment-">https://gcc02.safelinks.protection.gcc02

164338&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C45c22564b6f7423c94f208db0df73b40%7C11d0 RE: NORAD Gives Notice of Air Defense Exercise Around Washington, DC, Set for

Tuesday! — Galwaypoet 2023-02-12 21:53
https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerr.

<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fnews-nation%2Fnorad-gives-notice-of-air-defense-exercise-around-washington-dc-set-for-tuesday%23comment-

164338&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C45c22564b6f7423c94f208db0df73b40%7C11d0

Reminds me of that 9-11 ruse where military were doing exercises while they pulled off the real thing. More stench in our nostrils coming. This COULD BE the big one. Since the most likely LEGITIMATE attack would come from Russian hyper-sonic missles that can't be defended against, this crap once again is trying to play us all for idiots. Sickening.

+4

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https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findex page%2Fnews-nation%2Fnorad-gives-notice-of-air-defense-exercise-around-washington-dc-set-for-tuesday%23comment-

164337&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C45c22564b6f7423c94f208db0df73b40%7C11d0False Flags? — oak2022 2023-02-12 21:50

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fnews-nation%2Fnorad-gives-notice-of-air-defense-exercise-around-washington-dc-set-for-tuesday%23comment-

164337&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C45c22564b6f7423c94f208db0df73b40%7C11d0

Is this a ruse to legitimize a war and martial law? I know, tinfoil, but we have seen so much dystopian fiction playing out IRL that I have to wonder.

+5

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164336&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C45c22564b6f7423c94f208db0df73b40%7C11d0 Balloons — Ralphieboy 2023-02-12 21:49

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fnews-nation%2Fnorad-gives-notice-of-air-defense-exercise-around-washington-dc-set-for-tuesday%23comment-

164336&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C45c22564b6f7423c94f208db0df73b40%7C11d0

Have to keep the sheep distracted. Something else is happening.

DECLARATION of NORTH AMERICA

DNA (North American Union)?

https://leohohmann.com/2023/01/16/biden-signs-onto-declaration-of-north-america-dna-with-canada-and-mexico-is-the-planned-north-american-union-making-a-comeback/

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fleohohmann.com%2F2023%2F01 signs-onto-declaration-of-north-america-dna-with-canada-and-mexico-is-the-planned-north-american-union-making-a-

comeback%2F&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C45c22564b6f7423c94f208db0df73b40%7

https://www.whitehouse.gov/briefing-room/statements-releases/2023/01/10/declaration-of-north-america-dna/

< https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.whitehouse.gov%2Fbriefing-room%2Fstatements-releases%2F2023%2F01%2F10%2Fdeclaration-of-north-america-dna%2F&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C45c22564b6f7423c94f208db0df73b40%7C11d0f40sboh.wa.gov%7C45c22564b6f7423c94f208db0df73b40wgf40sboh.wa.gov%7C45c22564b6f7423c94f208db0df73b40wgf40sboh.wa.gov%7C45c22564b6f7423c94f208db0df73b40wgf40sboh.wa.gov%7C45c22564b6f7423c94f208db0df73b40wgf40sboh.wa.gov%7C45c22564b6f7423c94f40wgf40sboh.wa.gov%7C45c22564b6f7423c94f40wgf40sboh.wa.gov%7C45c22564b6f7423c94f40wgf40sboh.wa.gov%7C45c22564b6f742666bf740sboh.wa.gov%7C45c22564b6f740sboh.wa.gov%7C45c22564b6f740sboh.wa.gov%7C45c22564b6f740sboh.wa.gov%7C45c22564b6f740sboh.wa.gov%7C45c22564b6f740sboh.wa.gov%7C45c22564b6f740sboh.wa.gov%7C45c22564b6f740sboh.wa.gov%7C45c22566b6f740sboh.wa.gov%7C45c22566b6f

< https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.whitehouse.gov%2Fbriefing-room%2Fstatements-releases%2F2023%2F01%2F10%2Fdeclaration-of-north-america-dna%2F&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C45c22564b6f7423c94f208db0df73b40%7C11d0f40sboh.wa.gov%7C45c22564b6f7423c94f208db0df73b40wgf40sboh.wa.gov%7C45c22564b6f7423c94f208db0df73b40wgf40sboh.wa.gov%7C45c22564b6f7423c94f208db0df73b40wgf40sboh.wa.gov%7C45c22564b6f7423c94f208db0df73b40wgf40sboh.wa.gov%7C45c22564b6f7423c94f208db0df73b40wgf40sboh.wa.gov%7C45c22564b6f7423c94f208db0df740sboh.wa.gov%7C45c22564b6f7423c94f740wgf40sboh.wa.gov%7C45c22564b6f7423c94f740wgf40sboh.wa.gov%7C45c22564b6f740sboh.wa.gov%7C45c22564b6f740sboh.wa.gov%7C45c22564b6f740sboh.wa.gov%7C45c22564b6f740sboh.wa.gov%7C45c22564b6f740sboh.wa.gov%7C45c22564b6f740sboh.wa.gov%7C45c22564b6f740sboh.wa.gov%7C45c225664b6f740sbo

https://www.presidency.ucsb.edu/documents/joint-statement-president-biden-and-president-andres-manuel-lopez-obrador-mexico

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.presidency.ucsb.edu%2Fdocstatement-president-biden-and-president-andres-manuel-lopez-obrador-

mexico&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C45c22564b6f7423c94f208db0df73b40%7C11d0e

https://www.youtube.com/watch?v=ZRAa8BcDOCA

<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.youtube.com%2Fwatch%3Fw

https://www.youtube.com/watch?v=2IKSyj5z6I4

<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.youtube.com%2Fwatch%3Fw

https://www.presidency.ucsb.edu/documents/executive-order-14067-ensuring-responsible-development-digital-assets

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.presidency.ucsb.edu%2Fdocorder-14067-ensuring-responsible-development-digital-

assets&data = 05%7C01%7CWSBOH%40sboh.wa.gov%7C45c22564b6f7423c94f208db0df73b40%7C11d0example asset = 05%7C01%7CWSBOH%40sboh.wa.gov%7C45c22564b6f7423c94f208db0df73b40%7C45c22564b6f7423c94f208db0df73b40%7C45c22564b6f7423c94f208db0df73b40%7C45c22564b6f7423c94f208db0df73b40%7C45c22564b6f7423c94f208db0df73b40%7C45c22564b6f7423c94f208db0df73b40%7C45c22564b6f7423c94f208db0df73b40%7C45c22564b6f7423c94f208db0df73b40%7C45c22564b6f7423c94f208db0df74b6f74664b6f7464b6f7464b6f7464b6f7464b6f7464b6f

"COVERT INTEL": READ THE COMMENTS!!! - "One Trillion Moved into BLOCKCHAIN in 72 Hours"???

https://halturnerradioshow.com/index.php/en/news-page/world/covert-intel-banks

< https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fworld%2Fcovert-intel-

banks&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C45c22564b6f7423c94f208db0df73b40%7C11d0e2

"FEMA WHISTLEBLOWER - CAMPS FOR DISSENT & THE NEXT 5G (HEMORRHAGIC FEVER / EBOLA) P(L)ANDEMIC - SECRET FEMA DOCUMENTS - MARIA ZEEE"

https://www.bitchute.com/video/Uuz0uWcPOQ5X/

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.bitchute.com%2Fvideo%2Fl

https://www.banned.video/watch?id=63c35ee9eb7b0916fc0e16c9

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.banned.video%2Fwatch%3F

As in Guayaquil & Wuhan: WHO/WEF/GATES/SCHWAB/SOROS 5G Global Rollout & the

EBOLA 'VAX' Hemorrhagic Fever PLandemic for DEPOPULATION

https://www.youtube.com/watch?v=K-hp VY2EZc

NAC & BROMELAIN Vs. (Clot Shot) SPIKE PROTEIN* - *This is NOT Medical Advice

https://halturnerradioshow.com/index.php/en/news-page/world/tonight-how-to-unfold-

the-spike-protein-of-covid-19-and-the-vax-making-it-go-away

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fworld%2Ftonight-how-to-unfold-the-spike-protein-of-covid-19-and-the-vax-making-it-go-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fworld%2Ftonight-how-to-unfold-the-spike-protein-of-covid-19-and-the-vax-making-it-go-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fworld%2Ftonight-how-to-unfold-the-spike-protein-of-covid-19-and-the-vax-making-it-go-">https://gcc02.safelinks.protein-of-covid-19-and-the-vax-making-it-go-

away&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C45c22564b6f7423c94f208db0df73b40%7C11d0e2

END of the PETRO DOLLAR

https://halturnerradioshow.com/index.php/en/news-page/world/boom-saudi-arabia-announces-end-of-us-petro-dollar

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fworld%2Fboom-saudi-arabia-announces-end-of-us-petro-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fworld%2Fboom-saudi-arabia-announces-end-of-us-petro-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fworld%2Fboom-saudi-arabia-announces-end-of-us-petro-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fworld%2Fboom-saudi-arabia-announces-end-of-us-petro-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fworld%2Fboom-saudi-arabia-announces-end-of-us-petro-">https://gcc02.safelinks.protection.prot

dollar&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C45c22564b6f7423c94f208db0df73b40%7C11d0e2

From: DOH Information Sent: 2/22/2023 10:12:31 AM To: DOH PCH Immunization Child Profile, DOH COVID Vaccine, DOH WSBOH
Cc: Subject: FW: Question/Comment from the public
attachments\58B9F46B00FF406E_image001.png
Hello,
Passing this feedback along for your awareness.
Thank you,
Customer Service Specialist 2
Office of Public Affairs and Equity
Washington State Department of Health
DOH.Information@DOH.WA.GOV < mailto:DOH.Information@DOH.WA.GOV >
doh.wa.gov <https: 1-800-525-0127<="" ?url="http%3A%2F%2Fwww.doh.wa.gov%2F&data=05%7" gcc02.safelinks.protection.outlook.com="" th="" =""></https:>
From: DOH Feedback <doh.information@doh.wa.gov> Sent: Wednesday, February 22, 2023 12:48 AM To: DOH Information <doh.information@doh.wa.gov> Subject: Question/Comment from the public</doh.information@doh.wa.gov></doh.information@doh.wa.gov>
The following survey response is submitted:
1.
Please select one:

Please enter your comments or questions in the space provided below:

To Whom It May Concern, The Centers for Disease Control and Prevention (CDC) officially added the COVID-19 vaccinations to its recommended child and adolescent immunization schedules on Feb. 9. This decision may deny children the right to attend school if mandated in states without exemption laws. There is no COVID emergency for children. Children under 18 with no comorbidities have virtually no risk of death. They have a 99.9997% recovery rate and the vast majority of children have minimal symptoms. It is alarming that children are now subject to these "recommendations" despite serious safety concerns including myocarditis, heart attacks, blood clots, seizures and even sudden death in children. Defend your constituents' right to choose or forgo COVID vaccinations for school attendance. Introduce legislation to ban COVID vaccine mandates for daycare and students as 21 states have already done. Thank you. Sincerely, Brian T. Lally

3.

If you are sending feedback on one of our Web pages, please paste the URL here: (no answer)

4.

Tell us how to get in touch with you.
Name: Brian T. Lally Email: briantlally@mail.com <mailto:briantlally@mail.com> Telephone: (206)262-0595</mailto:briantlally@mail.com>
5.
To receive a confirmation of your submission, please enter your email address again in the space provided below.
briantlally@mail.com <mailto:briantlally@mail.com></mailto:briantlally@mail.com>

From: Cascade Climber

Sent: 2/25/2023 12:33:05 PM To: DOH WSBOH,Inslee, Jay

(GOV),barry.moore@mail.house.gov,gary.palmer@mail.house.gov,david.schweikert@mail.house.gov,eli.cra

Chamber of Commerce, Nic Bacetich, editor@methowvalleynews.com, DNR RE NORTHEAST REGION, electhawleysher iff@gmail.com, info@cspoa.org, info@codyhart.org, Ferguson, Bob

(ATG), secretary of state@sos.wa.gov, cacord@okanogancountyfd6.com, secretary@okanogancountyfd6.com, s Neal (ATG), Abbarno, Peter, Barkis, Andrew, Bateman, Jessica, Berg, April, Bergquist, Steve, Berry, Liz, Billig, Andy, Boehnke, Matt, Braun, John, Bronoske, Dan, Caldier, Michelle, Callan, Lisa, Chambers, Kelly, Chandler, Bruce, Chopp, Frank, Cleveland, Annette, Conway, Steve, Corry, Chris, Davis, Lauren, Dent, Tom, Dhingra, Manka, Dolan, Laurie, Donaghy, Brandy, Dozier, Perry, Duerr, Davina, Dye, Mary, Entenman, Debra, Eslick, Carolyn, Fey, Jake, Fitzgibbon, Joe, Fortunato, Phil, Frame, Noel, Gildon, Chris, Goehner, Keith, Goodman, Roger, Graham, Jenny, Gregerson, Mia, Griffey, Dan, Hackney, David, Hansen, Drew, Harris, Paul, Hasegawa, Bob, Hawkins, Brad, Holy, Jeff, Hunt, Sam, Jacobsen, Cyndy, Jinkins, Laurie, Keiser, Karen, King, Curtis, Klicker, Mark, Kloba, Shelley, Kretz, Joel, Kuderer, Patty (LEG), Leavitt, Mari, Lekanoff, Debra, Liias, Marko, Lovelett, Liz, Lovick, John, MacEwen, Drew, Macri, Nicole, Maycumber, Jacquelin, McCune, Jim, McEntire, Joel, Morgan, Melanie, DOR Gina Mosbrucker, Mullet, Mark, Muzzall, Ron, Nguyen, Joe, Nobles, T'wina (LEG), Orcutt, Ed, Ormsby, Timm, Ortiz-Self, Lillian, Orwall, Tina, Padden, Mike, Paul, Dave, Pedersen, Jamie, Peterson, Strom, Pollet, Gerry, Ramel, Alex, Ramos, Bill, Randall, Emily, Riccelli, Marcus, Rivers, Ann, Robertson, Eric, Robinson, June, Rolfes, Christine, Rude, Skyler, Rule, Alicia, Ryu, Cindy, Saldana, Rebecca (LEG), Salomon, Jesse, Santos, Sharon Tomiko, Schmick, Joe, Schoesler, Mark, Senn, Tana, Shewmake, Sharon, Short, Shelly, Simmons, Tarra, Slatter, Vandana, Springer, Larry, Stanford, Derek, Steele, Mike (LEG), Stokesbary, Drew, Stonier, Monica, Taylor, Jamila, Thai, My-Linh, Tharinger, Steve, Trudeau, Yasmin, Valdez, Javier, Van De Wege, Kevin, Volz, Mike, DOR Keith Wagoner, Walen, Amy, Walsh, Jim, Warnick, Judy, Wellman, Lisa, J.T. Wilcox@leg.wa.gov, Wilson, Claire, Wilson, Jeff, Wylie, Sharon, Ybarra, Alex, Alvarado, Emily, Barnard, Stephanie, Christian, Leonard, Cortes, Julio, Couture, Travis, Doglio, Beth, Kauffman, Claudia, Low, Sam, McClintock, Stephanie, Mena, Sharlett, Reed, Julia, Reeves, Kristine, Schmidt, Suzanne, Sandlin, Bryan, Shavers, Clyde, Street, Chipalo, Timmons, Joe, Torres, Nikki, Waters, Kevin, Wilson, Lynda, Stearns, Chris Subject: DEFCON ONE* Transnistria Tactical Nuke to be Used as Justification for WW3?

Subject: DEFCON ONE* Transnistria Tactical Nuke to be Used as Justification for WW3? FIRST STRIKE?

External Email

*Russia is at their highest level of nuclear readiness - This is NOT an Official Pronouncement - DO NOT PANIC!!!

If Ukraine attempts to seize the massive Soviet era ammo depot in Transnistria it is possible that Russia could use a tactical NUKE!

https://halturnerradioshow.com/index.php/en/news-page/world/covert-intel-urgent-ukraine-massing-invasion-troops

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fworld%2Fcovert-intel-urgent-ukraine-massing-invasion-

troops&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C0efd51cec8ed43e11a6908db176f7d35%7C11d0e

https://halturnerradioshow.com/index.php/en/news-page/world/russia-engages-gps-jamming-over-nuclear-weapons-facilities

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findex

page%2Fworld%2Frussia-engages-gps-jamming-over-nuclear-weapons-

facilities&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C0efd51cec8ed43e11a6908db176f7d35%7C11d0

https://halturnerradioshow.com/index.php/en/news-page/world/romania-deploys-air-

defense-missiles-along-moldova-border

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iskander-missiles-for-combat

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ukraine-war-supporting-ukraine-doesn-t-make-you-a-patriot-just-a-useful-idiot

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make-you-a-patriot-just-a-useful-

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Erom: suo coffman

From: sue coffman

Sent: 1/11/2023 3:49:21 PM

To: DOH WSBOH

Cc:

Subject: Senator Ron Johnson's video is important and accurate

External Email

Attention, WA State BOH:

Please look at this information that I'm sure you have been receiving from other sources. It is important that you KNOW what is truly happening in our world, and stop listening to your medical and pharmaceutical Reps:

Vaccines, Mandates & COVID-19

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ronjohnson.senate.gov%2Fwside-effects-and-

mandates&data=05%7C01%7Cwsboh%40sboh.wa.gov%7C194ae644139f43e0a4ce08daf42e73d9%7C11d

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mandates&data=05%7C01%7Cwsboh%40sboh.wa.gov%7C194ae644139f43e0a4ce08daf42e73d9%7C11d

Vaccines, Mandates & COVID-19

There is NO MORE HIDING. Now you know that the Truth is out, and you cannot say "we didn't know."

Thank you,

Sue Coffman 714-337-4331 ICWA Team Leader Legislative District #24 https://informedchoicewa.org/

< https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Finformedchoicewa.org%2F&data=https%3A%2F%2Finformedchoicewa.org%2Finformedchoicewa.or

From: James Girt

Sent: 2/3/2023 7:14:26 AM

To: DOH WSBOH

Cc:

Subject: My Public Comments

External Email

To whom it may concern:

My name is James Girt and I am writing to you in regards to agenda item #9 to be discussed at the March 9th public meeting. I am strongly opposed to adding Covid-19 immunizations to the vaccination list for school aged children. The risk of these vaccines far exceed any benefit children may receive. There is not enough long term data to support the safety of these vaccines and the data we do have shows these vaccines do not help stopping any spread of this disease and children are not significantly affected from having it. If any of these vaccines are made mandatory my children will not return to public schools and I know of multiple other families that will be pulling their kids from the school district. I don't want to see this, do not make these mandatory, please look at the data and the way it's trending. Everyday that goes by is showing how these vaccinations aren't effective and have no place in our children's bodies. The T.A.G. voted against this and so should the Board of Health. Thank you for your attention and hearing my strong opposition to adding Covid-19 immunizations to the vaccine requirements.

Sincerely		
-James Girt		

This email and its attachments may be confidential and are intended solely for the use of the individual to whom it is addressed. Any views or opinions expressed are solely those of the author and do not necessarily represent those of the Fire Department.

Forman Bill Organia

From: Bill Osmunson

Sent: 1/12/2023 10:51:12 AM

To: DOH WSBOH,Ramos, Bill,Julie Simms,Scott Shock,audrey55,Olemara Peters,Stuart

Cooper Cc:

Subject: WSBOH Board Members



attachments\7C6CCD64DBB042BC_1 12 23 WSBOH Fluorosis Osmunson.pdf

External Email

WSBOH,

Attached is my letter to the Board Members, please provide them a copy.

Sincerely, Bill Osmunson DDS MPH Bill Osmunson DDS MPH bill@teachingsmiles.com

1418 112th Ave NE, Bellevue, WA. 98004. 425.466.0100 January 12, 2023

Dear Washington State Board of Health Members Keith Grellner, Chair; Kelly Oshiro, JD, Vice Chair; Socia Love-Thurman, MD; Stephen Kutz, BSN, MPH; Dimyana Abdelmalek, MD, MPH; Patty Hayes, RN, MN; Melinda Flores, Elisabeth Crawford, and Umair Shah Umair Shah, MD, MPH, wsboh@sboh.wa.gov.

RE: Community Water Fluoridation Dental Fluorosis Harm: Dental fluorosis is caused by excess fluoride ingestion prior to tooth eruption and is both known and undisputed cosmetic and functional damage. A label or legend for community water fluoridation is requested.

Some gang members scratched their logo on the hood of my car. Just cosmetic damage, but the cost to repair was estimated at about \$5,000. Damage is the cost not the repairs. The car ran fine and the damage only "cosmetic," but indeed damage.

Dental fluorosis is usually considered a cosmetic blemish by dentists. . . compared to the black mercury and gold fillings we have placed. However, patients often disagree.

However, an EPA study¹ funded by the EPA with fluoride concentrations between 1.0-4.0 mg/L, the same dosage as many drinking fluoridated water but more than the mean amount of water, evaluated the cost of treating dental fluorosis, reporting:

"A mean cost for all consultants shows that the estimated costs for restoring function exceeds the cosmetic costs in all categories except the minimum later costs. This represents a new finding and raises an issue that has been overlooked or ignored by previous investigators and the profession. i.e. that repair of the cosmetic discoloration was the only cost involved; or that repair of dysfunction was never considered to be a problem."

¹Collins, E., V. Segreto, H. Martin, AND H. Dickson. ANALYSIS OF COSTS FOR THE TREATMENT OF DENTAL FLUOROSIS. U.S. Environmental Protection Agency, Washington, D.C., EPA/600/5-87/001 (NTIS PB87170817), 1987. Revised 2005. [EPA Link], However, Data Revised 08/02/2022 and no longer contains all original data.

All consultants do not appear to have been cosmetic dentists nor did they estimate lifetime costs.

A normal ideal smile with healthy teeth, no fluorosis detected is below. She was raised predominantly on mother's milk and no formula was made with fluoridated water.



For comparison, the patient below was diagnosed with Dean's Fluorosis Index of 4, "discrete or confluent pitting," moderate to severe dental fluorosis and functional damage having chipped, pitted, and warn teeth.



He was raised mostly on formula made with fluoridated water. Although the timing suggests he

ingested fluoride from other sources, mom was confident significant fluoridated toothpaste was

not swallowed and no fluoride supplements ingested. Lifetime repairs estimated at \$72,000.

Although public health professionals and many dentists suggest he only has cosmetic blemishes,

the patient and mother considered the dental fluorosis to be actual harm.

Treatment options can be expensive, and damage estimated at 30 times the cost savings of dental

caries mitigation. A study ² of adolescents at 12 years of age reported 52% had fluorosis at a

fluoride concentration of 0.7 mg/. Of the subjects, 95% wished to remove the spots. In contrast to

the subjects reported concern, only 14.5% had professionally diagnosed mild, moderate or severe

dental fluorosis. The NHANES CDC published studies report even more children have dental

fluorosis in the USA, about 70%. Clearly, patients do not like the stigmatic harm caused by the

WSBH policy. The contribution of fluoride to total exposure is authority administered iatrogenic

harm.

The WSBH must protect the public with a legend/label for the prescription drug they add to

public water with the intent to prevent dental caries. My comment to the Board of 1/10/2023

contains FDA language which is a good starting point.

Sincerely,

Bill Osmunson DDS MPH

From: Cindy Sue

Sent: 2/26/2023 2:19:14 PM

To: DOH WSBOH

Cc:

Subject: Opposition to childhood covid vaccine mandate

External Email

Hello,

As a Washington state resident, I am writing to voice my concerns over mandating the covid injection for K-12. Personally, I have lost 2 friends to heart attack within days of their injection. My neighbor fainted after her first injection and had a stroke after the second. I have listened carefully to the brave souls who volunteered in the trials for these so-called vaccines and are now injured permanently with no acknowledgement from the multibillion dollar pharmaceutical companies. Left to fund their own recovery, medical bills and inability to work with no support from the medical industry. I understand that the VAERS reporting system - though grossly underreported - this so-called vaccine has injured more people that any other vaccine combined. This is absolutely criminal. If the regulators of big pharmaceutical companies (the CDC, FDA) are no longer able to protect the public from these profit driven corporations who benefit immensely from zero liability, then you need to listen to your people in your state and demand there be further investigation into the injuries and death following the injection rollout. It is your duty to protect the public. This is a massive experiment with terribly harmful consequences and it will be on your conscience if you decide to mandate this toxin for children. Children are least affected by covid and we now know (though we always knew) that natural immunity is the most beneficial remedy for this respiratory virus. Please, look deeply at the evidence. Ask yourselves who this is benefiting. Billions in profits while millions are injured. The truth is coming out and you will be on the wrong side of history if you allow this unethical mandate

Please read the highly detailed letter of resistance attached.

Sincerely,

Cindy Dennison

https://margaretannaalice.substack.com/p/letter-to-the-washington-state-board https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fmargaretannaalice.substack.com% to-the-washington-state-

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Sent with Proton Mail

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fproton.me%2F&data=05%7C01% secure email.

From: Cascade Climber

Sent: 2/12/2023 7:45:59 PM To: DOH WSBOH,Inslee, Jay

(GOV),barry.moore@mail.house.gov,gary.palmer@mail.house.gov,david.schweikert@mail.house.gov,eli.cra Chamber of Commerce,Nic Bacetich,editor@methowvalleynews.com,DNR RE NORTHEAST REGION,electhawleysheriff@gmail.com,info@cspoa.org,info@codyhart.org,Ferguson, Bob

(ATG), secretary of state@sos.wa.gov, cacord@okanogancountyfd6.com, secretary@okanogancountyfd6.com, secretary@okanogancountyfd6.com Neal (ATG), Abbarno, Peter, Barkis, Andrew, Bateman, Jessica, Berg, April, Bergquist, Steve, Berry, Liz, Billig, Andy, Boehnke, Matt, Braun, John, Bronoske, Dan, Caldier, Michelle, Callan, Lisa, Chambers, Kelly, Chandler, Bruce, Chopp, Frank, Cleveland, Annette, Conway, Steve, Corry, Chris, Davis, Lauren, Dent, Tom, Dhingra, Manka, Dolan, Laurie, Donaghy, Brandy, Dozier, Perry, Duerr, Davina, Dye, Mary, Entenman, Debra, Eslick, Carolyn, Fey, Jake, Fitzgibbon, Joe, Fortunato, Phil, Frame, Noel, Gildon, Chris, Goehner, Keith, Goodman, Roger, Graham, Jenny, Gregerson, Mia, Griffey, Dan, Hackney, David, Hansen, Drew, Harris, Paul, Hasegawa, Bob, Hawkins, Brad, Holy, Jeff, Hunt, Sam, Jacobsen, Cyndy, Jinkins, Laurie, Keiser, Karen, King, Curtis, Klicker, Mark, Kloba, Shelley, Kretz, Joel, Kuderer, Patty (LEG), Leavitt, Mari, Lekanoff, Debra, Liias, Marko, Lovelett, Liz, Lovick, John, MacEwen, Drew, Macri, Nicole, Maycumber, Jacquelin, McCune, Jim, McEntire, Joel, Morgan, Melanie, DOR Gina Mosbrucker, Mullet, Mark, Muzzall, Ron, Nguyen, Joe, Nobles, T'wina (LEG), Orcutt, Ed, Ormsby, Timm, Ortiz-Self, Lillian, Orwall, Tina, Padden, Mike, Paul, Dave, Pedersen, Jamie, Peterson, Strom, Pollet, Gerry, Ramel, Alex, Ramos, Bill, Randall, Emily, Riccelli, Marcus, Rivers, Ann, Robertson, Eric, Robinson, June, Rolfes, Christine, Rude, Skyler, Rule, Alicia, Ryu, Cindy, Saldana, Rebecca (LEG), Salomon, Jesse, Santos, Sharon Tomiko, Schmick, Joe, Schoesler, Mark, Senn, Tana, Shewmake, Sharon, Short, Shelly, Simmons, Tarra, Slatter, Vandana, Springer, Larry, Stanford, Derek, Steele, Mike (LEG), Stokesbary, Drew, Stonier, Monica, Taylor, Jamila, Thai, My-Linh, Tharinger, Steve, Trudeau, Yasmin, Valdez, Javier, Van De Wege, Kevin, Volz, Mike, DOR Keith Wagoner, Walen, Amy, Walsh, Jim, Warnick, Judy, Wellman, Lisa, J.T. Wilcox@leg.wa.gov, Wilson, Claire, Wilson, Jeff, Wylie, Sharon, Ybarra, Alex, Alvarado, Emily, Barnard, Stephanie, Christian, Leonard, Cortes, Julio, Couture, Travis, Doglio, Beth, Kauffman, Claudia, Low, Sam, McClintock, Stephanie, Mena, Sharlett, Reed, Julia, Reeves, Kristine, Schmidt, Suzanne, Sandlin, Bryan, Shavers, Clyde, Street, Chipalo, Timmons, Joe, Torres, Nikki, Waters, Kevin, Wilson, Lynda, Stearns, Chris Subject: *****FLASH ALERT*****BULLETIN: Possible FALSE FLAG NUKE ATTACK on DC 24:00 2.14.23 - 02:30 2.15.23 or 24:00 2:15:23 - 02:30 2.16.23 + HEMORRHAGIC

External Email

Remember that "VIGILANT GUARDIAN" 'exercise' on 9/11? https://www.youtube.com/watch?v=nKGR4FGUJ-k

FEVER/EBOLA PLandemic & DECLARATION of NORTH AMERICA

https://halturnerradioshow.com/index.php/en/news-page/news-nation/norad-gives-notice-of-air-defense-exercise-around-washington-dc-set-for-tuesday https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fnews-nation%2Fnorad-gives-notice-of-air-defense-exercise-around-washington-dc-set-for-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fnews-nation%2Fnorad-gives-notice-of-air-defense-exercise-around-washington-dc-set-for-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fnews-nation%2Fnorad-gives-notice-of-air-defense-exercise-around-washington-dc-set-for-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fnews-nation%2Fnorad-gives-notice-of-air-defense-exercise-around-washington-dc-set-for-">https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=

tuesday&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C96a51a2c9ccb4d60b62e08db0d74ce19%7C11d

"NORAD Gives Notice of Air Defense Exercise Around Washington, DC, Set for Tuesday!

NATION

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https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findex12">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findex12">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findex12">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findex12">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findex12">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findex12">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findex12">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findex12">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findex12">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findex12">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findex12">https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=https

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<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.facebook.com%2Fsharer.phpage%2Fnews-nation%2Fnorad-gives-notice-of-air-defense-exercise-around-washington-dc-set-for-dc

tuesday&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C96a51a2c9ccb4d60b62e08db0d74ce19%7C11d

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<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftwitter.com%2Fshare%3Furl%3Dlpage%2Fnews-nation%2Fnorad-gives-notice-of-air-defense-exercise-around-washington-dc-set-for-d

tuesday%26text%3DNORAD%2520Gives%2520Notice%2520of%2520Air%2520Defense%2520Exercise%2520Notice%2520Of%2520Air%2520Defense%2520Exercise%2520Of%2520Air%2520Defense%2520Exercise%2520Of%2520Air%2520Defense%2520Exercise%2520Of%2520Air%2520Defense%2520Exercise%2520Of%2520Air%2520Defense%2520Exercise%2520Of%2520Air%2520Defense%2520Exercise%2520Of%2520Air%2520Defense%2520Exercise%2520Of%2520Air%2520Defense%2520Exercise%2520Of%2520Air%2520Defense%2520Exercise%2520Of%2520Air%2520Defense%2520Exercise%2520Of%2520Air%2520Defense%2520Exercise%2520Of%2520Air%2520Defense%2520Exercise%2520Of%2520Air%2520Defense%2520Exercise%2520Of%2520Air%2520Defense%2520Exercise%2520Of%2520Air%2520Defense%2520Exercise%2520Of%2520Air%2520Defense%2520Exercise%2520Off%2520Air%2520Defense%2520Exercise%2520Off%2520Air%2520Defense%2520Defense%2520Off%2520Air%2520Defense%2520Defense%2520Off%2520Air%2520Defense%2520Defense%2520Off%2520Air%2520Defense%2520Defense%2520Off%2520Air%2520Defense%25

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<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fplus.google.com%2Fshare%3Furlpage%2Fnews-nation%2Fnorad-gives-notice-of-air-defense-exercise-around-washington-dc-set-for-

tuesday&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C96a51a2c9ccb4d60b62e08db0d74ce19%7C11d

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<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.linkedin.com%2FshareArticle.page%2Fnews-nation%2Fnorad-gives-notice-of-air-defense-exercise-around-washington-dc-set-for-

https://halturnerradioshow.com/images/2023/02/12/NORAD-logo_large.png

The announcement comes after a fourth "unidentified Object" is shot down over North America.

The North American Aerospace Defense Command, (NORAD) will conduct an air defense exercise on Tuesday, February 14, between midnight and 2:30 a.m. EST, according to officials, around the Washington, D.C. area.

Officials said some flights may take place at 2,500 feet, making them visible from the ground, and if weather interferes with operations, they will commence the next day at the same time.

The agency said it conducts routine exercises that include a variety of scenarios, whether it is a hijacking, response to unknown aircraft, or airspace restriction violations, and that all exercises are controlled and planned out.

(HT Remark: I don't recall them ever announcing these exercises around the White House before. Strange.)"

<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fnews-nation%2Fnorad-gives-notice-of-air-defense-exercise-around-washington-dc-set-for-

tuesday%23addcomments&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C96a51a2c9ccb4d60b62e08db

Comments

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findex

<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fnews-nation%2Fnorad-gives-notice-of-air-defense-exercise-around-washington-dc-set-for-

tuesday%23&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C96a51a2c9ccb4d60b62e08db0d74ce19%7C

+1#

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fnews-nation%2Fnorad-gives-notice-of-air-defense-exercise-around-washington-dc-set-for-tuesday%23comment-

164342&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C96a51a2c9ccb4d60b62e08db0d74ce19%7C11d0RE: NORAD Gives Notice of Air Defense Exercise Around Washington, DC, Set for

Tuesday! — The Deplorable Renegade2023-02-12 22:09

Can anyone say 9/11-type false flag? This one really smells.

+2#

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findex page%2Fnews-nation%2Fnorad-gives-notice-of-air-defense-exercise-around-washington-dc-set-for-tuesday%23comment-

164341&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C96a51a2c9ccb4d60b62e08db0d74ce19%7C11d0RE: NORAD Gives Notice of Air Defense Exercise Around Washington, DC, Set for

Tuesday! — pwalz12 2023-02-12 22:08

Really I believe the fling objects are just a distraction so they can m9ve to depcon 2 without everyone thinking Russia is about to nuke us

+1#

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fnews-nation%2Fnorad-gives-notice-of-air-defense-exercise-around-washington-dc-set-for-tuesday%23comment-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fnews-nation%2Fnorad-gives-notice-of-air-defense-exercise-around-washington-dc-set-for-tuesday%23comment-

164340&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C96a51a2c9ccb4d60b62e08db0d74ce19%7C11d0 Yep — gjones7777 2023-02-12 22:03

False flag written all over it

+4#

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fnews-nation%2Fnorad-gives-notice-of-air-defense-exercise-around-washington-dc-set-for-tuesday%23comment-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fnews-nation%2Fnorad-gives-notice-of-air-defense-exercise-around-washington-dc-set-for-tuesday%23comment-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fnews-nation%2Fnorad-gives-notice-of-air-defense-exercise-around-washington-dc-set-for-tuesday%23comment-">https://gcc02.safelinks.protection.gcc02

164338&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C96a51a2c9ccb4d60b62e08db0d74ce19%7C11d0RE: NORAD Gives Notice of Air Defense Exercise Around Washington, DC, Set for Tuesday! — Galwaypoet 2023-02-12 21:53

Reminds me of that 9-11 ruse where military were doing exercises while they pulled off the real thing. More stench in our nostrils coming. This COULD BE the big one. Since the most likely LEGITIMATE attack would come from Russian hyper-sonic missles that can't be defended against, this crap once again is trying to play us all for idiots. Sickening.

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fnews-nation%2Fnorad-gives-notice-of-air-defense-exercise-around-washington-dc-set-for-tuesday%23comment-

164337&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C96a51a2c9ccb4d60b62e08db0d74ce19%7C11d0False Flags? — oak2022 2023-02-12 21:50

Is this a ruse to legitimize a war and martial law? I know, tinfoil, but we have seen so much dystopian fiction playing out IRL that I have to wonder.

+5# +5#

page%2Fnews-nation%2Fnorad-gives-notice-of-air-defense-exercise-around-washington-dc-set-for-tuesday%23comment-

164336&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C96a51a2c9ccb4d60b62e08db0d74ce19%7C11d0Balloons — Ralphieboy 2023-02-12 21:49

Have to keep the sheep distracted. Something else is happening.

DECLARATION of NORTH AMERICA

DNA (North American Union)?

https://leohohmann.com/2023/01/16/biden-signs-onto-declaration-of-north-america-dna-with-canada-and-mexico-is-the-planned-north-american-union-making-a-comeback/

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fleohohmann.com%2F2023%2F01 signs-onto-declaration-of-north-america-dna-with-canada-and-mexico-is-the-planned-north-american-union-making-a-

comeback%2F&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C96a51a2c9ccb4d60b62e08db0d74ce19%

https://www.whitehouse.gov/briefing-room/statements-releases/2023/01/10/declaration-of-north-america-dna/

< https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.whitehouse.gov%2Fbriefing-room%2Fstatements-releases%2F2023%2F01%2F10%2Fdeclaration-of-north-america-

dna % 2F & data = 05% 7C01% 7CWSBOH % 40 sboh. wa. gov % 7C96a51a2c9ccb4d60b62e08db0d74ce19% 7C11data = 05% 7C01% 7CWSBOH % 40 sboh. wa. gov % 7C96a51a2c9ccb4d60b62e08db0d74ce19% 7C11data = 05% 7C01% 7CWSBOH % 40 sboh. wa. gov % 7C96a51a2c9ccb4d60b62e08db0d74ce19% 7C11data = 05% 7C01% 7CWSBOH % 40 sboh. wa. gov % 7C96a51a2c9ccb4d60b62e08db0d74ce19% 7C11data = 05% 7C01% 7CWSBOH % 40 sboh. wa. gov % 7C96a51a2c9ccb4d60b62e08db0d74ce19% 7C11data = 05% 7C01% 7CWSBOH % 40 sboh. wa. gov % 7C96a51a2c9ccb4d60b62e08db0d74ce19% 7C11data = 05% 7C01% 7CWSBOH % 40 sboh. wa. gov % 7C96a51a2c9ccb4d60b62e08db0d74ce19% 7C11data = 05% 7C01% 7CWSBOH % 40 sboh. wa. gov % 7C96a51a2c9ccb4d60b62e08db0d74ce19% 7C11data = 05% 7C01% 7C

https://www.presidency.ucsb.edu/documents/joint-statement-president-biden-and-president-andres-manuel-lopez-obrador-mexico

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.presidency.ucsb.edu%2Fdocstatement-president-biden-and-president-andres-manuel-lopez-obrador-

mexico&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C96a51a2c9ccb4d60b62e08db0d74ce19%7C11d0

https://www.youtube.com/watch?v=ZRAa8BcDOCA

<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.youtube.com%2Fwatch%3Fw

https://www.youtube.com/watch?v=2IKSyj5z6I4

<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.youtube.com%2Fwatch%3Fw

"Executive Order 14067—Ensuring Responsible Development of Digital Assets" (CBDC)

https://www.presidency.ucsb.edu/documents/executive-order-14067-ensuring-responsible-development-digital-assets

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.presidency.ucsb.edu%2Fdocorder-14067-ensuring-responsible-development-digital-

assets&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C96a51a2c9ccb4d60b62e08db0d74ce19%7C11d0e

"COVERT INTEL": READ THE COMMENTS!!! - "One Trillion Moved into BLOCKCHAIN in 72 Hours"???

https://halturnerradioshow.com/index.php/en/news-page/world/covert-intel-banks

<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fworld%2Fcovert-intel-page%2Fcovert-intel-page%2Fcovert-intel-page%2Fcovert-intel-page%2Fcovert-intel-page%2Fcovert-intel-page%2Fcovert-intel-page%2Fcovert-intel-page%2Fcovert-intel-page%2Fcovert-intel-page%2Fcovert-intel-page%2Fcovert-intel-page%2Fcovert

banks&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C96a51a2c9ccb4d60b62e08db0d74ce19%7C11d0e

"FEMA WHISTLEBLOWER - CAMPS FOR DISSENT & THE NEXT 5G (HEMORRHAGIC FEVER / EBOLA) P(L)ANDEMIC - SECRET FEMA DOCUMENTS - MARIA ZEEE"

https://www.bitchute.com/video/Uuz0uWcPOQ5X/

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.bitchute.com%2Fvideo%2Fl

https://www.banned.video/watch?id=63c35ee9eb7b0916fc0e16c9

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.banned.video%2Fwatch%3F

As in Guayaquil & Wuhan: WHO/WEF/GATES/SCHWAB/SOROS 5G Global Rollout & the EBOLA 'VAX' Hemorrhagic Fever PLandemic for DEPOPULATION

https://www.youtube.com/watch?v=K-hp_VY2EZc

<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.youtube.com%2Fwatch%3F%2FZc&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C96a51a2c9ccb4d60b62e08db0d74ce19%7C25%2Fwww.youtube.com%2Fwatch%3Fwatch%3Fwat

NAC & BROMELAIN Vs. (Clot Shot) SPIKE PROTEIN* - *This is NOT Medical Advice

https://halturnerradioshow.com/index.php/en/news-page/world/tonight-how-to-unfold-

the-spike-protein-of-covid-19-and-the-vax-making-it-go-away

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findex page%2Fworld%2Ftonight-how-to-unfold-the-spike-protein-of-covid-19-and-the-vax-making-it-go-

away & data = 05%7C01%7CWSBOH%40sboh. wa.gov%7C96a51a2c9ccb4d60b62e08db0d74ce19%7C11d0e208db0d74ce19%7C1008db0d74ce19%7C1008db0d74ce19%7C1008db0d74ce1908db0d7608db0d7608db0d7608db0d7608db0d7608db0d7608db0d7608db0d7608db0d7608db0d

END of the PETRO DOLLAR

https://halturnerradioshow.com/index.php/en/news-page/world/boom-saudi-arabia-announces-end-of-us-petro-dollar

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fworld%2Fboom-saudi-arabia-announces-end-of-us-petro-

dollar&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C96a51a2c9ccb4d60b62e08db0d74ce19%7C11d0e

France Court Bosses

From: Gerry Bassen

Sent: 2/21/2023 8:07:09 PM

To: DOH WSBOH

Cc:

Subject: Mask Mandate

External Email

It's obscene at this point to force people to wear a mask in any health care setting. This is more about control than "the science" at this point. The majority of the masks being worn do absolutely nothing to prevent the spread of any disease, in fact when they are repeatedly handled and are subject to repeated use, they do more to contribute to the spreading of any sort of respiratory disease rather than preventing the spread of any disease.

Stop forcing the citizens of Washington state to participate in this mask theater mandate. It's more than past time for masking in any setting to end as well as the power-trip control over us that you all seem to love.

Gerry Bassen Spokane Valley, WA

Sent from my iPhone

From: Robert Lowery

Sent: 2/21/2023 1:36:13 PM

To: DOH WSBOH

Cc:

Subject: COVID innoculation

External Email

To whom it may concern,

Now that the Centers for Disease Control and Prevention has added the two-shot primary series mRNA COVID-19 vaccine to its routine immunization schedule for children and adults is the Washington State Board of Health planning to mandate this for public school attendance next year? If so, how soon could that announcement be made?

Robert Lowery robloweryiii@icloud.com 509-899-0235

"It's not who I am underneath, but what I do that defines me" - Batman

From: Denise Culnane

Sent: 3/1/2023 3:04:05 PM

To: DOH WSBOH

Cc:

Subject: RE: Ahora disponible: Orden del día definitivo de la reunión pública de la Mesa

Directiva de Salud del 8 de marzo

(J)

attachments\796434EEB9184567_image002.jpg

attachments\22B835945DF9462D_image003.png

External Email

Unsubscribe the Spanish version.

Thank you,

Denise Culnane, SHRM-SCP, MBA

Senior Benefits/Compensation Analyst

Phone: 509.892.2726

Fax: 509-530-2856

From: DOH WSBOH <WSBOH@SBOH.WA.GOV> Sent: Wednesday, March 1, 2023 3:01 PM

Subject: Ahora disponible: Orden del día definitivo de la reunión pública de la Mesa

Directiva de Salud del 8 de marzo

Ya está disponible el orden

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fsboh.wa.gov%2Fsites%2Fdefaultc03%2FWSBOH-Agenda-2023-03-08-

Final_Spanish_1.pdf&data=05%7C01%7CWSBOH%40SBOH.WA.GOV%7C7dd09c31aa8e4f5470f508db1aa9del día definitivo propuesto para la reunión pública de la Mesa Directiva de Salud del miércoles 8 de marzo de 2023. Nos reuniremos de 10:30 a.m. a 3:25 p.m. Los

materiales de la reunión están disponibles en la página web de la reunión del 8 de marzo

<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fsboh.wa.gov%2Fmeetings%2

08&data=05%7C01%7CWSBOH%40SBOH.WA.GOV%7C7dd09c31aa8e4f5470f508db1aa93fca%7C11d0e21 (en inglés).

Lea la propuesta de orden del día para obtener más información sobre la reunión y sobre cómo hacer comentarios públicos. Puede acceder a la reunión de las siguientes maneras:

1. Registrese en línea en:

https://us02web.zoom.us/webinar/register/WN_has7tGYeQ9uKBC9EUwsD9g https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fus02web.zoom.us%2Fwebinar%2

- 2. Llame y participe a través de su teléfono:
 - 0. Llamada para el seminario web: +1 (253) 215-8782
 - 1. Id. del seminario web: 871 1231 5420
 - 2. Contraseña del seminario web: 952181

Para hacer comentarios públicos escritos:

* Invitamos al público a enviar sus comentarios por escrito a la Mesa Directiva antes de la reunión. A fin de garantizar que los miembros de la Mesa Directiva tengan la oportunidad de leer y tener en cuenta sus comentarios antes de la reunión, envíelos por correo electrónico <mailto:wsboh@sboh.wa.gov?subject=My%20Public%20Comments> antes del viernes 3 de marzo a las 12:00 del mediodía. Los comentarios por escrito recibidos después de las 12:00 del mediodía del viernes se compartirán con los miembros de la Mesa Directiva; sin embargo, es posible que estos no puedan leer o considerar sus comentarios durante el fin de semana anterior a la reunión o durante esta. Puede hacer comentarios verbales en la reunión durante los segmentos de comentarios públicos o de la audiencia sobre normas. Los comentarios públicos se publicarán en la página web de materiales de la reunión el miércoles 1 de marzo de 2023.

Para hacer comentarios públicos verbales en las reuniones híbridas:

- * Para el público que asiste en persona: Si desea hacer un comentario público, por favor escriba su nombre en la hoja de registro antes de que comience el período de comentarios públicos. Se llamará su nombre cuando sea su turno para hacer comentarios. Alentamos fuertemente al público a anotarse para hablar con la Mesa Directiva enviando un correo electrónico antes de las 12:00 pm (mediodía) del día anterior a la reunión a: wsboh@sboh.wa.gov
- <https://gcc02.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwsboh%40sboh.wa.gov%2F&data=. Como esta es una reunión de negocios de la Mesa Directiva, el tiempo para comentarios públicos es limitado (típicamente 2 a 4 minutos). El presidente de la Mesa Directiva llamará primero a quienes se hayan anotado para hablar. La cantidad de tiempo otorgada a cada persona dependerá de la cantidad de personas presentes que deseen hablar. Si queda tiempo, se les dará tiempo para hablar con la Mesa Directiva a quienes no se hayan anotado, hasta que se agote el tiempo calculado para el comentario público.</p>
- * Para el público que asiste virtualmente: Si desea hacer un comentario público, por favor inscríbase a través del enlace del seminario web de Zoom antes de las 12:00 del mediodía el día antes de la reunión. Se llamará su nombre cuando sea su turno para hacer comentarios.
- * Para hacer una declaración pública en las audiencias sobre normas, por favor use el mismo proceso.

Más información sobre reunión:

* Esta reunión se celebrará en formato híbrido. La reunión en línea se realizará a través la de la aplicación Zoom Webinar. La reunión física será en Trabajo e Industrias, en 7273 Linderson Way SW, Tumwater, WA 98501.

(360) 236-4110

P.O. Box 47990, Olympia, WA 98504-7990

Ubicación

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This e-mail and any attachments may contain CONFIDENTIAL information, including PROTECTED HEALTH INFORMATION. If you are not the intended recipient, any use or disclosure of this information is STRICTLY PROHIBITED; you are requested to delete this e-mail and any attachments, notify the sender immediately, and notify the InCyte Privacy Officer at privacy@incdx.com or call (509) 892-2700.

From: Honey Badger Sent: 2/18/2023 10:29:38 AM

To: DOH WSBOH

Cc:

Subject: March 9th public meeting

External Email

Since the January 12th meeting went long, I am wondering if item #7 the keeping of Animals is going to be on the agenda for the March 9th meeting.

Thank you,

Emily

Sent from Mail

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From: Testify Online Survey Sent: 3/3/2023 12:00:06 PM To: DOH WSBOH Cc:			
Subject: Survey Response: Testify Online *			
The following survey response is submitted:			
1.			
State Board of Health Meeting Date:			
March 8, 2023			
2.			
Agenda Item or Issue:			
COVID vaccines: oppose as an immunization requirement for public schoolchildren			
3.			
Your Name:			

Dennis Flynn	
4.	
Do you have a pr	ofessional title?
2.	No
5.	
Are you represen	ting an organization?
2.	No
6.	
Address:	
2108 W Euclid Av	re, Spokane, WA, 99205
7.	

Email:

dpflynn@hotmail.com
8.
Phone Number (Include Area Code):
5093259097
9.
Do you have any special expertise relevant to this topic?
1. Yes
significant self-study of multiple disciplines and expert testimony over the past 3 years.
10.
Are you testifying on a specific proposal under consideration by the board?

1.

Yes

child immunization	rates		
11. Are you Pro or Con on the proposal?			
2.	Con		

Please do not add any COVID vaccines as a requirement for children to attend any school that receives public funds. Please review testimony before the Select Subcommittee on the Coronovirus Pandemic by Mr. Kulldorff and Dr. Battacharya and Dr. Makary before any future decision regarding any COVID vaccines as a requirement for schoolchildren, even allowing for any exemption.

https://www.youtube.com/watch?v=IFMsaRJDeyA&t=3s This EUA vaccine for children who are at 0% statistical risk should be fully 100% opt-in, without any exemption required.

From: Cascade Climber

Sent: 1/16/2023 9:26:41 PM To: DOH WSBOH,Inslee, Jay

(GOV),barry.moore@mail.house.gov,gary.palmer@mail.house.gov,david.schweikert@mail.house.gov,eli.cra Chamber of Commerce,Nic Bacetich,editor@methowvalleynews.com,DNR RE NORTHEAST REGION,electhawleysheriff@gmail.com,info@cspoa.org,info@codyhart.org,Ferguson, Bob

Neal (ATG), Abbarno, Peter, Barkis, Andrew, Bateman, Jessica, Berg, April, Bergquist, Steve, Berry, Liz, Billig, Andy, Boehnke, Matt, Braun, John, Bronoske, Dan, Caldier, Michelle, Callan, Lisa, Chambers, Kelly, Chandler, Bruce, Chopp, Frank, Cleveland, Annette, Conway, Steve, Corry, Chris, Davis, Lauren, Dent, Tom, Dhingra, Manka, Dolan, Laurie, Donaghy, Brandy, Dozier, Perry, Duerr, Davina, Dye, Mary, Entenman, Debra, Eslick, Carolyn, Fey, Jake, Fitzgibbon, Joe, Fortunato, Phil, Frame, Noel, Gildon, Chris, Goehner, Keith, Goodman, Roger, Graham, Jenny, Gregerson, Mia, Griffey, Dan, Hackney, David, Hansen, Drew, Harris, Paul, Hasegawa, Bob, Hawkins, Brad, Holy, Jeff, Hunt, Sam, Jacobsen, Cyndy, Jinkins, Laurie, Keiser, Karen, King, Curtis, Klicker, Mark, Kloba, Shelley, Kretz, Joel, Kuderer, Patty (LEG), Leavitt, Mari, Lekanoff, Debra, Liias, Marko, Lovelett, Liz, Lovick, John, MacEwen, Drew, Macri, Nicole, Maycumber, Jacquelin, McCune, Jim, McEntire, Joel, Morgan, Melanie, DOR Gina Mosbrucker, Mullet, Mark, Muzzall, Ron, Nguyen, Joe, Nobles, T'wina (LEG), Orcutt, Ed, Ormsby, Timm, Ortiz-Self, Lillian, Orwall, Tina, Padden, Mike, Paul, Dave, Pedersen, Jamie, Peterson, Strom, Pollet, Gerry, Ramel, Alex, Ramos, Bill, Randall, Emily, Riccelli, Marcus, Rivers, Ann, Robertson, Eric, Robinson, June, Rolfes, Christine, Rude, Skyler, Rule, Alicia, Ryu, Cindy, Saldana, Rebecca (LEG), Salomon, Jesse, Santos, Sharon Tomiko, Schmick, Joe, Schoesler, Mark, Senn, Tana, Shewmake, Sharon, Short, Shelly, Simmons, Tarra, Slatter, Vandana, Springer, Larry, Stanford, Derek, Steele, Mike (LEG), Stokesbary, Drew, Stonier, Monica, Taylor, Jamila, Thai, My-Linh, Tharinger, Steve, Trudeau, Yasmin, Valdez, Javier, Van De Wege, Kevin, Volz, Mike, DOR Keith Wagoner, Walen, Amy, Walsh, Jim, Warnick, Judy, Wellman, Lisa, J.T. Wilcox@leg.wa.gov, Wilson, Claire, Wilson, Jeff, Wylie, Sharon, Ybarra, Alex, Alvarado, Emily, Barnard, Stephanie, Christian, Leonard, Cortes, Julio, Couture, Travis, Doglio, Beth, Kauffman, Claudia, Low, Sam, McClintock, Stephanie, Mena, Sharlett, Reed, Julia, Reeves, Kristine, Schmidt, Suzanne, Sandlin, Bryan, Shavers, Clyde, Street, Chipalo, Timmons, Joe, Torres, Nikki, Waters, Kevin, Wilson, Lynda, Stearns, Chris

Subject: ***BULLETIN *** FLASH - URGENT: The Combination of Bromelain and Acetylcysteine (BromAc) Vs.. SPIKE PROTEIN* - Please Read & Share With Anyone Who Has COVID VAX *NOT Medical Advice

External Email

*This is NOT Medical Advice. Please seek competent medical advice from a doctor who is not a greedy 'COVID' QUACK that wants to KILL YOU with a VENT, VERSED & REMDESIVER for \$48K per unnecessary RESTRAINED Dead FAKE 'COVID' VICTIM by BLOWING THEIR LUNGS OUT & POISONING THEM based upon FALSE, FRAUDULENT, DEFECTIVE & RECALLED PCR TESTS for KLEPTOCRATS to increase the FEAR PORN for KOMMUNIST KONTROL Like Narcissistic, Sociopathic #GOVIDIOT 'MAGGOT' INSLEE who KILLED GRANNY with loneliness after IMPRISONING her in SOLITARY CONFINEMENT for a virus with a 98.7% survival rate while #GOVIDIOT placed 'COVID' patients in NURSING HOMES to UP the DEATH COUNT, What a FCUKING PSYCHOPATH! This after #GOVIDIOT 'MAGGOT' INSLEE spread APPLE MAGGOTS across E WA while WA was HACKED B4 ELECTION with FOREIGN COLLUSION! TREASON, SEDITION & SUBVERSIVE ACTS including #GOVIDIOT OVERTHROWING the GOVERNMENT through SABOTAGE as a DISTRACTION! Did #GOVIDIOT 'MAGGOT' INSLEE STEAL the 2020 ELECTION with HAMMER & SCORECARD 'Fraction Magic'?

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"How To "Unfold" The Spike Protein of COVID-19 (and the VAX) Making it Go Away!

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https://halturnerradioshow.com/images/2023/01/16/Bromelaine_large.jpg

A peer-reviewed medical study shows two, common, over-the-counter supplements, combine to destroy the spike protein of SARS-CoV-2. This article reprints the peer-

reviewed study and tells you what supplements THEY used that wiped-out the spike protein. Maybe, people who took the "vaccines" can use this to wipe out the spike proteins inside themselves, that are making many of them sick, and killing many others?

In the interest of full disclosure, I do NOT sell any of the supplements mentioned here and earn NO MONEY from anyone, for passing along this information to you. I do this as a public service.

This peer-reviewed paper was published in March of 2021, but no one in the media bothered to tell the public. The only thing the media did was push the "vax." Now, a lot of people are dead, dying, or very sick from the vax.

It seems that the messenger RNA in the vax, causes our human cells to "express a spike protein" like the one on the Coronavirus that causes COVID. Except human cells are not supposed to "express a spike protein."

Below, is the study which showed two over-the-counter food supplements, Bromelain and Acetylcysteine (NAC), when used together - not separately - cause the spike protein bindings to fall apart and dissolve into nothing. Images of the results are below!

The Combination of Bromelain and Acetylcysteine (BromAc) Synergistically Inactivates SARS-CoV-2

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Department of Surgery, St. George Hospital, Sydney, NSW 2217, Australia
Mucpharm Pty Ltd., Sydney, NSW 2217, Australia
CIRI, Centre International de Recherche en Infectiologie, Team VirPatH, Univ Lyon,
Inserm, U1111, Université Claude Bernard Lyon 1, CNRS, UMR5308, ENS de Lyon, F-
69007 Lyon, France
Hospices Civils de Lyon, EMR 3738 (CICLY), Lyon 1 Université, F-69921 Lyon, France
St. George & Sutherland Clinical School, University of New South Wales, Sydney, NSW
2217, Australia
Laboratoire de Virologie, Institut des Agents Infectieux (IAI), Hospices Civils de Lyon,
Groupement Hospitalier Nord, F-69004 Lyon, France
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Author to whom correspondence should be addressed.

These authors contributed equally to this work.

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Viruses 2021, 13(3), 425; https://doi.org/10.3390/v13030425

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Received: 31 January 2021 / Revised: 25 February 2021 / Accepted: 1 March 2021 / Published: 6 March 2021

(This article belongs to the Special Issue Vaccines and Therapeutics against

Coronaviruses

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1. Introduction

The recently emergent severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is the causative agent of coronavirus disease 2019 (COVID-19), which can range from asymptomatic to severe and lethal forms with a systemic inflammatory response syndrome. As of 21 February 2021, over 111 million confirmed cases have been reported, with an estimated overall mortality of 2.2% [1 https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999- 4915%2F13%2F3%2F425%23B1-viruses-13-00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0]. There are currently few therapeutic agents proven to be beneficial in reducing earlyand late-stage disease progression [2 https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999- 4915%2F13%2F3%2F425%23B2-viruses-13-00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0]. While there are fortunately many vaccine candidates, their widespread availability for vaccination may not be immediate, the length of immune protection may be limited [3 https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999- 4915%2F13%2F3%2F425%23B3-viruses-13-00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0 https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999- 4915%2F13%2F3%2F425%23B4-viruses-13-00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0

], and the efficacy of the vaccines may be reduced by novel SARS-CoV-2 variants. The continued exploration of effective treatments is therefore still needed.

Structurally, SARS-CoV-2 contains surface spike proteins, membrane proteins, and envelope proteins, as well as internal nucleoproteins that package the RNA. The spike protein is a homotrimer glycoprotein complex with different roles accomplished through dynamic conformational modifications, based in part on disulfide bonds [5 https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999- 4915%2F13%2F3%2F425%23B5-viruses-13-00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0]. It allows the infection of target cells by binding to the human angiotensin-converting enzyme (ACE2) receptors, among others, which triggers proteolysis by transmembrane protease serine 2 (TMPRSS2), furin, and perhaps other proteases, leading to virion and host cell membrane fusion [6 https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999- 4915%2F13%2F3%2F425%23B6-viruses-13-00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0 ,7 https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999- 4915%2F13%2F3%2F425%23B7-viruses-13-00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0

The entry of viruses into mammalian cells, or "virus internalization", is a key mechanism of enveloped virus infection and is based on dynamic conformational changes of their surface glycoproteins, namely, as mediated by disulfide bond reduction and regulated by cell surface oxydoreductases and proteases [5 https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999- 4915%2F13%2F3%2F425%23B5-viruses-13-

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00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0
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00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0
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<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-</a>
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00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0
]. SARS-CoV-2 entry into host cells has been shown to start with destabilization of the
spike protein through allosteric mechanical transition, which induces a conformational
change from the closed "down" state to open "up" state of the receptor binding domain
(RBD) of the spike protein [12
<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-</a>
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<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-</a>
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00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0
]. The conformational changes of RBD and virus binding are induced by TMPRSS2 or
Cathepsin L, which trigger the transition from the pre-fusion to post-fusion state [5]
<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-</a>
4915%2F13%2F3%2F425%23B5-viruses-13-
00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0
<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-</a>
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<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-</a>
4915%2F13%2F3%2F425%23B13-viruses-13-
00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0
]. The energy liberated by disulfide bond reduction increases protein flexibility, which is
maximal when the reduced state is complete [8
<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-</a>
4915%2F13%2F3%2F425%23B8-viruses-13-
00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0
], thus allowing the fusion of host-virus membranes, which is otherwise impossible due
to the repulsive hydration forces present before reduction [5
<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-</a>
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00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0
].
Bromelain is extracted mainly from the stem of the pineapple plant (Ananas comosus)
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and contains a number of enzymes that give it the ability to hydrolyze glycosidic bonds in

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complex carbohydrates [14]

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00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0
]. Previous studies have indicated that Bromelain removes the spike and hemagglutinin
proteins of Semliki Forest virus, Sindbis virus, mouse gastrointestinal coronavirus,
hemagglutinating encephalomyelitis virus, and H1N1 influenza viruses [15
<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-</a>
4915%2F13%2F3%2F425%23B15-viruses-13-
00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0
<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-</a>
4915%2F13%2F3%2F425%23B16-viruses-13-
00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0
]. As a therapeutic molecule, it is used for debriding burns. Acetylcysteine is a powerful
antioxidant that is commonly nebulized into the airways for mucus accumulation and is
also used as a hepatoprotective agent in paracetamol overdose. Most importantly in the
present context, Acetylcysteine reduces disulfide bonds [17
<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-</a>
4915%2F13%2F3%2F425%23B17-viruses-13-
00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0
]. Moreover, the association of the spike and envelope proteins by their respective triple
cysteine motifs warrants the hypothesis of impacting virion stability following disulfide
bridge disruption by the action of Acetylcysteine [18
<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-</a>
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00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0
]. The combination of Bromelain and Acetylcysteine (BromAc) exhibits a synergistic
mucolytic effect that is used in the treatment of mucinous tumors [19
<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-</a>
4915%2F13%2F3%2F425%23B19-viruses-13-
00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0
,20
<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-</a>
4915%2F13%2F3%2F425%23B20-viruses-13-
00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0
and as a chemosensitizer of several anticancer drugs [21
<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-</a>
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00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0
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Therefore, in the current study we set out to determine whether BromAc can disrupt the integrity of SARS-CoV-2 spike and envelope proteins and subsequently examine its inactivation potential against in vitro replication of two viral strains, including one with a spike mutant alteration of the novel S1/S2 cleavage site.

]. These different actions are due to the ability of BromAc to unfold the molecular structures of complex glycoproteins, thus allowing binding to occur because of the high

2. Materials and Methods

affinity between RBD and ACE2.

2.1. Materials

Bromelain API was manufactured by Mucpharm Pty Ltd (Kogarah, Australia) as a sterile powder. Acetylcysteine was purchased from Link Pharma (Cat# AUST R 170803; Warriewood, Australia). The recombinant SARS-COV-2 spike protein was obtained from SinoBiological (Cat# 40589-V08B1; Beijing, China). The recombinant envelope protein was obtained from MyBioSource (Cat# MBS8309649; San Diego, CA, USA). All other reagents were from Sigma Aldrich (St. Louis, MO, USA).

2.2. Recombinant Spike and Envelope Gel Electrophoresis

The spike or envelope proteins were reconstituted in sterile distilled water according to the manufacturer's instructions, and aliquots were frozen at -20 °C. Two and a half micrograms of spike or envelope protein were incubated with 50 or 100 µg/mL Bromelain, 20 mg/mL Acetylcysteine, or a combination of both in Milli-Q water. The control contained no drugs. The total reaction volume was 15 µL each. After 30 min incubation at 37 °C, 5 µL of sample buffer was added into each reaction. A total of 20 µL of each reaction was electrophoresed on an SDS-PAGE (Cat# 456-1095; Bio-Rad Hercules, CA, USA). The gels were stained using Coomassie blue.

2.3. UV Spectral Detection of Disulfide Bonds in Spike and Envelope Proteins

The method of Iyer and Klee for the measurement of the rate of reduction of disulfide bonds has been used to detect disulfide bonds in spike and envelope proteins [22 < https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-4915%2F13%2F3%2F425%23B22-viruses-13-00425&data=05%7C01%7CWSB0H%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0]. The recombinant SARS-CoV-2 spike protein at a concentration of 3.0 μ g/mL in phosphate-buffered saline (PBS) (pH 7.0) containing 1 mM ethylenediaminetetraacetic acid (EDTA) was incubated with 0, 10, 20, 40, and 50 μ L of Acetylcysteine (0.5 M), agitated at 37 °C for 30 min followed by equivalent addition of Dithiothreitol (DTT) (0.5 M), and agitated for a further 30 min at 37 °C. The spike protein was incubated in parallel only with DTT (0.5 M) as before without any Acetylcysteine and agitated at 37 °C for 30 min. The absorbance was then read at 310 nm. UV spectral detection of disulfide

2.4. SARS-CoV-2 Whole Virus Inactivation with BromAc

bonds in the envelope protein was performed in a similar manner.

Fully respecting the World Health Organization (WHO) interim biosafety guidance related to the coronavirus disease, the SARS-CoV-2 whole virus inactivation tests were carried out with a wild-type (WT) strain representative of early circulating European viruses (GISAID accession number EPI_ISL_578176). A second SARS-CoV-2 strain (denoted as ΔS), reported through routine genomic surveillance in the Auvergne-Rhône-Alpes region of France, was added to the inactivation tests due to a rare mutation in the spike S1/S2 cleavage site and its culture availability in the laboratory (GISAID accession number EPI_ISL_578177).

These tests were conducted with incremental concentrations of Bromelain alone (0, 25, 50, 100, and 250 μg/mL), Acetylcysteine alone (20 mg/mL), and the cross-reaction of the different Bromelain concentrations combined with a constant 20 mg/mL Acetylcysteine formulation, against two virus culture dilutions at 105.5 and 104.5 TCID50/mL. Following 1 h of drug exposure at 37 °C, all conditions, including the control, were diluted 100-fold to avoid cytotoxicity, inoculated in quadruplicate on confluent Vero cells (CCL-81; ATCC@, Manassas, VA, USA), and incubated for 5 days at 36 °C with 5% CO2. Cells were maintained in Eagle's minimal essential medium (EMEM) with 2% Penicillin-Streptomycin, 1% L-glutamine, and 2% inactivated fetal bovine serum. Results were obtained by daily optical microscopy observations, an end-point cell lysis staining assay, and reverse-transcriptase polymerase chain reaction (RT-PCR) of supernatant RNA extracts. Briefly, the end-point cell lysis staining assay consisted of adding Neutral Red dye (Merck KGaA, Darmstadt, Germany) to cell monolayers, incubating at 37 °C for 45 min, washing with PBS, and adding citrate ethanol before optical density (OD) was measured at 540 nm (Labsystems Multiskan Ascent Reader, Thermo Fisher Scientific, Waltham, MA, USA). OD was directly proportional to viable cells, so a low OD would signify important cell lysis due to virus replication. In addition, RNA from well supernatants was extracted by the semi-automated eMAG® workstation (bioMérieux, Lyon, FR), and SARS-CoV-2 RdRp IP2-targeted RdRp Institute Pasteur RT-PCR was performed on a QuantStudio™ 5 System (Applied Biosystems, Thermo Fisher Scientific, Foster City, CA, USA). Log10 reduction values (LRV) of viral replication were calculated

by the difference between treatment and control wells per condition divided by 3.3 (as $1 \log 10 \approx 3.3$ PCR Cycle thresholds (Ct)).

2.5. Replication Kinetics by Real-Time Cell Analysis

To compare the in vitro replication capacity of both WT and ΔS SARS-CoV-2 strains, replication kinetics were determined by measuring the electrode impedance of microelectronic cell sensors on the xCELLigence Real-Time Cell Analyzer (RTCA) DP Instrument (ACEA Biosciences, Inc., San Diego, CA, USA). Vero cells were seeded at 20,000 cells per well on an E-Plate 16 (ACEA Biosciences, Inc., San Diego, CA, USA) and incubated with the same media conditions as described previously at 36 °C with 5% CO2. After 24 h, SARS-CoV-2 culture isolates were inoculated in triplicate at a multiplicity of infection of 10–2. Mock infections were performed in quadruplicate. Electronic impedance data (cell index) were continuously collected at 15-min intervals for 6 days. Area under the curve analysis of normalized cell index, established at time of inoculation, was then calculated at 12-h intervals. At each interval, cell viability was determined by normalizing against the corresponding cell control. Tukey multiple comparison tests were used to compare each condition on GraphPad Prism (software version 9.0; San Diego, CA, USA).

Results

3.1. Alteration of SARS-CoV-2 Spike and Envelope Proteins

Treatment of the spike protein with Acetylcysteine alone did not show any alteration of the protein, whereas concentrations of Bromelain at 50 and 100 μ g/mL and BromAc at 50 and 100 μ g/20 mg/mL resulted in protein alteration (Figure 1 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-4915%2F13%2F3%2F425%23fig_body_display_viruses-13-00425-f001&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0e2A). Treatment with Acetylcysteine on the envelope protein did not alter the protein, whereas treatment with Bromelain at 50 and 100 μ g/mL and BromAc at 50 and 100 μ g/20 mg/mL also resulted in near complete and complete fragmentation, respectively (Figure 1 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-4915%2F13%2F3%2F425%23fig_body_display_viruses-13-00425-f001&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0e2A).

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Figure 1. (A) Bromelain and Acetylcysteine present a synergistic effect on severe acute respiratory syndrome coronavirus (SARS-CoV-2) spike and envelope protein destabilization. SDS-PAGE of the recombinant SARS-CoV-2 spike protein S1 + S2 subunits (150 kDa) and envelope protein (25 kDa). Proteins were treated with 20 mg/mL Acetylcysteine alone, 100 and 50 μ g/mL Bromelain alone, and a combination of 100 and 50 μ g/20 mg/mL BromAc. (B) Disulfide reduction of recombinant SARS-CoV-2 spike protein by Acetylcysteine. The differential assay between Acetylcysteine (Ac) and Dithiothreitol (DTT) for the reduction of disulfide bonds found on the spike protein indicates that Acetylcysteine reduces 42% of the disulfide bonds before the addition of DTT. The remaining bonds are reduced by DTT to produce the chromogen detected at 310 nm. (C) Disulfide reduction of recombinant SARS-CoV-2 envelope protein by Acetylcysteine. The differential assay between Acetylcysteine (Ac) and Dithiothreitol (DTT) for the reduction of disulfide bonds found on the envelope protein indicates that Acetylcysteine reduces 40% of the bonds before the addition of DTT.

3.2. UV Spectral Detection Demonstrates the Alteration of Disulfide Bonds in Spike and Envelope Proteins

The comparative reduction of disulfide bonds on the spike protein between DTT alone and DTT with Acetylcysteine demonstrated a 42% difference (Figure 1 https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999- 4915%2F13%2F3%2F425%23fig body display viruses-13-00425f001&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0e2 B), based on the slope of the graphs [0.002599/0.006171 (100) = 42 %]. Acetylcysteine was thus able to reduce 58% of the disulfide linkages in the sample, after which the remaining disulfide bonds were reduced by DTT to produce the chromogen that was monitored in the spectra. Similarly, the differential assay between Acetylcysteine and DTT for the reduction of disulfide bonds found in the envelope protein [0.007866/0.01293 (100) = 60%] indicates that Acetylcysteine reduces 40% of the disulfide bonds before the addition of DTT (Figure 1 https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999- 4915%2F13%2F3%2F425%23fig body display viruses-13-00425f001&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0e2 C).

3.3. In Vitro SARS-CoV-2 Inactivating Potential of Bromelain, Acetylcysteine, and BromAc

For both SARS-CoV-2 strains tested, the untreated virus controls at 105.5 and 104.5 TCID50/mL yielded typical cytopathic effects (CPE), and no cytotoxicity was observed for any of the drug combinations on Vero cells. Optical CPE results were invariably confirmed by end-point Neutral Red cell staining. Overall, Bromelain and Acetylcysteine treatment alone showed no viral inhibition, all with CPE comparable to virus control wells, whereas BromAc combinations displayed virus inactivation in a concentration-dependent manner (Figure 2

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). Treatment on 104.5 TCID50/mL virus titers (Figure 2 https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-4915%2F13%2F3%2F425%23fig_body_display_viruses-13-00425

f002&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0e2B,D) yielded more consistent inhibition of CPE for quadruplicates than on 105.5 TCID50/mL virus titers (Figure 2

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-4915%2F13%2F3%2F425%23fig_body_display_viruses-13-00425

f002&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0e2A,C).

Figure 2. Cell lysis assays demonstrated in vitro inactivation potential of Acetylcysteine and Bromelain combined (BromAc) against SARS-CoV-2. Cell viability was measured by cell staining with Neutral Red, where optical density (OD) is directly proportional to viable cells. Low OD would signify important cell lysis due to virus replication. The wild-type (WT) SARS-CoV-2 strain at 5.5 and 4.5 log10TCID50/mL titers (A and B, respectively) showed no inhibition of cytopathic effect (CPE) for single agent treatment, compared to the mock treatment virus control condition. BromAc combinations were able to inhibit CPE, compared to the mock infection cell controls. Treatment of a SARS-CoV-2 spike protein variant (Δ S) with a mutation at the S1/S2 junction at 5.5 and 4.5 log10TCID50/mL titers (C and D, respectively) showed similar results. Bars represent the average of each quadruplicate per condition, illustrated by white circles. Ordinary oneway ANOVA was performed, using the mock treatment virus control as the control condition (**** p < 0.0001, *** p < 0.0005, ** p < 0.003, and * p < 0.05).

Based on the virus inactivation guidelines established by the WHO, a robust and reliable process of inactivation will be able to reduce replication by at least 4 logs [Log10 reduction value (LRV) = (RT-PCR Ct treatment - RT-PCR Ct control)/3.3; as 1 log10 ≈ 3.3 Ct]. As such, RT-PCR was performed on the RNA extracts to directly measure virus replication. For the wild-type (WT) strain at 104.5 TCID50/mL, successful LRV > 4 were observed with 1 out of 4 wells, 2 out of 4 wells, 3 out of 4 wells, and 4 out of 4 wells for 25, 50, 100 and 250 µg/20 mg/mL BromAc, respectively (Figure 3 https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999- 4915%2F13%2F3%2F425%23fig_body_display_viruses-13-00425f003&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0e2). It is worth noting that at 105.5 TCID50/mL, LRV were slightly below the threshold at, on average, 3.3, with 3 out of 4 wells and 2 out of 4 wells for 100 and 250 µg/20 mg/mL BromAc, respectively (Table 1 https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999- 4915%2F13%2F3%2F425%23table body display viruses-13-00425t001&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0e2). For the spike protein mutant (Δ S) at 104.5 TCID50/mL, no successful LRV > 4 was observed for 25 µg/20 mg/mL BromAc, but it was observed in 4 out of 4 wells for 50, 100, and 250 μg/20 mg/mL BromAc (Figure 3 https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999- 4915%2F13%2F3%2F425%23fig_body_display_viruses-13-00425f003&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0e2). Of note, at 105.5 TCID50/mL, LRV were slightly below the threshold at, on average, 3.2, with 1 out of 4 wells, 2 out of 4 wells, and 4 out of 4 wells for 50, 100, and 250 µg/20 mg/mL BromAc, respectively (Table 1 https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999- 4915%2F13%2F3%2F425%23table_body_display_viruses-13-00425t001&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0e2). Overall, in vitro inactivation of both SARS-CoV-2 strains' replication capacity was observed in a dose-dependent manner, most strongly demonstrated at 100 and 250 μg/20 mg/mL BromAc against 104.5 TCID50/mL of virus.

Figure 3. Threshold matrix of log10 reduction values (LRV) of in vitro virus replication 96 h after BromAc treatment on WT and ΔS SARS-CoV-2 strains at 5.5 and 4.5 log10TCID50/mL titers. LRV were calculated with the following formula: LRV = (RT-PCR Ct of treatment—RT-PCR Ct virus control)/3.3; as 1 log10 \approx 3.3 Ct. The color gradient matrix displays the number of quadruplicates per condition yielding an LRV > 4, corresponding to a robust inactivation according to the WHO. WT = wild-type; ΔS = S1/S2 spike mutant.

Table 1. Log10 reduction values (LRV) of in vitro virus replication 96 h after BromAc treatment on WT and ΔS SARS-CoV-2 strains at 5.5 and 4.5 log10TCID50/mL titers. LRV were calculated with the following formula: LRV = (RT-PCR Ct of treatment – RT-PCR Ct virus control)/3.3; as 1 log10 \approx 3.3 Ct. Each replicate is described. TCID50/mL = Median Tissue Culture Infectious Dose; WT = wild-type; ΔS = S1/S2 spike mutant.

Figure 4. SARS-CoV-2 replication capacity of WT and Δ S SARS-CoV-2 measured by Real-Time Cell Analysis. Data points correspond to area under the curve analysis of normalized cell index (electronic impedance of RTCA established at time of inoculation) at

12-h intervals. Cell viability was then determined by normalizing against the corresponding cell control. WT = wild-type; $\Delta S = S1/S2$ spike mutant.

4. Discussion The combination of Bromelain and Acetylcysteine, BromAc, synergistically inhibited the infectivity of two SARS-CoV-2 strains cultured on Vero cells. Protein confirmation and its molecular properties are dependent on its structural and geometric integrity, which are dependent on both the peptide linkages and disulfide bridges. Acetylcysteine, as a good reducing agent, tends to reduce the disulfide bridges and hence alter the molecular properties of most proteins. This property has been widely exploited in the development of several therapies (chronic obstructive pulmonary disease, allergic airways diseases, cystic fibrosis, pseudomyxoma peritonei, etc.) [20 https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999- 4915%2F13%2F3%2F425%23B20-viruses-13-00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0 https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999- 4915%2F13%2F3%2F425%23B23-viruses-13-00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0 ,24 https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999- 4915%2F13%2F3%2F425%23B24-viruses-13-00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0 ,25 https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999- 4915%2F13%2F3%2F425%23B25-viruses-13-00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0 https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999- 4915%2F13%2F3%2F425%23B26-viruses-13-00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0 ,27 https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999- 4915%2F13%2F3%2F425%23B27-viruses-13-00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0]. More recently, Acetylcysteine has been used in the development of therapies for respiratory infections such as influenza and COVID-19 [28 https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999- 4915%2F13%2F3%2F425%23B28-viruses-13-00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0 ,29 https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999- 4915%2F13%2F3%2F425%23B29-viruses-13-00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0 https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999- 4915%2F13%2F3%2F425%23B30-viruses-13-00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0

4915%2F13%2F3%2F425%23B13-viruses-13-00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0]. A hypothesized mechanism of action could be the unfolding of the spike glycoprotein

00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0

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], where the integrity of the spike protein is vital for infection [12]

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,13

and the reduction of its disulfide bonds.

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The SARS-CoV-2 spike protein is the cornerstone of virion binding to host cells and hence
represents an ideal therapeutic target. A direct mechanical action against this spike
protein is a different treatment strategy in comparison to most of the existing antiviral
drugs, which prevents viral entry in host cells rather than targeting the replication
machinery. BromAc acts as a biochemical agent to destroy complex glycoproteins.
Bromelain's multipotent enzymatic competencies, dominated by the ability to disrupt
glycosidic linkages, usefully complement Acetylcysteine's strong power to reduce
disulfide bonds [17
<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-</a>
4915%2F13%2F3%2F425%23B17-viruses-13-
00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0
]. Amino acid sequence analysis of the SARS-CoV-2 spike glycoprotein identified several
predetermined sites where BromAc could preferentially act, such as the S2' site rich in
disulfide bonds [31
<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-</a>
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00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0
], together with three other disulfide bonds in RBD [32
<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-</a>
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00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0
]. In parallel, the role of the glycosidic shield in covering the spike, which is prone to
being removed by BromAc, has been highlighted as a stabilization element of RBD
conformation transitions as well as a resistance mechanism to specific immune response
<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-</a>
4915%2F13%2F3%2F425%23B5-viruses-13-
00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0
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<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-</a>
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00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0
Mammalian cells exhibit reductive functions at their surface that are capable of cleaving
disulfide bonds, and the regulation of this thiol-disulfide balance has been proven to
impact the internalization of different types of viruses, including SARS-CoV-2 [8
<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-</a>
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00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0
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<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-</a>
4915%2F13%2F3%2F425%23B36-viruses-13-
00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0
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4915%2F13%2F3%2F425%23B38-viruses-13-
00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0
]. Both ACE2 and spike proteins possess disulfide bonds. When all the spike protein RBD
disulfide bonds were reduced to thiols, ACE2 receptor binding to spike protein became
less favorable [8
<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-</a>
4915%2F13%2F3%2F425%23B8-viruses-13-
00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0
1. Interestingly, the reduction of ACE2 disulfide bonds also induced a decrease in binding
<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-</a>
4915%2F13%2F3%2F425%23B8-viruses-13-
00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0
]. Moreover, other reports suggested that Bromelain alone could inhibit SARS-CoV-2
infection in VeroE6 cells through an action on disulfide links [39
<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-</a>
4915%2F13%2F3%2F425%23B39-viruses-13-
00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0
,40
<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-</a>
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00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0
]. As such, the loss of SARS-CoV-2 infectivity observed after pre-treatment with BromAc
could be correlated to the cumulative unfolding of the spike and envelope proteins, with a
significant reduction of their disulfide bonds by Acetylcysteine, demonstrated in vitro.
Interestingly, a similar effect of BromAc was observed against both WT and \Delta S SARS-
CoV-2. The main difference in amino acid sequences between SARS-CoV-2 and previous
SARS-CoV is the inclusion of a furin cleavage site between S1 and S2 domains [41
<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-</a>
4915%2F13%2F3%2F425%23B41-viruses-13-
00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0
]. This distinct site of the spike protein and its role in host spill-over and virus fitness is a
topic of much debate [41
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00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0
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00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0
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<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-</a>
4915%2F13%2F3%2F425%23B43-viruses-13-
00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0
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4915%2F13%2F3%2F425%23B44-viruses-13-
00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0
]. Of note, \Delta S, which harbors a mutation in this novel S1/S2 cleavage site and alters the
cleavage motif, exhibits no apparent difference in replication capacity compared to the
WT strain. The slightly increased sensitivity of \Delta S to BromAc treatment is therefore not
due to a basal replication bias, but the mutation could perhaps be involved in enhancing
the mechanism of action of BromAc. These results would nevertheless suggest that, from
a threshold dose, BromAc could potentially be effective on spike mutant strains. This may
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be a clear advantage for BromAc over specific immunologic mechanisms of a spike-

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specific vaccination [3
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4915%2F13%2F3%2F425%23B3-viruses-13-
00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0
<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-</a>
4915%2F13%2F3%2F425%23B4-viruses-13-
00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0
1.
To date, different treatment strategies have been tested, but no molecules have
demonstrated a clear antiviral effect. In addition, given the heterogeneous disease
outcome of COVID-19 patients, the treatment strategy should combine several
mechanisms of action and be adapted to the stage of the disease. Thus, treatment
repurposing remains an ideal strategy against COVID-19, whilst waiting for sufficient
vaccination coverage worldwide [45
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4915%2F13%2F3%2F425%23B45-viruses-13-
00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0
<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-</a>
4915%2F13%2F3%2F425%23B46-viruses-13-
00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0
]. In particular, the development of early nasal-directed treatment prone to decreasing a
patient's infectivity and preventing the progression towards severe pulmonary forms is
supported by a strong rationale. Hou et al. demonstrated that the first site of infection is
the nasopharyngeal mucosa, with secondary movement to the lungs by aspiration [47
<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-</a>
4915%2F13%2F3%2F425%23B47-viruses-13-
00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0
]. Indeed, the pattern of infectivity of respiratory tract cells followed ACE2 receptor
expression, decreasing from the upper respiratory tract to the alveolar tissue. The ratio
for ACE2 was five-fold greater in the nose than in the distal respiratory tract [40
<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-</a>
4915%2F13%2F3%2F425%23B40-viruses-13-
00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0
]. Other repurposing treatments as a nasal antiseptic have been tested in vitro, such as
Povidone-Iodine, which has shown activity against SARS-CoV-2 [48
<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-</a>
4915%2F13%2F3%2F425%23B48-viruses-13-
00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0
]. In the present study, we showed the in vitro therapeutic potential of BromAc against
SARS-CoV-2 with a threshold efficient dose at 100 µg/20 mg/mL. As animal airway
safety models in two species to date have exhibited no toxicity (unpublished data), the
aim is to test nasal administration of the drug in a phase I clinical trial
(ACTRN12620000788976). Such treatment could help mitigate mild infections and
prevent infection of persons regularly in contact with the virus, such as health-care
workers.
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Although our results are encouraging, there are a number of points to consider regarding this demonstration. Namely, the in vitro conditions are fixed and could be different from in vivo. Any enzymatic reaction is influenced by the pH of the environment, and even more so when it concerns redox reactions such as disulfide bond reduction [9 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-4915%2F13%2F3%2F425%23B9-viruses-13-00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0]. The nasal mucosal pH is, in physiological terms, between 5.5 and 6.5 and increases in rhinitis to 7.2–8.3 [49]

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-4915%2F13%2F3%2F425%23B49-viruses-13-

00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0]. Advanced age, often encountered in SARS-CoV-2 symptomatic infections, also induces a nasal mucosa pH increase [49

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-4915%2F13%2F3%2F425%23B49-viruses-13-

00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0]. Such a range of variation, depending on modifications typically induced by a viral infection, may challenge the efficacy of our treatment strategy. Further in vitro experiments to test various conditions of pH are ongoing, but ultimately, only clinical studies will be able to assess this point. Our experiments were led on a monkey kidney cell line known to be highly permissive to SARS-CoV-2 infectivity. With the above hypothesis of S protein lysis thiol-disulfide balance disruption, BromAc efficacy on SARS-CoV-2 should not be influenced by the membrane protease pattern. Reproducing this experimental protocol with the human pulmonary epithelial Calu-3 cell line (ATCC® HTB-55™) would allow these points to be addressed, as virus entry is TMPRSS2-dependent and pH-independent, as in airway epithelium, while virus entry in Vero cells is Cathepsin L-dependent, and thus pH-dependent [50

< https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.mdpi.com%2F1999-4915%2F13%2F3%2F425%23B50-viruses-13-

00425&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0

].

Overall, results obtained from the present study in conjunction with complementary studies on BromAc properties and SARS-CoV-2 characterization reveal a strong indication that BromAc can be developed into an effective therapeutic agent against SARS-CoV-2.

5. Conclusions

There is currently no suitable therapeutic treatment for early SARS-CoV-2 aimed at preventing disease progression. BromAc is under clinical development by the authors for mucinous cancers due to its ability to alter complex glycoprotein structures. The potential of BromAc on SARS-CoV-2 spike and envelope proteins stabilized by disulfide bonds was examined and found to induce the unfolding of recombinant spike and envelope proteins by reducing disulfide stabilizer bridges. BromAc also showed an inhibitory effect on wild-type and spike mutant SARS-CoV-2 by inactivation of its replication capacity in vitro. Hence, BromAc may be an effective therapeutic agent for early SARS-CoV-2 infection, despite mutations, and even have potential as a prophylactic in people at high risk of infection.

Author Contributions

Conceptualization, J.A., K.P., S.J.V., and D.L.M.; methodology, J.A., G.Q., K.P., S.B., and A.H.M.; validation, J.A., G.Q., K.P., V.K., S.B., and A.H.M.; investigation, J.A., G.Q., K.P., V.K., S.B., and A.H.M.; writing—original draft preparation, G.Q., K.P., V.K, A.H.M., E.F., and S.J.V.; supervision, D.L.M. and E.F.; project administration, S.J.V.; funding acquisition, S.J.V. and D.L.M. All authors have read and agreed to the published version of the manuscript.

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Data Availability Statement

A preprint of this manuscript was archived on www.biorxiv.org https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.biorxiv.org%2F&data=05%7

(accessed on 31 January 2021) due to the emergency of COVID-19.

Conflicts of Interest

David L. Morris is the co-inventor and assignee of the Licence for this study and director of the spin-off sponsor company, Mucpharm Pty Ltd. Javed Akhter, Krishna Pillai, and Ahmed Mekkawy are employees of Mucpharm Pty Ltd. Sarah Valle is partly employed by Mucpharm for its cancer development and is supported by an Australian Government Research Training Program Scholarship. Vahan Kepenekian thanks the Foundation Nuovo Soldati for its fellowship and was partly sponsored for stipend by Mucpharm Pty Ltd.

References

- 1. John's Hopkins University Coronavirus Resource Centre. COVID-19 Dashboard by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University (JHU). Available online: https://coronavirus.jhu.edu/map.html https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fcoronavirus.jhu.edu%2Fmap.html (accessed on 7 February 2021).
- 2. Song, Y.; Zhang, M.; Yin, L.; Wang, K.; Zhou, Y.; Zhou, M.; Lu, Y. COVID-19 treatment: Close to a cure?—a rapid review of pharmacotherapies for the novel coronavirus. J. Antimicrob. Agents2020, 56, 106080. [Google Scholar
- <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_lo19%2Btreatment%3A%2BClose%2Bto%2Ba%2Bcure%3F%25E2%2580%2593a%2Brapid%2Breview%2Bclose%2Bcure%3F%25E2%2580%2593a%2Brapid%2Breview%2Bclose%2Bcure%3F%25E2%2580%2593a%2Brapid%2Breview%2Bcure%3F%25E2%2580%2593a%2Brapid%2Breview%2Bcure%3F%25E2%2580%2593a%2Brapid%2Breview%2Bcure%3F%25E2%2580%2593a%2Brapid%2Breview%2Bcure%3F%25E2%2580%2593a%2Brapid%2Breview%2Bcure%3F%25E2%2580%2593a%2Brapid%2Breview%2Bcure%3F%25E2%2580%2593a%2Brapid%2Breview%2Bcure%3F%25E2%2580%2593a%2Brapid%2Breview%2Bcure%3F%25E2%2580%2593a%2Brapid%2Breview%2Bcure%3F%25E2%2580%2593a%2Brapid%2Breview%2Bcure%3F%25E2%2580%2593a%2Brapid%2Breview%2Bcure%3F%25E2%2580%2593a%2Brapid%2Breview%2Bcure%3F%25E2%2580%2593a%2Brapid%2Breview%2Bcure%3F%25E2%2580%2593a%2Brapid%2Breview%2Bcure%3F%25E2%2580%2593a%2Brapid%2Breview%2Bcure%3F%25E2%2580%2593a%2Brapid%2Breview%2Bcure%2B
- https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubmed-approximation-noted-approximat
-]
 3. Zhu, F.C.; Guan, X.H.; Li, Y.H.; Huang, J.Y.; Jiang, T.; Hou, L.H.; Li, J.X.; Yang, B.F.; Wang, L.; Wang, W.J.; et al. Immunogenicity and safety of a recombinant

adenovirus type-5-vectored COVID-19 vaccine in healthy adults aged 18 years or older:

A randomised, double-blind, placebo-controlled, phase 2 trial. Lancet2020, 396,

479–488. [Google Scholar https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/

5-vectored%2BCOVID19%2Bvaccine%2Bin%2Bhealthy%2Badults%2Baged%2B18%2Byears%2Bor%2Bolder%3A%2BA%2Brand

blind%2C%2Bplacebo-controlled%2C%2Bphase%2B2%2Btrial%26author%3DZhu%2C%2BF.C.%26author%3DGuan%2C%2BX.F6736(20)31605-

6&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0e217

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1016%2FS0140-6736(20)31605-

6736(20)31605-6&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0e217

- 4. Folegatti, P.M.; Ewer, K.J.; Aley, P.K.; Angus, B.; Becker, S.; Belij-Rammerstorfer, S.; Bellamy, D.; Bibi, S.; Bittaye, M.; Clutterbuck, E.A.; et al. Safety and immunogenicity of the ChAdOx1 nCoV-19 vaccine against SARS-CoV-2: A preliminary report of a phase 1/2, single-blind, randomised controlled trial. Lancet2020, 396, 467–478. [Google Scholar
- <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_loutlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_loutlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_loutlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_loutlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_loutlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_loutlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_loutlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_loutlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_loutlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_loutlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_loutlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_loutlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_loutlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_loutlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_loutlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar.google.com/?url=https%3A%2Fscholar.google.com/?url=https%3A%2Fscholar.google.com/?url=https%3A%2Fscholar.google.com/?url=https%3A%2Fscholar.google.com/?u
- 2%3A%2BA%2Bpreliminary%2Breport%2Bof%2Ba%2Bphase%2B1%2F2%2C%2Bsingle-

blind%2C%2Brandomised%2Bcontrolled%2Btrial%26author%3DFolegatti%2C%2BP.M.%26author%3DEweRammerstorfer%2C%2BS.%26author%3DBellamy%2C%2BD.%26author%3DBibi%2C%2BS.%26author%6736(20)31604-

4&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0e217

```
6736(20)31604-
4&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0e217
                              Cai, Y.; Zhang, J.; Xiao, T.; Peng, H.; Sterling, S.M.; Walsh, R.M., Jr.; Rawson,
S.; Rits-Volloch, S.; Chen, B. Distinct conformational states of SARS-CoV-2 spike protein.
Science2020, 369, 1586-1592. [Google Scholar
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com/%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com
CoV-
2%2Bspike%2Bprotein%26author%3DCai%2C%2BY.%26author%3DZhang%2C%2BJ.%26author%3DXiac
Volloch%2C%2BS.%26author%3DChen%2C%2BB.%26publication year%3D2020%26journal%3DScience
1 [CrossRef
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1126%2Fscience.algorithms.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1126%2Fscience.algorithms.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1126%2Fscience.algorithms.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1126%2Fscience.algorithms.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1126%2Fscience.algorithms.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1126%2Fscience.algorithms.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1126%2Fscience.algorithms.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1126%2Fscience.algorithms.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1126%2Fscience.algorithms.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1126%2Fscience.algorithms.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1126%2Fscience.algorithms.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2Fi0.1126%2Fscience.algorithms.protection.outlook.com/protection.outlook.com/protection.outlook.com/protection.outlook.com/protection.outlook.com/protection.outlook.com/protection.outlook.com/protection.outlook.com/protection.outlook.com/protection.outlook.com/protection.outlook.com/protection.outlook.com/protection.outlook.com/protection.outlook.com/protection.outlook.com/protection.outlook.com/protection.outlook.com/protection.outlook.com/protection.outlook.com/protection.outlook.com/protection.outlook.com/protection.outlook.com/protection.outlook.com/protection.outlook.com/protection.outlook.com/protection.outlook.com/protection.outlook.com/protection.outlook.com/protection.outlook.com/protection.outlook.com/protection.outlook.com/protection.outlook.com/protection.outlook.com/protection.outlook.com/protection.outlook.com/protection.outlook.com/protection.outlook.com/protection.outlook.com/protection.outlook.com/protection.outlook.com/protection.outlook.com/protection.outlook.com/protection.outlook.com/protection.outlook.com/protection.outlook.com/protec
] [PubMed
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme</a>
                              Coutard, B.; Valle, C.; de Lamballerie, X.; Canard, B.; Seidah, N.G.; Decroly, E.
The spike glycoprotein of the new coronavirus 2019-nCoV contains a furin-like cleavage
site absent in CoV of the same clade. Antiviral Res.2020, 176, 104742. [Google Scholar
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com/%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com
nCoV%2Bcontains%2Ba%2Bfurin-
like%2Bcleavage%2Bsite%2Babsent%2Bin%2BCoV%2Bof%2Bthe%2Bsame%2Bclade%26author%3DCout
] [CrossRef
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1016%2Fj.antiviral">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1016%2Fj.antiviral</a>
                              Vankadari, N.; Wilce, J.A. Emerging WuHan (COVID-19) coronavirus: Glycan
7.
shield and structure prediction of spike glycoprotein and its interaction with human CD26.
Microbes Infect.2020, 9, 601-604. [Google Scholar
 19)%2Bcoronavirus%3A%2BGlycan%2Bshield%2Band%2Bstructure%2Bprediction%2Bof%2Bspike%2Bgly
] [CrossRef
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1080%2F22221751">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1080%2F22221751</a>
                              Hati, S.; Bhattacharyya, S. Impact of Thiol-Disulfide Balance on the Binding of
Covid-19 Spike Protein with Angiotensin-Converting Enzyme 2 Receptor. ACS
Omega2020, 5, 16292-16298. [Google Scholar
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com/%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.
Disulfide%2BBalance%2Bon%2Bthe%2BBinding%2Bof%2BCovid-
 19%2BSpike%2BProtein%2Bwith%2BAngiotensin-
Converting%2BEnzyme%2B2%2BReceptor%26author%3DHati%2C%2BS.%26author%3DBhattacharyya%
] [CrossRef
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1021%2Facsomega.https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1021%2Facsomega.https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1021%2Facsomega.html

] [PubMed
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih
9.
                              Lavillette, D.; Barbouche, R.; Yao, Y.; Boson, B.; Cosset, F.L.; Jones, I.M.;
Fenouillet, E. Significant redox insensitivity of the functions of the SARS-CoV spike
glycoprotein: Comparison with HIV envelope. Biol. Chem. 2006, 281, 9200-9204. [Google
Scholar
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com
CoV%2Bspike%2Bglycoprotein%3A%2BComparison%2Bwith%2BHIV%2Benvelope%26author%3DLavillett
1 [CrossRef
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1074%2Fjbc.M512">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1074%2Fjbc.M512</a>
][Green Version
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.jbc.org%2Fcontent%2F281%">https://gcc02.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.jbc.org%2Fcontent%2F281%</a>
                              Mathys, L.; Balzarini, J. The role of cellular oxidoreductases in viral entry and
virus infection-associated oxidative stress: Potential therapeutic applications. Opin. Ther.
```

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1016%2FS0140-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1016%2FS0140-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1016%2FS0140-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1016%2FS0140-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1016%2FS0140-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1016%2FS0140-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1016%2FS0140-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1016%2FS0140-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1016%2FS0140-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1016%2FS0140-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F00.1016%2FS0140-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F00.1016%2FS0140-">https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.outlook.com/?url=https://gcc02.safelinks.protection.

```
Targets2016, 20, 123-143. [Google Scholar
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com
associated%2Boxidative%2Bstress%3A%2BPotential%2Btherapeutic%2Bapplications%26author%3DMathy
1 [CrossRef
  <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1517%2F14728222">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1517%2F14728222</a>
][Green Version
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.tandfonline.com%2Fdoi%2F">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.tandfonline.com%2Fdoi%2F</a>
                                     Wrapp, D.; Wang, N.; Corbett, K.S.; Goldsmith, J.A.; Hsieh, C.-L.; Abiona, O.;
11.
Graham, B.S.; McLellan, J.S. Cryo-EM structure of the 2019-nCoV spike in the prefusion
conformation. Science2020, 367, 1260-1263. [Google Scholar
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com/%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com/%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.co
EM%2Bstructure%2Bof%2Bthe%2B2019-
nCoV%2Bspike%2Bin%2Bthe%2Bprefusion%2Bconformation%26author%3DWrapp%2C%2BD.%26author
L.%26author%3DAbiona%2C%2BO.%26author%3DGraham%2C%2BB.S.%26author%3DMcLellan%2C%2
] [CrossRef
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1126%2Fscience.algorithms.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1126%2Fscience.algorithms.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1126%2Fscience.algorithms.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1126%2Fscience.algorithms.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1126%2Fscience.algorithms.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1126%2Fscience.algorithms.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1126%2Fscience.algorithms.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1126%2Fscience.algorithms.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1126%2Fscience.algorithms.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1126%2Fscience.algorithms.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fdoi.org%2Fd
][Green Version
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscience.sciencemag.org%2Fconte">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscience.sciencemag.org%2Fconte</a>
                                     Moreira, R.A.; Guzman, H.V.; Boopathi, S.; Baker, J.L.; Poma, A.B. Quantitative
12.
determination of mechanical stability in the novel coronavirus spike protein.
Nanoscale2020, 12, 16409-16413. [Google Scholar
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com</a>
] [CrossRef
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1039%2FD0NR039">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1039%2FD0NR039</a>
                                     Moreira, R.A.; Guzman, H.V.; Boopathi, S.; Baker, J.L.; Poma, A.B.
13.
Characterization of Structural and Energetic Differences between Conformations of the
SARS-CoV-2 Spike Protein. Materials2020, 13, 5362. [Google Scholar
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com/%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.
CoV-
2%2BSpike%2BProtein%26author%3DMoreira%2C%2BR.A.%26author%3DGuzman%2C%2BH.V.%26auth
] [CrossRef
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.3390%2Fma13235">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.3390%2Fma13235</a>
] [PubMed
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih
                                     Amini, A.; Masoumi-Moghaddam, S.; Morris, D.L. Utility of Bromelain and N-
 14.
Acetylcysteine in Treatment of Peritoneal Dissemination of Gastrointestinal Mucin-
Producing Malignancies; Springer: New York, NY, USA, 2016. [Google Scholar
<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com/%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2
Acetylcysteine%2Bin%2BTreatment%2Bof%2BPeritoneal%2BDissemination%2Bof%2BGastrointestinal%2B
Producing%2BMalignancies%26author%3DAmini%2C%2BA.%26author%3DMasoumi-
Moghaddam%2C%2BS.%26author%3DMorris%2C%2BD.L.%26publication year%3D2016&data=05%7C03
                                     Schlegel, A.; Schaller, J.; Jentsch, P.; Kempf, C. Semliki Forest virus core protein
15.
fragmentation: Its possible role in nucleocapsid disassembly. Rep.1993, 13, 333-347.
[Google Scholar
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com
] [CrossRef
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1007%2FBF011504">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1007%2FBF011504</a>
                                     Greig, A.S.; Bouillant, A.M. Binding effects of concanavalin A on a coronavirus. J.
16.
Comp. Med.1977, 41, 122-126. [Google Scholar
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com/%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.
```

Pillai, K.; Akhter, J.; Chua, T.C.; Morris, D.L. A formulation for in situ lysis of

17.

```
mucin secreted in pseudomyxoma peritonei. J. Cancer 2014, 134, 478-486. [Google
Scholar
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com</a>
] [CrossRef
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1002%2Fijc.28380">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1002%2Fijc.28380</a>
                           Schoeman, D.; Fielding, B.C. Coronavirus envelope protein: Current knowledge.
J.2019, 16, 69. [Google Scholar
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com/%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com/%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.co
019-1182-
0&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0e217
1 [CrossRef
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1186%2Fs12985-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1186%2Fs12985-</a>
019-1182-
0&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0e217
][Green Version
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fvirologyj.biomedcentral.com%2Ft">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fvirologyj.biomedcentral.com%2Ft</a>
019-1182-
0&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0e217
                           Pillai, K.; Akhter, J.; Morris, D.L. Assessment of a novel mucolytic solution for
19.
dissolving mucus in pseudomyxoma peritonei: An ex vivo and in vitro study. Pleura
Peritoneum2017, 2, 111-117. [Google Scholar
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com</a>
2017-
0013%26pmid%3D30911639&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b1660
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1515%2Fpp-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1515%2Fpp-</a>
0013&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0e
] [PubMed
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih
                           Valle, S.J.; Akhter, J.; Mekkawy, A.H.; Lodh, S.; Pillai, K.; Badar, S.; Glenn, D.;
Power, M.; Liauw, W.; Morris, D.L. A novel treatment of bromelain and acetylcysteine
(BromAc) in patients with peritoneal mucinous tumours: A phase I first in man study. J.
Surg. Oncol.2021, 47, 115–122. [Google Scholar
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com/%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2
] [CrossRef
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1016%2Fj.ejso.2016">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1016%2Fj.ejso.2016</a>
] [PubMed
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme</a>
21.
                           Pillai, K.; Mekkawy, A.H.; Akhter, J.; Badar, S.; Dong, L.; Liu, A.I.; Morris, D.L.
Enhancing the potency of chemotherapeutic agents by combination with bromelain and
N-acetylcysteine—An in vitro study with pancreatic and hepatic cancer cells. J. Transl.
Res.2020, 12, 7404-7419. [Google Scholar
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com/%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2
acetylcysteine%25E2%2580%2594An%2Bin%2Bvitro%2Bstudy%2Bwith%2Bpancreatic%2Band%2Bhepat
22.
                           Iyer, K.S.; Klee, W.A. Direct spectrophotometric measurement of the rate of
reduction of disulfide bonds. The reactivity of the disulfide bonds of bovine -lactalbumin.
Biol. Chem. 1973, 248, 707-710. [Google Scholar
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com/%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com/%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.co
lactalbumin%26author%3DIyer%2C%2BK.S.%26author%3DKlee%2C%2BW.A.%26publication year%3D1
                           Zhang, Q.; Ju, Y.; Ma, Y.; Wang, T. N-acetylcysteine improves oxidative stress
```

and inflammatory response in patients with community acquired pneumonia: A

```
randomized controlled trial. Medicine 2018, 97, 45. [Google Scholar
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_loutlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_loutlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_loutlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_loutlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_loutlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_loutlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_loutlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_loutlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_loutlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_loutlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_loutlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_loutlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/particles.google.com/pa
acetylcysteine%2Bimproves%2Boxidative%2Bstress%2Band%2Binflammatory%2Bresponse%2Bin%2Bpat
1 [CrossRef
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1097%2FMD.0000">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1097%2FMD.00000</a>
] [PubMed
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih
                                Morgan, L.E.; Jaramillo, A.M.; Shenoy, S.K.; Raclawska, D.; Emezienna, N.A.;
24.
Richardson, V.L.; Hara, N.; Harder, A.Q.; NeeDell, J.C.; Hennessy, C.E. Disulfide
disruption reverses mucus dysfunction in allergic airway disease. Commun. 2021, 12,
 1-9. [Google Scholar
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com</a>
020-20499-
0%26pmid%3D33431872&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608da
] [CrossRef
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1038%2Fs41467-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1038%2Fs41467-</a>
020-20499-
0&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0e217
] [PubMed
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih
25.
                                Calzetta, L.; Rogliani, P.; Facciolo, F.; Rinaldi, B.; Cazzola, M.; Matera, M.G. N-
Acetylcysteine protects human bronchi by modulating the release of neurokinin A in an
ex vivo model of COPD exacerbation. Biomed Pharm.2018, 103, 1-8. [Google Scholar
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com/%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2
Acetylcysteine%2Bprotects%2Bhuman%2Bbronchi%2Bby%2Bmodulating%2Bthe%2Brelease%2Bof%2Bne
] [CrossRef
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1016%2Fj.biopha.2">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1016%2Fj.biopha.2</a>
                                Cazzola, M.; Calzetta, L.; Facciolo, F.; Rogliani, P.; Matera, M.G. Pharmacological
investigation on the anti-oxidant and anti-inflammatory activity of N-acetylcysteine in an
ex vivo model of COPD exacerbation. Res.2017, 18, 26. [Google Scholar
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com/%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com/%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.co
oxidant%2Band%2Banti-inflammatory%2Bactivity%2Bof%2BN-
acetylcysteine%2Bin%2Ban%2Bex%2Bvivo%2Bmodel%2Bof%2BCOPD%2Bexacerbation%26author%3DCa
016-0500-
y%26pmid%3D28118826&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608da
] [CrossRef
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1186%2Fs12931-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1186%2Fs12931-</a>
016-0500-
y&data=05%7C01%7CWSB0H%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0e217
] [PubMed
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih
27.
                                Suk, J.S.; Boylan, N.J.; Trehan, K.; Tang, B.C.; Schneider, C.S.; Lin, J.-M.G.;
Boyle, M.P.; Zeitlin, P.L.; Lai, S.K.; Cooper, M.J. N-acetylcysteine enhances cystic fibrosis
sputum penetration and airway gene transfer by highly compacted DNA nanoparticles.
Ther.2011, 19, 1981-1989. [Google Scholar
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com/%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com
acetylcysteine%2Benhances%2Bcystic%2Bfibrosis%2Bsputum%2Bpenetration%2Band%2Bairway%2Bgen
M.G.%26author%3DBoyle%2C%2BM.P.%26author%3DZeitlin%2C%2BP.L.%26author%3DLai%2C%2BS.K
] [CrossRef
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1038%2Fmt.2011">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1038%2Fmt.2011</a>.
28.
                                Suhail, S.; Zajac, J.; Fossum, C.; Lowater, H.; McCracken, C.; Severson, N.;
Laatsch, B.; Narkiewicz-Jodko, A.; Johnson, B.; Liebau, J. Role of Oxidative Stress on
SARS-CoV (SARS) and SARS-CoV-2 (COVID-19) Infection: A Review. Protein J.2020, 39,
```

```
1-13. [Google Scholar
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com
CoV%2B(SARS)%2Band%2BSARS-CoV-2%2B(COVID-
 19)%2BInfection%3A%2BA%2BReview%26author%3DSuhail%2C%2BS.%26author%3DZajac%2C%2BJ.%
Jodko%2C%2BA.%26author%3DJohnson%2C%2BB.%26author%3DLiebau%2C%2BJ.%26publication_yea
020-09935-
8&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0e217
1 [CrossRef
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1007%2Fs10930-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1007%2Fs10930-</a>
020-09935-
8&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0e217
29.
                           De Flora, S.; Balansky, R.; La Maestra, S. Rationale for the use of N-
acetylcysteine in both prevention and adjuvant therapy of COVID-19. FASEB J.2020, 34,
 13185-13193. [Google Scholar
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com/%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com
acetylcysteine%2Bin%2Bboth%2Bprevention%2Band%2Badjuvant%2Btherapy%2Bof%2BCOVID-
 19%26author%3DDe%2BFlora%2C%2BS.%26author%3DBalansky%2C%2BR.%26author%3DLa%2BMaes
1 [CrossRef
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1096%2Ffj.202001">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1096%2Ffj.202001</a>
                           Guerrero, C.A.; Acosta, O. Inflammatory and oxidative stress in rotavirus
30.
infection. World J. Virol. 2016, 5, 38. [Google Scholar
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com</a>
] [CrossRef
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.5501%2Fwjv.v5.i2">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.5501%2Fwjv.v5.i2</a>
] [PubMed
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih
31.
                           Walls, A.C.; Park, Y.J.; Tortorici, M.A.; Wall, A.; McGuire, A.T.; Veesler, D.
Structure, Function, and Antigenicity of the SARS-CoV-2 Spike Glycoprotein. Cell2020,
 181, 281-292. e6. [Google Scholar
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com</a>
2%2BSpike%2BGlycoprotein%26author%3DWalls%2C%2BA.C.%26author%3DPark%2C%2BY.J.%26author%3DWalls%2C%2BA.C.%26author%3DPark%2C%2BY.J.%26author%3DWalls%2C%2BA.C.%26author%3DPark%2C%2BY.J.%26author%3DWalls%2C%2BA.C.%26author%3DPark%2C%2BY.J.%26author%3DWalls%2C%2BA.C.%26author%3DPark%2C%2BY.J.%26author%3DPark%2C%2BY.J.%26author%3DPark%2C%2BY.J.%26author%3DPark%2C%2BY.J.%26author%3DPark%2C%2BY.J.%26author%3DPark%2C%2BY.J.%26author%3DPark%2C%2BY.J.%26author%3DPark%2C%2BY.J.%26author%3DPark%2C%2BY.J.%26author%3DPark%2C%2BY.J.%26author%3DPark%2C%2BY.J.%26author%3DPark%2C%2BY.J.%26author%3DPark%2C%2BY.J.%26author%3DPark%2C%2BY.J.%26author%3DPark%2C%2BY.J.%26author%3DPark%2C%2BY.J.%26author%3DPark%2C%2BY.J.%26author%3DPark%2C%2BY.J.%26author%3DPark%2C%2BY.J.%26author%3DPark%2C%2BY.J.%26author%3DPark%2C%2BY.J.%26author%2DPark%2C%2BY.J.%26author%2DPark%2C%2BY.J.%26author%2DPark%2C%2BY.J.%26author%2DPark%2C%2BY.J.%26author%2DPark%2C%2BY.J.%26author%2DPark%2C%2BY.J.%26author%2DPark%2C%2BY.J.%26author%2DPark%2C%2BY.J.%26author%2DPark%2C%2BY.J.%26author%2DPark%2C%2BY.J.%26author%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2DPark%2
] [CrossRef
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1016%2Fj.cell.202">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1016%2Fj.cell.202</a>
                           Li, W.; Zhang, C.; Sui, J.; Kuhn, J.H.; Moore, M.J.; Luo, S.; Wong, S.K.; Huang,
32.
I.C.; Xu, K.; Vasilieva, N.; et al. Receptor and viral determinants of SARS-coronavirus
adaptation to human ACE2. EMBO J.2005, 24, 1634-1643. [Google Scholar
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com/%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.
coronavirus%2Badaptation%2Bto%2Bhuman%2BACE2%26author%3DLi%2C%2BW.%26author%3DZhang
] [CrossRef
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1038%2Fsj.emboj.">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1038%2Fsj.emboj.</a>
] [PubMed
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme</a>
1[Green Version
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Feuropepmc.org%2Farticles%2Fpm">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Feuropepmc.org%2Farticles%2Fpm</a>
33.
                           Watanabe, Y.; Allen, J.D.; Wrapp, D.; McLellan, J.S.; Crispin, M. Site-specific
glycan analysis of the SARS-CoV-2 spike. Science2020, 369, 330-333. [Google Scholar
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_loops">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_loops</a>
specific%2Bglycan%2Banalysis%2Bof%2Bthe%2BSARS-CoV-
2%2Bspike%26author%3DWatanabe%2C%2BY.%26author%3DAllen%2C%2BJ.D.%26author%3DWrapp%
] [CrossRef
```

<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1126%2Fscience.algorithms.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1126%2Fscience.algorithms.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1126%2Fscience.algorithms.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1126%2Fscience.algorithms.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1126%2Fscience.algorithms.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1126%2Fscience.algorithms.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1126%2Fscience.algorithms.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1126%2Fscience.algorithms.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1126%2Fscience.algorithms.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1126%2Fscience.algorithms.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2Fd

```
Casalino, L.; Gaieb, Z.; Goldsmith, J.A.; Hjorth, C.K.; Dommer, A.C.; Harbison,
A.M.; Fogarty, C.A.; Barros, E.P.; Taylor, B.C.; McLellan, J.S. Beyond shielding: The roles
of glycans in the SARS-CoV-2 spike protein. ACS Cent. Sci.2020, 6, 1722-1734. [Google
Scholar
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com</a>
CoV-
2%2Bspike%2Bprotein%26author%3DCasalino%2C%2BL.%26author%3DGaieb%2C%2BZ.%26author%3I
1 [CrossRef
 35.
                           Ryser, H.; Levy, E.M.; Mandel, R.; DiSciullo, G.J. Inhibition of human
immunodeficiency virus infection by agents that interfere with thiol-disulfide interchange
upon virus-receptor interaction. Natl. Acad. Sci. USA1994, 91, 4559-4563. [Google
Scholar
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com/%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com
disulfide%2Binterchange%2Bupon%2Bvirus-
receptor%2Binteraction%26author%3DRyser%2C%2BH.%26author%3DLevy%2C%2BE.M.%26author%3D
1 [CrossRef
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1073%2Fpnas.91.1">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1073%2Fpnas.91.1</a>
] [PubMed
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih
][Green Version
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.pnas.org%2Fcontent%2F91%">https://gcc02.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.pnas.org%2Fcontent%2F91%</a>
36.
                           Kennedy, S.I. The effect of enzymes on structural and biological properties of
Semliki forest virus. Gen. Virol.1974, 23, 129-143. [Google Scholar
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com
 1317-23-2-
 129&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0e2
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1099%2F0022-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1099%2F0022-</a>
 1317-23-2-
 129&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0e2
37.
                           Schlegel, A.; Omar, A.; Jentsch, P.; Morell, A.; Kempf, C. Semliki Forest virus
envelope proteins function as proton channels. Rep.1991, 11, 243-255. [Google Scholar
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com/%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2
] [CrossRef
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1007%2FBF011275">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1007%2FBF011275</a>
38.
                           Compans, R.W. Location of the glycoprotein in the membrane of Sindbis virus.
New Biol.1971, 229, 114-116. [Google Scholar
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com</a>
] [CrossRef
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1038%2Fnewbio22">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1038%2Fnewbio22</a>
] [PubMed
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme</a>
39.
                           Sagar, S.; Rathinavel, A.K.; Lutz, W.E.; Struble, L.R.; Khurana, S.; Schnaubelt,
A.T.; Mishra, N.K.; Guda, C.; Palermo, N.Y.; Broadhurst, M.J.; et al. Bromelain inhibits
SARS-CoV-2 infection via targeting ACE-2, TMPRSS2, and spike protein. Transl.
Med.2021, 11, 2. [Google Scholar
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com/%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.
CoV-2%2Binfection%2Bvia%2Btargeting%2BACE-
2%2C%2BTMPRSS2%2C%2Band%2Bspike%2Bprotein%26author%3DSagar%2C%2BS.%26author%3DRa
```

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1002%2Fctm2.281

] [CrossRef

```
Korber, B.; Fischer, W.M.; Gnanakaran, S.; Yoon, H.; Theiler, J.; Abfalterer, W.;
40.
Hengartner, N.; Giorgi, E.E.; Bhattacharya, T.; Foley, B. Tracking changes in SARS-CoV-
2 Spike: Evidence that D614G increases infectivity of the COVID-19 virus. Cell2020, 182,
812-827. [Google Scholar
<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com</a>
CoV-
2%2BSpike%3A%2BEvidence%2Bthat%2BD614G%2Bincreases%2Binfectivity%2Bof%2Bthe%2BCOVID-
19%2Bvirus%26author%3DKorber%2C%2BB.%26author%3DFischer%2C%2BW.M.%26author%3DGnanal
1 [CrossRef
<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1016%2Fj.cell.202">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1016%2Fj.cell.202</a>
] [PubMed
<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih
                       Zhou, H.; Chen, X.; Hu, T.; Li, J.; Song, H.; Liu, Y.; Wang, P.; Liu, D.; Yang, J.;
41.
Holmes, E.C.; et al. A Novel Bat Coronavirus Closely Related to SARS-CoV-2 Contains
Natural Insertions at the S1/S2 Cleavage Site of the Spike Protein. Biol.2020, 30,
2196-2203. [Google Scholar
<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com</a>
CoV-
2%2BContains%2BNatural%2BInsertions%2Bat%2Bthe%2BS1%2FS2%2BCleavage%2BSite%2Bof%2Bthe
] [CrossRef
<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1016%2Fj.cub.202">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1016%2Fj.cub.202</a>
] [PubMed
<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih
                       Jaimes, J.A.; Millet, J.K.; Whittaker, G.R. Proteolytic Cleavage of the SARS-CoV-2
42.
Spike Protein and the Role of the Novel S1/S2 Site. iScience2020, 23, 101212. [Google
Scholar
<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com</a>
2%2BSpike%2BProtein%2Band%2Bthe%2BRole%2Bof%2Bthe%2BNovel%2BS1%2FS2%2BSite%26autho
43.
                       Lau, S.Y.; Wang, P.; Mok, B.W.; Zhang, A.J.; Chu, H.; Lee, A.C.; Deng, S.; Chen,
P.; Chan, K.H.; Song, W.; et al. Attenuated SARS-CoV-2 variants with deletions at the
S1/S2 junction. Emerg Microbes Infect2020, 9, 837-842. [Google Scholar
<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com
CoV-
2%2Bvariants%2Bwith%2Bdeletions%2Bat%2Bthe%2BS1%2FS2%2Bjunction%26author%3DLau%2C%2B
] [CrossRef
<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1080%2F22221751">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1080%2F22221751</a>
] [PubMed
<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme</a>
1
44.
                       Hoffmann, M.; Kleine-Weber, H.; Pohlmann, S. A Multibasic Cleavage Site in the
Spike Protein of SARS-CoV-2 Is Essential for Infection of Human Lung Cells. Cell2020,
78, 779-784. [Google Scholar
<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com</a>
2%2BIs%2BEssential%2Bfor%2BInfection%2Bof%2BHuman%2BLung%2BCells%26author%3DHoffmann%
Weber%2C%2BH.%26author%3DPohlmann%2C%2BS.%26publication year%3D2020%26journal%3DMol.
] [CrossRef
<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1016%2Fj.molcel.2">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1016%2Fj.molcel.2</a>
<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fpubme-https%3A%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih.gov%2Fwww.ncbi.nlm.nih
45.
                       Walsh, E.E.; Frenck, R.W., Jr.; Falsey, A.R.; Kitchin, N.; Absalon, J.; Gurtman, A.;
Lockhart, S.; Neuzil, K.; Mulligan, M.J.; Bailey, R.; et al. Safety and Immunogenicity of
Two RNA-Based Covid-19 Vaccine Candidates. Engl. J. Med.2020, 383, 2439-2450.
```

```
[Google Scholar
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com
Based%2BCovid-
 19%2BVaccine%2BCandidates%26author%3DWalsh%2C%2BE.E.%26author%3DFrenck%2C%2BR.W.%20
] [CrossRef
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1056%2FNEJMoa26">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1056%2FNEJMoa26</a>
                                Andersen, P.I.; Ianevski, A.; Lysvand, H.; Vitkauskiene, A.; Oksenych, V.; Bjoras,
46.
M.; Telling, K.; Lutsar, I.; Dumpis, U.; Irie, Y.; et al. Discovery and development of safe-
in-man broad-spectrum antiviral agents. J. Infect. Dis.2020, 93, 268-276. [Google
Scholar
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com
in-man%2Bbroad-
spectrum%2Bantiviral%2Bagents%26author%3DAndersen%2C%2BP.I.%26author%3DIanevski%2C%2BA
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1016%2Fj.ijid.2020">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1016%2Fj.ijid.2020</a>
47.
                                Hou, Y.J.; Okuda, K.; Edwards, C.E.; Martinez, D.R.; Asakura, T.; Dinnon, K.H.,
3rd; Kato, T.; Lee, R.E.; Yount, B.L.; Mascenik, T.M.; et al. SARS-CoV-2 Reverse
Genetics Reveals a Variable Infection Gradient in the Respiratory Tract. Cell2020, 182,
429-446.e14. [Google Scholar
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com%2Fscholar.google.com
CoV-
2%2BReverse%2BGenetics%2BReveals%2Ba%2BVariable%2BInfection%2BGradient%2Bin%2Bthe%2BRe
] [CrossRef
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1016%2Fj.cell.202">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1016%2Fj.cell.202</a>
] [PubMed
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48.
                                Frank, S.; Brown, S.M.; Capriotti, J.A.; Westover, J.B.; Pelletier, J.S.; Tessema, B.
In Vitro Efficacy of a Povidone-Iodine Nasal Antiseptic for Rapid Inactivation of SARS-
CoV-2. JAMA Otolaryngol. Head Neck Surg. 2020, 146, 1054-1058. [Google Scholar
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com/%2Fscholar_look.com/?url=https%3A%2F%2Fscholar.google.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com/%2Fscholar_look.com
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49.
                                England, R.J.; Homer, J.J.; Knight, L.C.; Ell, S.R. Nasal pH measurement: A
reliable and repeatable parameter. Otolaryngol. Allied Sci. 1999, 24, 67-68. [Google
 <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com</a>
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 50.
                                Hoffmann, M.; Mosbauer, K.; Hofmann-Winkler, H.; Kaul, A.; Kleine-Weber, H.;
Kruger, N.; Gassen, N.C.; Muller, M.A.; Drosten, C.; Pohlmann, S. Chloroquine does not
inhibit infection of human lung cells with SARS-CoV-2. Nature2020, 585, 588-590.
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https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fscholar.google.com%2Fscholar_look.com

2%26author%3DHoffmann%2C%2BM.%26author%3DMosbauer%2C%2BK.%26author%3DHofmann-

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3&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Ca8191b94607a4942b16608daf84b4025%7C11d0e217

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Akhter, J.; Quéromès, G.; Pillai, K.; Kepenekian, V.; Badar, S.; Mekkawy, A.H.; Frobert, E.; Valle, S.J.; Morris, D.L. The Combination of Bromelain and Acetylcysteine (BromAc) Synergistically Inactivates SARS-CoV-2. Viruses 2021, 13, 425. https://doi.org/10.3390/v13030425 https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.3390%2Fv1303042

AMA Style

Akhter J, Quéromès G, Pillai K, Kepenekian V, Badar S, Mekkawy AH, Frobert E, Valle SJ, Morris DL. The Combination of Bromelain and Acetylcysteine (BromAc) Synergistically Inactivates SARS-CoV-2. Viruses. 2021; 13(3):425. https://doi.org/10.3390/v13030425 https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.3390%2Fv1303042

Chicago/Turabian Style

Akhter, Javed, Grégory Quéromès, Krishna Pillai, Vahan Kepenekian, Samina Badar, Ahmed H. Mekkawy, Emilie Frobert, Sarah J. Valle, and David L. Morris. 2021. "The Combination of Bromelain and Acetylcysteine (BromAc) Synergistically Inactivates SARS-CoV-2" Viruses 13, no. 3: 425. https://doi.org/10.3390/v13030425 https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.3390%2Fv1303042

From: Bill Osmunson

Sent: 1/10/2023 11:02:24 AM

To: DOH WSBOH, Ramos, Bill, Julie Simms, Scott Shock, audrey 55, Olemara Peters

Cc:

Subject: WSBOH Board Members



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External Email

Bill Osmunson DDS MPH bill@teachingsmiles.com <mailto:bill@teachingsmiles.com> 1418 112Th Ave NE, Bellevue, WA. 98004. 425.466.0100

January 10, 2023

Dear Washington State Board of Health Members Keith Grellner, Chair; Kelly Oshiro, JD, Vice Chair; Socia Love-Thurman, MD; Stephen Kutz, BSN, MPH; Dimyana Abdelmalek, MD, MPH; Patty Hayes, RN, MN; Melinda Flores, Elisabeth Crawford, and Umair Shah Umair Shah, MD, MPH, wsboh@sboh.wa.gov <mailto:wsboh@sboh.wa.gov>.

RE: The FDA (US Food and Drug Administration) has not approved (through the drug approval process) the ingestion of fluoride, with intent to prevent dental caries, in any form or dosage. (This letter also attached)

Attachment: FDA warning letter to Kirkman Labs, 1/13/16 their fluoride products are unapproved and misbranded.

Attachment: FDA warning letter to DS Waters of America, June 8, 2009. "Your product label has serious violations. . . ." "Health claims may not be made for food products, including bottled water, for which the label represents or purports that the food is for infants or toddlers less than two years of age. . . "

The WSBOH in the FOI request, responded with 26,000+ pages, does not have any empirical published studies to demonstrate the FDA is in error, that the WSBOH has jurisdiction over drug approval or exempt, that fluoride ingestion is safe, or evidence the Board has attempted to make any label for fluoridation, etc. Endorsements are not empirical evidence.

Remember, the Board of Pharmacy determined fluoride to be a legend (prescription drug) to be dispensed by a licensed health care provider to their patient of record. The WSBOH is promoting a product which is well known to the public to be dispensed with intent to prevent disease and if fluoride is not a drug then it is a poison according to Washington statutes, (documentation previously sent to the WSBOH).

Dosage is uncontrolled; although concentration is controlled. Some drink no public water and others drink over 10 liters/day. Dosage is uncontrolled. Current published research has report about 70% of our young have dental fluorosis, a biomarker of excess fluoride ingestion. I treat dental fluorosis a known risk of harm from too much fluoride ingestion which the WSBOH is causing.

With FDA approval of a drug, the dosage (milligrams per kilogram of body weight per day) is controlled and risks which may be known at that time are stated in the label so the patient and clinician can make an individual judgment based on the best available science. Fluoridation of public water is without a label of dosage and adverse effects, is misbranded and adulterated and contaminated with the waste product of the fertilizer industry.

The ingestion of fluoride has not gone through the FDA drug approval process. The FDA has stated that the evidence for efficacy is incomplete. A judgment of harm and dosage comes after the determination of efficacy.

The WSBOH has failed to determine efficacy, dosage, or label.

Without FDA approval, the Board of Health in Washington State has assumed the oversight drug approval role of the US Food and Drug Administration for scientific efficacy, dosage and safety approval of fluoride ingestion. And it gets worse. The WSBOH approves the administration of fluoride to every person without patient consent, without control of dosage (not everyone drinks the same amount of water), without knowing how much the patient already ingests from other sources such as toothpaste, and without regards for age or health of the patient or even if the patient has teeth.

Proponents will counter that bottled water with fluoride and label is FDA approved. Yes, Congress provided manufacturers a method to circumvent the drug approval process if other agencies of the government approve. Fluoride in bottled water did not go through the drug approval process and does not have an NDA number.

There are many streams of evidence which need to be considered to build an understanding for judgment on fluoride ingestion. Science is and should be controversial, that is how we discover. Science should never be stagnant and always questioned so we can improve. Protecting the public requires careful analysis of the science as more is constantly published.

We all intend to do good. We profit from selling our research to demonstrate efficacy to promote our pills and surgeries. Risk and harm provide little financial incentive for research or to stop our pills or avoid our surgeries. Harm and risk tend to be minimized, ignored, set aside, and glossed over in our enthusiasm to celebrate our good intentions. After all, no one makes money not selling their product.

When a clinician treating a patient makes a mistake, the patient can be harmed and has recourse in the courts. When Public Health makes a policy mistake, millions can be harmed, and the public has no realistic recourse.

My request is for the WSBOH to review science rather than the endorsements of believers and clearly provide the public on the Board's web site the primary research on efficacy, dosage, safety, with a label. That is your job with jurisdiction over fluoridation of public water. I am very willing to help or an Ad Hoc Committee can be set up to write a label. At a minimum, the WSBOH must at least accept the FDA's warnings.

Sincerely, Bill Osmunson DDS MPH



U.S. Food and Drug Administration

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CFSAN/Office of Nutritional Products, Labeling, and Dietary Supplements October 14, 2006

Health Claim Notification for Fluoridated Water and Reduced Risk of Dental Caries

Under section 403(r)(3)(C) (21 U.S.C. §343(r)(3)(C)) of the Federal Food, Drug, and Cosmetic Act (Act), a manufacturer may submit to the Food and Drug Administration (FDA) a notification of a health claim based on an authoritative statement from an appropriate scientific body of the United States Government or the National Academy of Sciences (NAS) or any of its subdivisions. The notification must be submitted to FDA at least 120 days before the food is introduced into interstate commerce. The claim may be made after 120 days from the date of submission of the notification until such time as 1) FDA issues a regulation prohibiting or modifying the claim or finding that the requirements for making the claim have not been met, or 2) a district court in an enforcement proceeding has determined that the requirements for making the claim have not been met.

On June 16, 2006, the FDA received a notification (the June 16 notification) from the law firm of Covington and Burling regarding a health claim for the relationship between fluoridated water and a reduced risk of dental caries. The 120-day period from the date of submission of the June 16 notification was October 14, 2006. Therefore, after October 14, 2006, manufacturers may use the claim specified in the notification, as modified by the notifier in a letter to FDA dated October 13, on the label and in labeling of any food product that meets the eligibility criteria described below, unless or until FDA or a court acts to prohibit the claim.

The June 16 notification cites statements from several sources as authoritative statements for the claim. FDA reviewed the sources and cited statements in their context and in light of existing authorized health claims and current science. The following three statements are considered authoritative for purposes of this notification.

Recommendation for Using Fluoride to Prevent and Control Dental Caries in the U.S. (Centers for Disease Control, 2001):

"Widespread use of fluoride has been a major factor in the decline in the prevalence and severity of dental caries (i.e., tooth decay) in the United States and other economically developed countries. When used appropriately, fluoride is both safe and effective in preventing and controlling dental caries. All U.S. residents are likely exposed to some degree of fluoride, which is available from multiple sources." (Summary section, page 1)

"Continue and extend fluoridation of community drinking water: Community water fluoridation is a safe, effective, and inexpensive way to prevent dental caries. This modality benefits persons in all age groups and of all SES," (Recommendation section, page 24)

THOMAS G. CONDON

THOMAS A. CONDON

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THIERS Zajicek, CSR 09/03/2020

DS-006370

http://www.cfsan.fda.gov/~dms/flfluoro.html

Oral Health in America: A Report of the Surgeon General (2000):

"Community water fluoridation is safe and effective in preventing dental caries in both children and adults. Water fluoridation benefits all residents served by community water supplies regardless of their social or economic status. Professional and individual measures, including the use of fluoride mouth rinses, gels, dentifrices, and dietary supplements and the application of dental sealants, are additional means of preventing dental caries." (Executive summary)

Review of Fluoride: Benefits and Risks (Public Health Service, 1991):

"Extensive studies over the past 50 years have established that individuals whose drinking water is fluoridated show a reduction in dental caries. Although the comparative degree of measurable benefit has been reduced recently as other fluoridation are still clearly available in non-fluoride areas, the benefits of water fluoridation are still clearly evident." (Conclusions section, page 87)

According to the June 16 notification and the letter to FDA dated October 13, the food eligible to bear the claim is bottled water meeting the standards of identity and quality set forth in 21 CFR 165.110, containing greater than 0.6 and up to 1.0 mg/L total fluoride, and meeting all general requirements for health claims (21 CFR 101.14) with the exception of minimum nutrient contribution (21 CFR 101.14) (e) (b)). The claim language is: "Drinking fluoridated water may reduce the risk of [dental caries or tooth decay]." In addition, the health claim is not intended for use on bottled water products specifically marketed for use by infants.

The notification and materials regarding the claim are publicly available from the FDA Division of Dockets Management (Docket Mo.2006Q-0418). Persons interested in these documents may view them at the Division of Dockets Management from 9am to 4pm, Monday through Friday at 5630 Fishers Lane, room 1061, Rockville, MD 20852. The Division of Dockets Management may be contacted at 301-827-6860. FDA also intends to make the documents available on the Dockets web site at http://www.fda.gov/ohrms/dockets/dockets/dockets.htm, under Docket Mo. 2006Q-0418.

Food Labeling and Mutrition

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FDA/Center for Food Safety & Applied Nutrition Hypertext updated by davicim October 18, 2006



U.S. Food and Drug Administration



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CFSAN/Office of Nutritional Products, Labeling, and Dietary Supplements October 14, 2006

Health Claim Notification for Fluoridated Water and Reduced Risk of Dental Caries

Under section 403(r)(3)(C) (21 U.S.C. §343(r)(3)(C)) of the Federal Food, Drug, and Cosmetic Act (Act), a manufacturer may submit to the Food and Drug Administration (FDA) a notification of a health claim based on an authoritative statement from an appropriate scientific body of the United States Government or the National Academy of Sciences (NAS) or any of its subdivisions. The notification must be submitted to FDA at least 120 days before the food is introduced into interstate commerce. The claim may be made after 120 days from the date of submission of the notification until such time as 1) FDA issues a regulation prohibiting or modifying the claim or finding that the requirements for making the claim have not been met, or 2) a district court in an enforcement proceeding has determined that the requirements for making the claim have not been met.

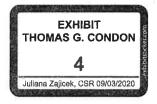
On June 16, 2006, the FDA received a notification (the June 16 notification) from the law firm of Covington and Burling regarding a health claim for the relationship between fluoridated water and a reduced risk of dental caries. The 120-day period from the date of submission of the June 16 notification was October 14, 2006. Therefore, after October 14, 2006, manufacturers may use the claim specified in the notification, as modified by the notifier in a letter to FDA dated October 13, on the label and in labeling of any food product that meets the eligibility criteria described below, unless or until FDA or a court acts to prohibit the claim.

The June 16 notification cites statements from several sources as authoritative statements for the claim. FDA reviewed the sources and cited statements in their context and in light of existing authorized health claims and current science. The following three statements are considered authoritative for purposes of this notification.

Recommendation for Using Fluoride to Prevent and Control Dental Caries in the U.S. (Centers for Disease Control, 2001):

"Widespread use of fluoride has been a major factor in the decline in the prevalence and severity of dental caries (i.e., tooth decay) in the United States and other economically developed countries. When used appropriately, fluoride is both safe and effective in preventing and controlling dental caries. All U.S. residents are likely exposed to some degree of fluoride, which is available from multiple sources." (Summary section, page 1)

"Continue and extend fluoridation of community drinking water: Community water fluoridation is a safe, effective, and inexpensive way to prevent dental caries. This modality benefits persons in all age groups and of all SES," (Recommendation section, page 24)



DS-006370

Oral Health in America: A Report of the Surgeon General (2000):

"Community water fluoridation is safe and effective in preventing dental caries in both children and adults. Water fluoridation benefits all residents served by community water supplies regardless of their social or economic status. Professional and individual measures, including the use of fluoride mouth rinses, gels, dentifrices, and dietary supplements and the application of dental sealants, are additional means of preventing dental caries." (Executive summary)

Review of Fluoride: Benefits and Risks (Public Health Service, 1991):

"Extensive studies over the past 50 years have established that individuals whose drinking water is fluoridated show a reduction in dental caries. Although the comparative degree of measurable benefit has been reduced recently as other fluoride sources have become available in non-fluoride areas, the benefits of water fluoridation are still clearly evident." (Conclusions section, page 87)

According to the June 16 notification and the letter to FDA dated October 13, the food eligible to bear the claim is bottled water meeting the standards of identity and quality set forth in 21 CFR 165.110, containing greater than 0.6 and up to 1.0 mg/L total fluoride, and meeting all general requirements for health claims (21 CFR 101.14) with the exception of minimum nutrient contribution (21 CFR 101.14 (e) (6)). The claim language is: "Drinking fluoridated water may reduce the risk of [dental caries or tooth decay]." In addition, the health claim is not intended for use on bottled water products specifically marketed for use by infants.

The notification and materials regarding the claim are publicly available from the FDA Division of Dockets Management (Docket No.2006Q-0418). Persons interested in these documents may view them at the Division of Dockets Management from 9am to 4pm, Monday through Friday at 5630 Fishers Lane, room 1061, Rockville, MD 20852. The Division of Dockets Management may be contacted at 301-827-6860. FDA also intends to make the documents available on the Dockets web site at http://www.fda.gov/ohrms/dockets/dockets/dockets.htm, under Docket No. 2006Q-0418.

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U.S. FOOD & DRUG

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Inspections, Compliance, Enforcement, and Criminal Investigations DS Waters of America, LP 6/8/09



Department of Health and Human Services

Public Health Service Food and Drug Administration 5100 Paint Branch Parkway College Park, MD 20740

JUN - 8 2009

WARNING LETTER

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. Stewart E. Allen Mr. Dillon Schickli Chief Executive Officers DS Waters of America, Inc. 5660 New Northside Drive, Suite 500 Atlanta, GA 30328

Re: CFSAN-OC-WL09-03

Dear Mr. Allen and Schickli:

EXHIBIT THOMAS G. CONDON Juliana Zajicek, CSR 09/03/2020

The Food and Drug Administration (FDA) has reviewed the label for the 1 Gal (3.78L) package of your NURSERY@ Purified Water with added fluoride, and your website at www.nurserywater.com in April 2009. Based on our review, we have found that your product label has serious violations of the Federal Food, Drug, and Cosmetic Act (the Act) and the applicable regulations in Title 21, Code of Federal Regulations (21 CFR). You can find the Act and these regulations through links on FDA's Internet website at www.fda.gov.

Your significant violations are as follows:

Your product is misbranded within the meaning of section 403(r)(1)(B) of the Act [21 U.S.C. 343(r)(1)(B)], because it bears an unauthorized health claim in its labeling. We have determined that your website www.nurserywater.com. the address for which appears on your product's label, is labeling for your product under section 201(m) of the Act [21 U.S.C. 321(m)]. This website bears the following unauthorized health claim: "Drinking water with added fluoride in the proper amounts has been shown to be so effective that the ADA supports municipal water fluoridation and refers to this as the single most effective measure to prevent tooth decay." Health claims may not be made for food products, including bottled water, for which the label represents or purports that the food is for infants or toddlers less than two years of age, unless FDA has provided for such claim by regulation. 21 CFR 101.14(e)(5), 1

Your product is misbranded within the meaning of section 403(q) of the Act [21 U.S.C. 343(q)] in that nutrition facts information is not in an appropriate format as defined in 21 CFR 101.9. The Nutrition Facts panel uses abbreviations for serving size and servings per container that are not in accordance with 21 CFR 101.9(j)(13)(ii)(B), which provides that the use of specific abbreviations to list nutrients is only for packages that have a total surface area available to bear labeling of 40 or less square inches. In addition, the correct heading on the Nutrition Facts panel for declaring the quantity of a nutrient is "% Daily Value" (not "Amount") in accordance with 21 CFR 101.9(d)(6).

This letter is not meant to be an all-inclusive review of your NURSERY® Purified Water product and its labeling. It is your

responsibility to ensure that all of your products are in compliance with the laws and regulations enforced by FDA. You should take prompt action to correct the violations described above and prevent their recurrence. Failure to promptly correct these violations may result in regulatory action without further notice, such as seizure and/or injunction.

Please respond in writing within fifteen (15) working days from your receipt of this letter. Your response should include each step that has been or will be taken to completely correct the labeling violations and to prevent the recurrence of similar violations, the time within which the correction will be completed, and any documentation necessary to show that the correction has been achieved. If applicable, please include a copy of your revised label. If corrective actions cannot be completed within fifteen (15) working days, state the reason for the delay and the time within which the corrections will be completed.

In addition, we have the following comments:

- The serving size of your NURSERY® Purified Water product is based on 8 fluid ounces. While FDA has not established a reference amount customarily consumed (RACC) for water by infants and toddlers, we recommend that you use the infant and toddler RACC for juices, which is 4 fl oz (120 mL) [21 CFR 101.12(b), Table I (Juices, all varieties)].
- Although minerals are added for taste, the statement of identity does not include this information (e.g., "purified water with minerals added for taste") [60 FR 57076 at 57080 and 57082, November 13, 1995].

If you need additional information or have questions concerning any products distributed through your website, please contact FDA. You may respond in writing to Felicia Binion Williams, Compliance Officer, Division of Enforcement, Center for Food Safety and Applied Nutrition, Food and Drug Administration, 5100 Paint Branch Parkway, College Park, MD 20740.

Sincerely,

/s/

Roberta F. Wagner Director Office of Compliance Center for Food Safety and Applied Nutrition

(b)(4)

1. FDA notes that the following claim regarding fluoridated water and reduced risk of dental caries or tooth decay may be made consistent with a health claim notification under section 403(r)(3)(C) of the Act [21 U.S.C. 343(r)(3)(C)]: "Drinking fluoridated water may reduce the risk of [dental caries or tooth decay]." [www.cfsan.fda.gov/~dms/flfluoro.html]. However, the prohibition under 21 CFR 101.14(e)(5) applies to these health claim notifications, and this notification explicitly excluded bottled water products that are specifically marketed for use by infants, and therefore your product is not eligible to bear this health claim. Furthermore, the language of the claim on your website differs significantly from the language in the claim in the notification.

Page Last Updated: 11/17/2009

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4

U.S. Department of Health & Human Services

Links on this page:

From: Dennis Flynn

Sent: 2/13/2023 4:32:32 PM

To: DOH PCH OI School Information, Helseth, Jennifer (DCYF), lpitsnogle@srhd.org, DOH

WSBOH

Subject: No COVID-19 exemption or "vaccine" requirement for public school participation

External Email

Jennifer Helseth and Others To Whom It May Concern:

Thank you in advance for considering the content I include in this communication.

Senator Billig's office identified you as the proper leaders to contact regarding my views on public schools and the COVID-19 "vaccines". Specifically I am writing to you regarding any type of requirement or mandate that children either provide an exemption (personal, religious, medical) or proof of having received the "vaccine" as a prerequisite to participate in any academic or extracurricular services and/or activities accessed via the public school systems in Washington state.

I also contacted Representatives Riccelli's and Ormsby's offices, but received no reply from multiple contact attempts. I relay this to point out how well-served Senator Billig is by his staff, especially Veronica.

In early February 2023, the CDC added the (Emergecy-Use-Authorization) COVID-19 "vaccines" to the Child and Adolescent Immunization Schedule (https://cdc.gov/vaccines/schedules/hcp/imz/child-adolescent.html). Now that this official action has taken place, I find it imperative to write to you in opposition to implementing and/or enforcing any requirement regarding these "vaccines" or submitting an exemption as a prerequisite for participation in any academic or extracurricular service or activity provided by our public schools.

First off, this is an Emergency-Use-Authorization vaccine, and any decision to accept such a vaccine must be without coercion. Threat of withholding public-school-related activities unless a child is vaccinated is definitely coercion, which is a violation of medical ethics regarding informed consent (https://pubmed.ncbi.nlm.nih.gov/11317270/).

Secondly, anyone with basic math skills may look at the data and see that COVID-19 is less dangerous to children and young adults than the flu (https://www.statista.com/statistics/1191568/reported-deaths-from-covid-by-age-us/), and there is no flu vaccine requirement as a prerequisite for public-school participation. It may also interest you that several European countries are now excluding children (without comorbidities) from even being able to access these "vaccines", due to observed short-term risk factors and unknown long-term risk factors.

Thirdly, disadvantaged communities, including communities of color, will be more impacted by a COVID-19 "vaccine" requirement. Likewise requiring a healthcare visit to receive an exemption would also disproportionately impact disadvantaged communities. I'm sure you are sensitive to implementing any policy that inequitably disadvantages communities of color.

Lastly, studies show that the vast majority of children have already had and recovered from COVID-19 (https://www.cdc.gov/mmwr/volumes/71/wr/mm7117e3.htm), and one of the largest employees and providers of healthcare in this state, Providence St. Joseph Health, conducted a study that proved recovery from COVID-19 provides protection from the virus at least as effective as the "vaccines" AND for a longer period of time (https://www.news-medical.net/news/20220420/Natural-immunity-provides-a-longerwindow-of-protection-against-COVID-19-infection-than-mRNA-vaccines.aspx).

The COVID "vaccines" are available for any parent who weighs the risk/benefit ratio and determines to "vaccinate" their child; this should be an "opt in" model, not an "opt out" model. Any COVID-19 "vaccine" requirement to attend our public schools unethically eliminates a parent's right to informed consent, especially when children are at more risk from flu, which has no such vaccination requirement, than COVID. Requiring either a vaccine or an exemption would disproportionately impact people of color, meaning any policy requiring the "vaccine" (or an exmption) will propogate societal inequities. And the easiest reason of all to not require COVID "vaccines" as a prerequisite to attend school is that almost all the children have already had it and recovered, and recovery is at least as effective as the "vaccines" anyway.

I appreciate your time and attention. Additional writings on my perspective, many of which include links to source data and resources, may be found here:

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https://flynner.substack.com/p/wa-doh-webinar-re-vaccines-for-infants

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fflynner.substack.com%2Fp%2Fwadoh-webinar-re-vaccines-for-

infants&data=05%7C01%7Cwsboh%40sboh.wa.gov%7C491e28c215d5409c620f08db0e22f46d%7C11d0e2

https://flynner.substack.com/p/covid-19-what-have-we-learned

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https://flynner.substack.com/p/vax-truths-are-peaking

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https://flynner.substack.com/p/theyre-lying

Please contact me with any clarifying questions:

Dennis Flynn 2108 W Euclid, Spokane, WA 99205 5093259097 dpflynn@hotmail.com ______

From: Arne Christensen

Sent: 1/25/2023 12:04:22 PM

To: DOH WSBOH

Cc:

Subject: face masks and health care

External Email

Hello:

You should not have to put a covering on your face in order to obtain health care in Washington. That requirement needs to end today. I will keep sending this message to the DOH until the policy changes.

From: WA.gov

Sent: 1/10/2023 1:56:31 AM

To: DOH WSBOH

Cc:

Subject: Webform submission from the WA.gov website.

External Email

This email was sent from the Government Agency Directory https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdev-accesswa- redesign.pantheonsite.io%2Fagency&data=05%7C01%7CWSBOH%40SBOH.WA.GOV%7C4dc975b508bd4a found on WA.gov. The message and details of the person contacting you are as follows:

Your Name Antoine Banks

Your Email

antoineleonbanksservices@gmail.com <mailto:antoineleonbanksservices@gmail.com>

Fire Alarms in Jails and Prisons

Message

Now, although, I haven't heard any cases on the news about fires breaking out in jails and prisons, yet I know that anything is possible for it to happen; in kitchens, cells, changing rooms, showers, etc. Also, in a prison camp, it can happen outside in the field.

My suggestion is that, by law, all cells, kitchens, laundry rooms, showers; for prison camps; the open field, etc. have fire alarms so that, just in a fire breaks out and an inmate needs to pull the fire alarm to warn everyone, instead of trying to yell "fire" and not being heard, or, the guards can't get there on time; especially, when the fire is small at the time before it grows. This is, especially, needed in cells because of the close proximity.

Now, when it comes to an open field; there needs to be fire alarms in various and easily obtained checkpoint areas.

Now, by law, no fire alarm should be covered by glass, locked, or anything else that would make it hard for an inmate to pull if necessary for the safety of both, the inmate and staff; and the jail/prison as a whole. Under no circumstances, shall the fire alarms be locked, covered, etc. that will make it difficult for anyone to pull if necessary.

I suggest that you forward this to other fire marshal offices around the USA and to lawmakers in Washington DC and let them know the urgent need for the placement of fire alarms in every jail and prison across the country.

Note: Please do not reply to this email as this inbox is not monitored. If you have questions regarding this service, please use our contact form

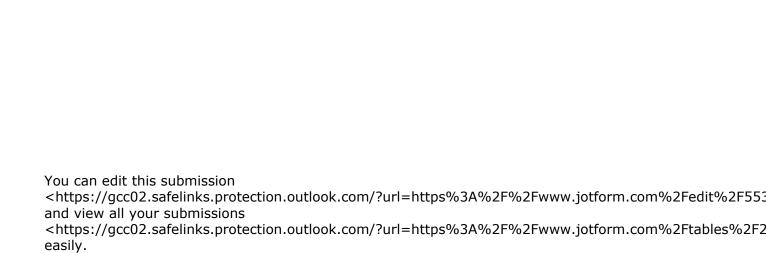
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team&data=05%7C01%7CWSBOH%40SBOH.WA.GOV%7C4dc975b508bd4a0f8ef808daf2f0f0c8%7C11d0e

From: Jotform Sent: 2/28/2023 6:20:07 PM To: DOH WSBOH
Cc: Subject: Re: Stop The Child Vaccine Mandate Petition - Luke Lewis
External Email
<https: assets="" cdn.jotfor.ms="" img="" jotform-logo.png="" logo2021=""></https:>
Stop The Child Vaccine Mandate Petition
Name
Luke Lewis
Email
lukelewis8@gmail.com

98052-1286

Zip



Cell Phone Number

(206) 7146007

From: Pohort Lowery

From: Robert Lowery

Sent: 2/22/2023 8:10:59 AM

To: DOH WSBOH

Subject: Fwd: COVID requirement

External Email

To whom it may concern,

Well, as you can see from this e-mail thread below, the buck has been passed squarely to the state Board of Health, at least from our county, on a potential COVID-19 innoculation mandate for public school attendance next year. So, my question continues, is such a mandate under consideration? If so, will there be public hearings/input taken before such a mandate is put forth? And what exemptions will be allowed, philosophical or simply religious? These don't seem to be such difficult questions for someone in authority and it baffles me why they are.

Robert Lowery 509-899-0235 robloweryiii@icloud.com

Begin forwarded message:

From: Robert Lowery <robloweryiii@icloud.com> Date: February 22, 2023 at 7:57:40 AM PST To: Mark Larson <mark.larson@co.kittitas.wa.us>

Subject: Re: COVID requirement

 \Box OK

Sent from my iPhone

On Feb 22, 2023, at 7:54 AM, Mark Larson <mark.larson@co.kittitas.wa.us> wrote:

□Meowery
You had brought up the issue on the number of vaccines and the increase autism rates in a separate email. I was just trying to answer your question.
There is no avoidance on the issue of Covid vaccine and the school vaccine uirements. It has not been decided by the state BOH as of yet. I would recommend owing their process at this point. There is nothing else to say about this issue at this nt.
Mark Larson, MD
Health Officer
Kittitas County

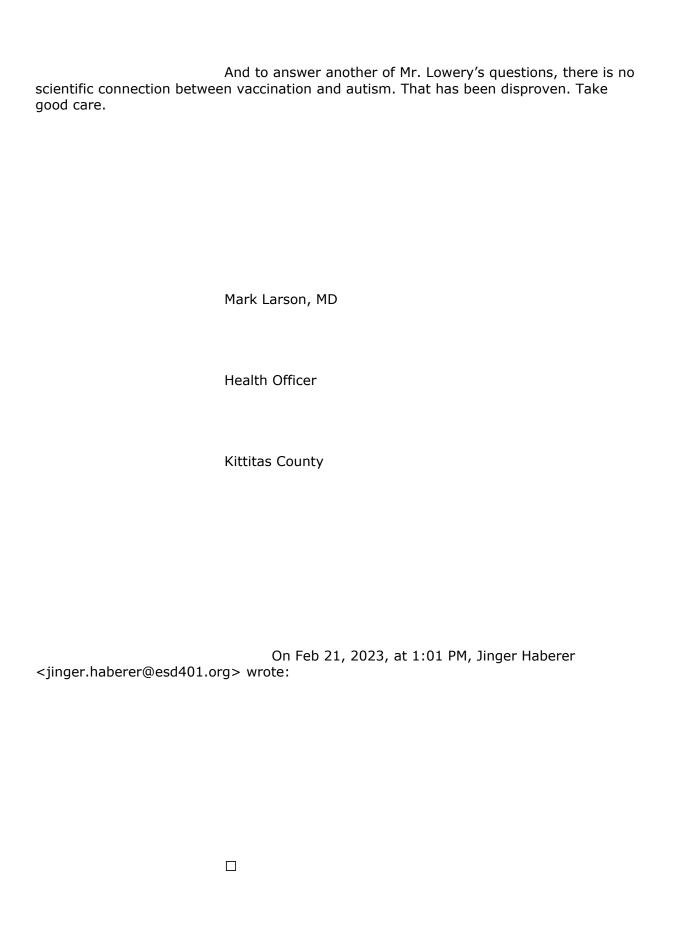
□CAUTION Fhis email originated from outside the Kittitas County network. Do not click links, open attachments, fulfill requests, or follow guidance unless you recognize the sender and have verified the content is safe.

All,

I am not sure where the question about vaccines and autism came up. That was not something I asked about. My concern is about the COVID innoculation only and whether the state, county, and/or ESD plan to mandate it for public school attendance here. Pretty simple and I don't want to muddy the waters by bringing other mandated shots and their efficacy or lack of same. As this COVID shot is certainly controversial, especially in light of research that MAY link it to myocarditis in young boys, and the fact I have two young men now enrolled in the ESD, I do not think it is out-of-bounds to ask this question about a COVID-shot mandate. I just want to get a jump on the exemption process for my boys. The obfuscation I feel I am getting to this fairly easy question is truly troubling. And as the state and local jurisdictions, apparently, have independent oversight and decision-making authority on a COVID innoculation mandate, that is the reason I'm posing this to all entities involved. Transparency on the decision-making

process on this extremely important medical issue is vital.		
Robert Lowery		
509-899-0235		
robloweryiii@icloud.com		
On Feb 21, 2023, at 10:13 PM, Mark Larson <mark.larson@co.kittitas.wa.us> wrote:</mark.larson@co.kittitas.wa.us>		
□Goodvening		

The State BOH makes decisions on vaccine requirements for school. Their meeting agendas can be found on their website. Public comment can be given. Local PH usually follows their lead, although Public Health is local in WA state. Decisions on vaccination schedules and exemptions have not been made.



	Hello Dr. Larson,
vaccines on the routine sch that they have now to get a	Will the COVID 19 vaccines be mandated like the other edule for schools? If so, would parents use the same process an extension?
	Forwarded message

From: Robert Lowery <robloweryiii@icloud.com>>

Date: Tue, Feb 21, 2023 at 1:45 PM

Subject: Fwd: COVID requirement

To: Mark Larson <mark.larson@co.kittitas.wa.us<mailto:mark.larson@co.kittitas.wa.us>>, <Board@esd401.org<mailto:Board@esd401.org>>, Jinger Haberer <Jinger.Haberer@esd401.org<mailto:Jinger.Haberer@esd401.org>>

I've also contacted the State Board of Health about this, to see if it plans to require COVID innoculations for school attendance. But, as the following e-mail notes, local jurisdictions have the ability to make such mandates. So, is the county public health department and/or the Ellensburg School District considering such a mandate? If so, what public comment is being taken and when will a decision be made? Or, will we simply follow whatever the Board of Health determines? If that is the case, will there also be public comment accepted?

	robloweryiii@icloud.com <mailto:robloweryiii@icloud.com></mailto:robloweryiii@icloud.com>
	509-899-0235
me" - Batman	"It's not who I am underneath, but what I do that defines
	Begin forwarded message:
<robloweryiii@icloud.com<< td=""><td>From: Robert Lowery mailto:robloweryiii@icloud.com>></td></robloweryiii@icloud.com<<>	From: Robert Lowery mailto:robloweryiii@icloud.com>>
	Date: February 21, 2023 at 1:31:31 PM PST

To: DOH COVID Vaccine <COVID.Vaccine@doh.wa.gov>>

S	Subject: Re: COVID requirement
add the COVID-19 shot to the attendance beginning next so	□Thididn't quite answer my question. Is Washington going to e required vaccine schedule for children for public school chool year? You mentioned it was up to states and/or local sion. So, is the state going to do that?
R	Robert Lowery
r	obloweryiii@icloud.com <mailto:robloweryiii@icloud.com></mailto:robloweryiii@icloud.com>
5	509-899-0235
me" - Batman	It's not who I am underneath, but what I do that defines

On Feb 21, 2023, at 11:36 AM, DOH COVID Vaccine <COVID.Vaccine@doh.wa.gov<> wrote: Hello,

Disease Control and Prevention (CDC), has unanimously voted to add the COVID-19 vaccine to the recommended immunization schedulehttps://lnks.gd/l/eyJhbGciOiJIUzI1NiJ9.eyJidWxsZXRpbl9saW5rX2lkIjoxMDAsInVyaSI6ImJwMjpjb1 for children and adults. The schedule, updated every fall to go into effect the following year, is meant to help guide providers in determining when to administer a number of important vaccinations, particularly for children. The immunization schedule also provides guidance to insurance companies, which tend to cover vaccines on the list.

The recommended immunization schedule is not a vaccine mandate. States and local jurisdictions make their own rules about which vaccines are required for school attendance. In fact, there are vaccines included on the schedule now, such as the seasonal flu vaccine, that many jurisdictions don't require for children to attend school.

Thank you, COVID-19 Vaccine Public Response Prevention and Community Health Division Washington State Department of Health



<image002.png>

From: Robert Lowery <robloweryiii@icloud.com<mailto:robloweryiii@icloud.com>>

Sent: Monday, February 20, 2023 11:42 AM

To: DOH Information <DOH.Information@DOH.WA.GOV>>

Subject: COVID requirement

External Email
To whom it may concern,
low that the Centers for Disease Control and Prevention has added the two-shot primary eries mRNA COVID-19 vaccine to its routine immunization schedule for children and dults is the Washington State Department of Health planning to mandate this for public chool attendance? If so, how soon could that announcement be made?
Robert Lowery
robloweryiii@icloud.com <mailto:robloweryiii@icloud.com></mailto:robloweryiii@icloud.com>
509-899-0235

--

[photo]

Jinger Haberer

Superintendent, Ellensburg School District

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message id: 38eb45916c6dcbdac24bb8719d004a14

From: Cascade Climber

Sent: 1/18/2023 12:50:36 PM To: DOH WSBOH, Inslee, Jay

(GOV),barry.moore@mail.house.gov,gary.palmer@mail.house.gov,david.schweikert@mail.house.gov,eli.cra Chamber of Commerce, Nic Bacetich, editor@methowvalleynews.com, DNR RE NORTHEAST

REGION, electhawleysheriff@gmail.com, info@cspoa.org, info@codyhart.org, Ferguson, Bob

(ATG), secretary of state@sos.wa.gov, cacord@okanogancountyfd6.com, secretary@okanogancountyfd6.com, s Neal (ATG), Abbarno, Peter, Barkis, Andrew, Bateman, Jessica, Berg, April, Bergquist, Steve, Berry, Liz, Billig, Andy, Boehnke, Matt, Braun, John, Bronoske, Dan, Caldier, Michelle, Callan, Lisa, Chambers, Kelly, Chandler, Bruce, Chopp, Frank, Cleveland, Annette, Conway, Steve, Corry, Chris, Davis, Lauren, Dent, Tom, Dhingra, Manka, Dolan, Laurie, Donaghy, Brandy, Dozier, Perry, Duerr, Davina, Dye, Mary, Entenman, Debra, Eslick, Carolyn, Fey, Jake, Fitzgibbon, Joe, Fortunato, Phil, Frame, Noel, Gildon, Chris, Goehner, Keith, Goodman, Roger, Graham, Jenny, Gregerson, Mia, Griffey, Dan, Hackney, David, Hansen, Drew, Harris, Paul, Hasegawa, Bob, Hawkins, Brad, Holy, Jeff, Hunt, Sam, Jacobsen, Cyndy, Jinkins, Laurie, Keiser, Karen, King, Curtis, Klicker, Mark, Kloba, Shelley, Kretz, Joel, Kuderer, Patty (LEG), Leavitt, Mari, Lekanoff, Debra, Liias, Marko, Lovelett, Liz, Lovick, John, MacEwen, Drew, Macri, Nicole, Maycumber, Jacquelin, McCune, Jim, McEntire, Joel, Morgan, Melanie, DOR Gina Mosbrucker, Mullet, Mark, Muzzall, Ron, Nguyen, Joe, Nobles, T'wina (LEG), Orcutt, Ed, Ormsby, Timm, Ortiz-Self, Lillian, Orwall, Tina, Padden, Mike, Paul, Dave, Pedersen, Jamie, Peterson, Strom, Pollet, Gerry, Ramel, Alex, Ramos, Bill, Randall, Emily, Riccelli, Marcus, Rivers, Ann, Robertson, Eric, Robinson, June, Rolfes, Christine, Rude, Skyler, Rule, Alicia, Ryu, Cindy, Saldana, Rebecca (LEG), Salomon, Jesse, Santos, Sharon Tomiko, Schmick, Joe, Schoesler, Mark, Senn, Tana, Shewmake, Sharon, Short, Shelly, Simmons, Tarra, Slatter, Vandana, Springer, Larry, Stanford, Derek, Steele, Mike (LEG), Stokesbary, Drew, Stonier, Monica, Taylor, Jamila, Thai, My-Linh, Tharinger, Steve, Trudeau, Yasmin, Valdez, Javier, Van De Wege, Kevin, Volz, Mike, DOR Keith Wagoner, Walen, Amy, Walsh, Jim, Warnick, Judy, Wellman, Lisa, J.T. Wilcox@leg.wa.gov, Wilson, Claire, Wilson, Jeff, Wylie, Sharon, Ybarra, Alex, Alvarado, Emily, Barnard, Stephanie, Christian, Leonard, Cortes, Julio, Couture, Travis, Doglio, Beth, Kauffman, Claudia, Low, Sam, McClintock, Stephanie, Mena, Sharlett, Reed, Julia, Reeves, Kristine, Schmidt, Suzanne, Sandlin, Bryan, Shavers, Clyde, Street, Chipalo, Timmons, Joe, Torres, Nikki, Waters, Kevin, Wilson, Lynda, Stearns, Chris

Subject: CEO of Pfizer Victor Bourla PERP WALK - VIDEO - Please Share With the WORLD

External Email

What's next, a 5G EBOLA "VAX" that CAUSES Hemorrhagic Fever PLandemic? https://halturnerradioshow.com/index.php/en/news-page/world/pfizer-ceo-interceptedby-media-in-davos

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findex page%2Fworld%2Fpfizer-ceo-intercepted-by-media-in-

davos&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C4ad2688d1fa84cd2c99208daf995a3cb%7C11d0e2

"Pfizer CEO Intercepted by Media in Davos

WORLD

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findex page%2Fworld&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C4ad2688d1fa84cd2c99208daf995a3cb%7 HAL TURNER

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findex

18 JANUARY 2023 HITS: 151

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davos&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C4ad2688d1fa84cd2c99208daf995a3cb%7C11d0e2

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<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftwitter.com%2Fshare%3Furl%3Dpage%2Fworld%2Fpfizer-ceo-intercepted-by-media-in-davos%26text%3DPfizer%2520CEO%2520Intercepted%2520by%2520Media%2520in%2520Davos%2520Intercepted%2520by%2520Media%2520in%2520Davos%2520Intercepted%2520by%2520Media%2520in%2520Davos%2520Intercepted%2520by%2520Media%2520in%2520Davos%2520Intercepted%2520by%2520Media%2520in%2520Davos%2520Intercepted%2520by%2520Media%2520in%2520Davos%2520Intercepted%2520by%2520Media%2520in%2520Davos%2520Intercepted%2520Davos%2520Intercepted%2520Davos%2520Intercepted%2520Davos%2520Intercepted%2520Davos%2520Intercepted%2520Davos%2520Intercepted%2520Davos%2520Intercepted%2520Davos%2520Intercepted%2520Davos%2520Intercepted%2520Davos%2520Intercepted%2520Davos%2520Intercepted%2520Davos%2520Intercepted%2520Davos%2520Intercepted%2520Davos%2520Intercepted%2520Davos%2520Intercepted%2520Davos%2520Intercepted%2520Davos%2520Intercepted%2520Davos%2520Intercepted

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https://halturnerradioshow.com/images/2023/01/18/Bourla-Davos_large.jpg

Victor Bourla, the Chief Executive Officer of Pfizer, was intercepted by new-media in Davos, Switzerland. It quickly became clear Mr. Bourla was not prepared for the questions asked by citizen journalist media as opposed legacy mass-media lapdogs. Video below shows the encounter.

Reporter Ezra Levant of Rebel News made the initial interception outside the World Economic Forum event in Davos, Switzerland. Mr. Levant was quickly joined by Avi Yemeni, also of Rebel News, but from their Australia outlet. Here's an Excerpt:

Levant: Mr. Bourla, can I ask you when did you know that the vaccines didn't stop transmission? How long did you know that without saying it publicly? We now know that the vaccines didn't stop transmission, but why did you keep it secret? You said it was 100% effective, then 90%, then 80%, then 70%. But we now know that the vaccines do not stop transmission. Why did you keep that secret?

Bourla: Have a nice day

Levant: I won't have a nice day until I know the answer. Why did you keep it a secret that your vaccine did not stop transmission?

Yemini: Is it time to apologize to the world, sir? To give refunds back to the countries

that poured all their money into your vaccine that doesn't work, your ineffective vaccine? Are you not ashamed of what you've done in the last couple of years?

Levant: Do you have apologies to the public, sir?

Yemini: Are you proud of it? You've made millions on the backs of people's entire livelihoods. How does that feel to walk the streets as a millionaire? On the backs of the regular person at home in Australia, in England, and Canada?

Levant: What do you think about on your yacht, sir? What do you think about on your private jet? Are you worried about product liability? Are you worried about myocarditis? What do you have to say about young men dropping dead of heart attacks every day? Why won't you answer these basic questions?

Yemini: Do you think you should be charged criminally for some of the criminal behavior you've obviously been a part of?

Levant: How much money have you personally made off the vaccine?

Yemini: How many boosters do you think it'll take for you to be happy enough with your earnings?

Levant: Who did you meet with here in secret? Will you disclose who you met with? Who did you pay commissions to? In the past, Pfizer has paid \$2.3 billion in fines for deceptive marketing. Have you engaged in that same conduct again? Are you under investigation like you were before for your deceptive marketing?

Yemini: If any other product in the world doesn't work as promised, you get a refund. Should you not refund to countries that laid out billions for your ineffective vaccine?

Levant: Are you used to only sympathetic media? So you don't know how to answer any questions.

Yemini: Shame on you.

Levant: Shame on you.

VIDEO

The video below was posted to social media. Within minutes, it _seemed_ to get "shadow banned" as viewership each minute went from 70,000, down to 50,000 and continued dropping. We publish the video here pursuant to exception to the U.S. Copyright Law which exists for news purposes:"

https://halturnerradioshow.com/index.php/en/news-page/world/pfizer-ceo-intercepted-by-media-in-davos

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fworld%2Fpfizer-ceo-intercepted-by-media-in-

davos&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C4ad2688d1fa84cd2c99208daf995a3cb%7C11d0e2

France Company Count

From: Suzanne Sund

Sent: 1/19/2023 6:25:36 PM

To: DOH WSBOH

Cc:

Subject: Deceptive Practices

External Email

Be Advised:

Hor the duration of the COVID-19 public health emergency declared pursuant to section 319 of the Public Health Service Act (42 U.S.C. 247d), this Act makes it unlawful under Section 5 of the Federal Trade Commission Act for any person, partnership, or corporation to engage in a deceptive act or practice in or affecting commerce associated with the treatment, cure, prevention, mitigation, or diagnosis of COVID-19 or a government benefit related to COVID-19. The Act provides that such a violation shall be treated as a violation of a rule defining an unfair or deceptive act or practice prescribed under Sec. 18(a)(1)(B) of the FTC Act.

Suzanne Sund

From: Travis Pahl

Sent: 1/25/2023 9:09:15 PM

To: DOH WSBOH

Cc:

Subject: Mental health care mask requirement

External Email

I would like to understand the boards reason for extending a mask requirement to mental health care facilities. Children with Autism often require treatment at centers that apply ABA therapy. These facilities fall under mental health care rules that require masks. The children and staff at these facilities are not in any way more vulnerable to COVID19 than the general population in public places throughout the community yet are treated like they are. The children already have difficult with social cues and forcing the staff to wear masks is harming these children in their most formative years.

Please explain the justification or end the requirement please.

Travis Pahl

From: WA.gov

Sent: 1/30/2023 2:43:30 PM

To: DOH WSBOH

Cc:

Subject: Webform submission from the WA.gov website.

External Email

This email was sent from the Government Agency Directory <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdev-accesswa-redesign.pantheonsite.io%2Fagency&data=05%7C01%7CWSBOH%40SBOH.WA.GOV%7C3731c0186fb141 found on WA.gov. The message and details of the person contacting you are as follows:

Your Name dana phillips

Your Email

2danna@live.com <mailto:2danna@live.com>

Subject

When r state officials going to start looking into the side effects caused by the "vaccine"

Message

Why is the state still pushing these "vaccines"... more and more information is coming out that they problematic.. The Twitter files have demonstrated that dialog about the dangers were suppressed by government and big pharma. I know of doctors practicing in Washington, felt they were unable to speak up due to cancel culture... Even Gates , now that he has made his profits selling bio tech, is saying they are ineffective. People lost their business due to a poorly thought out lockdown...

Note: Please do not reply to this email as this inbox is not monitored. If you have questions regarding this service, please use our contact form https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwa.gov%2Fwebform%2Fcontactwagov-

team&data=05%7C01%7CWSBOH%40SBOH.WA.GOV%7C3731c0186fb141d9075208db031366b7%7C11d

From: arnolfini@earthlink.net

Sent: 1/9/2023 10:47:09 AM

To: DOH WSBOH

Cc:

Subject: wet face masks

External Email

Hello

The CDC tells people to discard wet face masks. See

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F20ncov%2Fprevent-getting-sick%2Fabout-face-

coverings.html&data=05%7C01%7Cwsboh%40sboh.wa.gov%7Cf7e3c069eee54ea35e4f08daf271e772%7C "Disposable masks and respirators that become wet or dirty should be thrown away in the trash right away. Do not continue to wear a wet or dirty mask."

Why doesn't the health department aggressively inform Washingtonians of this, especially in the winter months? I continue to see many pedestrians stumble around outdoors in a steady rain, wearing masks. At this point, my suspicion is the reason is that you are avoiding any message that undermines the terribly misplaced faith in masks that has been inculcated over the past 3 years. Why continue to mislead the public about the error of keeping dripping masks on your face?

Arne Christensen

From: Angela

Sent: 2/7/2023 8:50:28 AM

To: DOH WSBOH

Cc:

Subject: My Public Comments

External Email

Please consider making vaccination a parents choice and not a state mandated decision.

You can't possibly understand the divide in Stevens County. Vaccination and masking have polarized our community and our schools. If you mandate vaccination for students it will force students out of our schools and from receiving a free public education.

If you pass this mandate I want you to make that announcement from the least vaccinated county in the State of Washington, Stevens County.

I am sure the parents of our schools and community would turn out in force to see you.

Respectfully submitted,

Angela Spencer

Human Resources

Nine Mile Falls School District

Sent from Mail

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From: Cascade Climber

Sent: 1/22/2023 11:50:11 PM To: DOH WSBOH,Inslee, Jay

(GOV),barry.moore@mail.house.gov,gary.palmer@mail.house.gov,david.schweikert@mail.house.gov,eli.cra

Chamber of Commerce, Nic Bacetich, editor@methowvalleynews.com, DNR RE NORTHEAST REGION, electhawleysheriff@gmail.com, info@cspoa.org, info@codyhart.org, Ferguson, Bob

(ATG), secretary of state@sos.wa.gov, cacord@okanogancountyfd6.com, secretary@okanogancountyfd6.com, s Neal (ATG), Abbarno, Peter, Barkis, Andrew, Bateman, Jessica, Berg, April, Bergquist, Steve, Berry, Liz, Billig, Andy, Boehnke, Matt, Braun, John, Bronoske, Dan, Caldier, Michelle, Callan, Lisa, Chambers, Kelly, Chandler, Bruce, Chopp, Frank, Cleveland, Annette, Conway, Steve, Corry, Chris, Davis, Lauren, Dent, Tom, Dhingra, Manka, Dolan, Laurie, Donaghy, Brandy, Dozier, Perry, Duerr, Davina, Dye, Mary, Entenman, Debra, Eslick, Carolyn, Fey, Jake, Fitzgibbon, Joe, Fortunato, Phil, Frame, Noel, Gildon, Chris, Goehner, Keith, Goodman, Roger, Graham, Jenny, Gregerson, Mia, Griffey, Dan, Hackney, David, Hansen, Drew, Harris, Paul, Hasegawa, Bob, Hawkins, Brad, Holy, Jeff, Hunt, Sam, Jacobsen, Cyndy, Jinkins, Laurie, Keiser, Karen, King, Curtis, Klicker, Mark, Kloba, Shelley, Kretz, Joel, Kuderer, Patty (LEG), Leavitt, Mari, Lekanoff, Debra, Liias, Marko, Lovelett, Liz, Lovick, John, MacEwen, Drew, Macri, Nicole, Maycumber, Jacquelin, McCune, Jim, McEntire, Joel, Morgan, Melanie, DOR Gina Mosbrucker, Mullet, Mark, Muzzall, Ron, Nguyen, Joe, Nobles, T'wina (LEG), Orcutt, Ed, Ormsby, Timm, Ortiz-Self, Lillian, Orwall, Tina, Padden, Mike, Paul, Dave, Pedersen, Jamie, Peterson, Strom, Pollet, Gerry, Ramel, Alex, Ramos, Bill, Randall, Emily, Riccelli, Marcus, Rivers, Ann, Robertson, Eric, Robinson, June, Rolfes, Christine, Rude, Skyler, Rule, Alicia, Ryu, Cindy, Saldana, Rebecca (LEG), Salomon, Jesse, Santos, Sharon Tomiko, Schmick, Joe, Schoesler, Mark, Senn, Tana, Shewmake, Sharon, Short, Shelly, Simmons, Tarra, Slatter, Vandana, Springer, Larry, Stanford, Derek, Steele, Mike (LEG), Stokesbary, Drew, Stonier, Monica, Taylor, Jamila, Thai, My-Linh, Tharinger, Steve, Trudeau, Yasmin, Valdez, Javier, Van De Wege, Kevin, Volz, Mike, DOR Keith Wagoner, Walen, Amy, Walsh, Jim, Warnick, Judy, Wellman, Lisa, J.T. Wilcox@leg.wa.gov, Wilson, Claire, Wilson, Jeff, Wylie, Sharon, Ybarra, Alex, Alvarado, Emily, Barnard, Stephanie, Christian, Leonard, Cortes, Julio, Couture, Travis, Doglio, Beth, Kauffman, Claudia, Low, Sam, McClintock, Stephanie, Mena, Sharlett, Reed, Julia, Reeves, Kristine, Schmidt, Suzanne, Sandlin, Bryan, Shavers, Clyde, Street, Chipalo, Timmons, Joe, Torres, Nikki, Waters, Kevin, Wilson, Lynda, Stearns, Chris

Subject: "Jab Me Two Times" (MORTICIAN"S MIX) - "The Eye of the Pfizer"

External Email

TAKE YOUR JAB & SHOVE IT UP A VERY DARK PLACE ILLEGITIMATE IMPOSTER 'HAMMER & SCORECARD' #GOVIDIOT 'MAGGOT' INSLEE!!! TREASON, SEDITION & SUBVERSIVE ACTS! ELECTION FRAUD - SENICIDE - GENOCIDE - CRIMES AGAINST CHILDREN - SOLITARY CONFINEMENT ELDER ABUSE + MURDER by PLACING 'COVID' PATIENTS IN NURSING HOMES! PREMEDITATED APPLE MAGGOT BIOTERRORISM & FOREIGN COLLUSION WHILE WA Was HACKED to STEAL 2020.

https://www.bitchute.com/video/QXlo2Rvy1L8g/

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.bitchute.com%2Fvideo%2FC

https://www.bitchute.com/video/fDqmFzH2LjtF/

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.bitchute.com%2Fvideo%2Ff

https://www.bitchute.com/video/m2At2rtWBoCK/

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https://www.bitchute.com/video/ztEJkM0DmMDy/ <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.bitchute.com%2Fvideo%2Fz

From: Garry Blankenship Sent: 1/20/2023 8:57:01 AM

To:

mozias@co.clallam.wa.us,rjohnson@co.clallam.wa.us,shahidafatin@gmail.com,gbsjrmd@sisna.com,ncarr@WSBOH,OADS@cdc.gov,sheriff@co.clallam.wa.us

Cc:

Subject: Multiple Doctors Calling for the Halt of mRNA Drugs

External Email

If there is any justification for the continuation of these mRNA drug injections, by all means share that data. Simply use reply all.

https://doctorsforpatientsuk.com/wp-content/uploads/direct/PressReleaseV2Final-Least.mov

From: Callie Batts

Sent: 2/3/2023 7:33:10 PM

To: DOH WSBOH

Cc:

Subject: Letter urging end to healthcare mask mandate

External Email

February 3, 2023

To WA State Department of Health,

The CDC updated it recommendations months ago for universal masking for healthcare workers. Now, healthcare workers in areas without low or medium COVID-19 transmission rates can opt out of requiring doctors, patients, and visitors to mask up.

The Biden administration is ending the COVID emergency order in May of 2023.

I am writing to urge that Washington State consider following the CDC's guidance. I work in an outpatient pediatric occupational therapy client. Many of the children we work with have sensory processing difficulties and disabilities that make it difficult for them to wear a mask. Additionally, half of the clients we serve have Autism Spectrum Disorder with challenges with language and social communication. Not being able to see their therapist's face and facial expression is detrimental to their progress. We are a "healthcare facility" however, we do not treat sick clients. We have a strict sick policy and children do not come into the clinic experiencing any symptoms of COVID-19. Many healthcare facilities covered under the WA DOH mask mandate do not see or treat sick or symptomatic clients.

With low community transmission, high vaccine and infection-induced immunity and available effective treatments, it is my belief that masking in healthcare settings like therapy clinics is causing more harm to the patients we serve than good.

Thank you for your consideration,

Callie Batts, OTR/L

Pediatric occupational therapist

From: Lica Tomploton

From: Lisa Templeton

Sent: 3/3/2023 11:53:38 AM

To: DOH WSBOH

Cc:

Subject: for the BOH's March 8 meeting materials

External Email

Good morning,

Will you please include the following message to the Board in its materials for its March 8 meeting. Thank you.

Dear BOH members,

At the risk of sounding harsh, I'm not alone when I say I'm embarrassed for the Board regarding its flattering letter to the outgoing Dr. Anthony Fauci.

The dogmatic Covid policies of this unelected bureaucrat caused, and continue to cause, incalculable harms to millions of people and our society at large. His claims were often self-conflicting, and he even publicly admitted lying about masks, rationalizing his falsehood by indicating that the ends justified the means.

Even prior to Covid, Dr. Fauci and his underlings committed crimes against humanity for decades under the guise of "medical experimentation." May I respectfully suggest that you learn the true nature of this man and his treacherous endeavors so you might spare yourself from expressing such sentiments toward him in the future. He may not be a person you want to be associated with, once you understand his life's work.

A useful tool to start educating yourself is Robert F. Kennedy Jr.'s best seller, The Real Anthony Fauci. I will be happy to send a hard copy or audiobook to any Board member who so requests. Find out for yourself what's behind the public outcry and the facts that you offhandedly dismiss as "misinformation." If you are hesitant to look at this presentation of evidence, I hope you will ask yourself why.

Thank you for considering my sincere offer,

Lisa Templeton

Washington citizen and informed consent advocate

From: horseshoebill

Sent: 3/2/2023 4:15:55 PM To: amesteam8@aol.com

Cc:

Subject: Stop HB 1333 - Urgent Washington: The "Ministry of Disinformation" bill

continues to move forward

External Email

https://standforhealthfreedom.com/action/shb1333/

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Here's my two cents worth...

Seems like everyone on the planet is being controlled by such an extreme amount of evil, it's really hard to comprehend in this day and age.

Certainly Goebbels and Hitler would be very proud of AG Ferguson and his SS Henchmen backing this insane Rise of the Fourth Reich law, HB1333 - Interesting number they choose there by the way..

If you want most of the people in Washington state to be forced to move out of state to a place where there is freedom and liberty and not this Socialist/Fascist/Communist insanity, then pass this evil law.

"Truth is a menace and Logic is the Enemy" That is how a dictator sees things.

That is from The Opposite Man Twilight Zone with Burgess Meredith.

I'd advise those that think this law is worth voting on to watch this episode first and while your at it, watch these as well.

"The Howling Man"

"The Hunt"

"Jezebel"

Please for the love of God, oppose this horrible, Rise of the Fourth Reich bill.

Unbelievable, this evil is even being considered, someone strong and patriotic enough to stand up for the truth, freedom and against medical tyranny to be labeled an enemy.

This is pure evil, un American and WRONG.

I OPPOSE, please vote NO

"The New World Order is the Enemy of Humanity"

"The world won't be destroyed by those that do evil, but by those that watch and do Nothing"

Albert Einstein

Please to the right thing for humanity vote no.

"If they can make you believe absurdities, they can make you commit atrocities" Voltaire

"Be Ashamed to die, until you've won some victory for humanity" Horace Mann

Sent with Proton Mail https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fproton.me%2F&data=05%7C01%secure email.

From: Cascade Climber

Sent: 2/17/2023 11:00:32 AM

To: Cc:

Subject: Fwd: Coming SOOn: MARBURG - OBOLA - HEMORRHAGIC FEVER PLandemic Via

HUNTER BIDEN'S Metabiota & FAUCI'S Gain of Function Funded by OBAMA

External Email

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----- Forwarded message -----
From: Cascade Climber < cascadeclimber69@gmail.com
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Date: Fri, Feb 17, 2023 at 10:58 AM
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https://articles.mercola.com/sites/articles/archive/2023/02/16/did-us-build-bioweapons-in-ukraine.aspx

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ukraine.aspx&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C98ca40af794e4cf3deac08db11193c28%7C

https://www.dailymail.co.uk/health/article-11753379/Marburg-virus-cure-wont-ready-

YEARS-Stark-warning-incurable-pathogen-spreads-Africa.html

<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.dailymail.co.uk%2Fhealth%211753379%2FMarburg-virus-cure-wont-ready-YEARS-Stark-warning-incurable-pathogen-spreads-

Africa.html&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C98ca40af794e4cf3deac08db11193c28%7C11

https://www.theepochtimes.com/health/why-experts-are-concerned-about-the-new-medical-codes-for-covid-19-vaccination-

 $status_5053996.html?utm_source=Morningbrief\&src_src=Morningbrief\&utm_campaign=mb-2023-02-16\&src_cmp=mb-2023-02-$

16&utm_medium=email&est=J3tKTWZ4Xjl0%2FhspaN1XR7I6IDeyWK9lBdwDP8hMx47%2FJ3NE%2Be%2Fj

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.theepochtimes.com%2Fhealexperts-are-concerned-about-the-new-medical-codes-for-covid-19-vaccination-

status_5053996.html%3Futm_source%3DMorningbrief%26src_src%3DMorningbrief%26utm_campaign%3 2023-02-16%26src_cmp%3Dmb-2023-02-

16%26utm_medium%3Demail%26est%3DJ3tKTWZ4Xjl0%252FhspaN1XR7I6IDeyWK9lBdwDP8hMx47%25

https://www.youtube.com/watch?v=gMM3OxPTFYs

<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.youtube.com%2Fwatch%3Fw

From L Camantha Chiolds

From: Samantha Shields Sent: 1/9/2023 11:01:34 AM

To: DOH WSBOH

Cc:

Subject: Comments on Vaccine Requirements

External Email

Good morning,

I'm a Washington Resident in Skamania County and a mother of 2. I urge you to not mandate any vaccines on children, including covid-19 vaccine which is under emergency use authorization. Additionally, according to the US Government's VAERS website (vaccine adverse event recording system), there's over 30,000 deaths and from a Harvard study, that only accounts for 1% of all adverse events. Normally, a vaccine is pulled from use after 50 deaths.

Children have a 100% rate of recovery from covid-19 without the vaccine. There's no reason to mandate this for children!

The vaccine has been advertised as safe and effective. It is not safe (has clearly killed 30,000+ people) and it's not effective! It has been proven and stated that the vaccine does not prevent covid and does not stop the transmission of covid. Health Officials now say that the vaccines just help the severity of covid. That's not true. There is no way to prove how someone's body is going to react to covid, with or without the vaccine. This is a lie.

I urge the State Board of Health to not mandate the covid vaccine for anyone, and definitely not for children.

Thank you, Samantha Shields.

From: Alicia Flogal

From: Alicia Flegel

Sent: 1/9/2023 11:03:31 AM

To: DOH WSBOH

Subject: Re: Public Comments for WSBOH Members from EH Committee Meeting Jan

2023

External Email

I am the mother of 3 children who attend the Enumclaw School District. I moved back here a 2 years ago to my home state from Montana to be closer to family and provide my children with education in a different light.

I have major concerns in regards to the WA Health/School Board determining the welfare in regards to this vaccination on my children, as that shouldn't be of there concern. It's the responsibility of the parents to decide for there children's health outlook which include guaranteed life saving vaccinations.

In these last 3 years since covid virus (keyword virus) began it's been found with much more research that the government has contradicted itself from the studies and findings from doctors/scientists that we all should be fully paying attention too.

Here are just a few questions that I feel should be at the forefront of each parents concern with going forward on forcing this shot:

- 1.) Children are at extremely low risk for Covid or death
- 2.) The vaccines are still only EUA (emergency use authorized)
- 3.) There are no long-term studies to document any history of safety for this shot on our childrens future health outlook
- 4.) Studies do now document that vaccinated and unvaccinated can both transmit Covid, therefore, the vaccine apparently does not stop the spread of the virus. It possibly only keeps symptoms at bay depending on each individuals own immunity.
- 5.) Death has occurred from this shot also major heart complications and other symptoms that concern me as a parent more than the virus itself.

No one should be forced, this should be a choice under our constitutional rights. It's also proven by doctors/science that there is no guarentee by injecting this shot and many boosters thereafter it will prevent death. There is too many unknowns to go forth with this injustice request on an experimental drug.

Also, regarding the HPV vaccine, I highly find this to be a pharmaceutical heist and should be an option for an individual as a choice. This shouldn't be a requirement to attend public school, this is a sexually transmitted disease. This is preposterous to allow the School/State Health Board to decide on our child's reproductive sexual health matters. That is between the child, parents and physician to determine the best riute for the health and well being of that child. Not all vaccines are right and perform as the pharmaceutical companies state.

Sincerely, Ali a concerned mother Franci Canada Climbar

From: Cascade Climber Sent: 2/1/2023 5:49:38 PM To: DOH WSBOH,Inslee, Jay

(GOV),barry.moore@mail.house.gov,gary.palmer@mail.house.gov,david.schweikert@mail.house.gov,eli.cra Chamber of Commerce,Nic Bacetich,editor@methowvalleynews.com,DNR RE NORTHEAST REGION,electhawleysheriff@gmail.com,info@cspoa.org,info@codyhart.org,Ferguson, Bob

(ATG), secretary of state@sos.wa.gov, cacord@okanogancountyfd6.com, secretary@okanogancountyfd6.com, secretary@okanogancountyfd6.com Neal (ATG), Abbarno, Peter, Barkis, Andrew, Bateman, Jessica, Berg, April, Bergquist, Steve, Berry, Liz, Billig, Andy, Boehnke, Matt, Braun, John, Bronoske, Dan, Caldier, Michelle, Callan, Lisa, Chambers, Kelly, Chandler, Bruce, Chopp, Frank, Cleveland, Annette, Conway, Steve, Corry, Chris, Davis, Lauren, Dent, Tom, Dhingra, Manka, Dolan, Laurie, Donaghy, Brandy, Dozier, Perry, Duerr, Davina, Dye, Mary, Entenman, Debra, Eslick, Carolyn, Fey, Jake, Fitzgibbon, Joe, Fortunato, Phil, Frame, Noel, Gildon, Chris, Goehner, Keith, Goodman, Roger, Graham, Jenny, Gregerson, Mia, Griffey, Dan, Hackney, David, Hansen, Drew, Harris, Paul, Hasegawa, Bob, Hawkins, Brad, Holy, Jeff, Hunt, Sam, Jacobsen, Cyndy, Jinkins, Laurie, Keiser, Karen, King, Curtis, Klicker, Mark, Kloba, Shelley, Kretz, Joel, Kuderer, Patty (LEG), Leavitt, Mari, Lekanoff, Debra, Liias, Marko, Lovelett, Liz, Lovick, John, MacEwen, Drew, Macri, Nicole, Maycumber, Jacquelin, McCune, Jim, McEntire, Joel, Morgan, Melanie, DOR Gina Mosbrucker, Mullet, Mark, Muzzall, Ron, Nguyen, Joe, Nobles, T'wina (LEG), Orcutt, Ed, Ormsby, Timm, Ortiz-Self, Lillian, Orwall, Tina, Padden, Mike, Paul, Dave, Pedersen, Jamie, Peterson, Strom, Pollet, Gerry, Ramel, Alex, Ramos, Bill, Randall, Emily, Riccelli, Marcus, Rivers, Ann, Robertson, Eric, Robinson, June, Rolfes, Christine, Rude, Skyler, Rule, Alicia, Ryu, Cindy, Saldana, Rebecca (LEG), Salomon, Jesse, Santos, Sharon Tomiko, Schmick, Joe, Schoesler, Mark, Senn, Tana, Shewmake, Sharon, Short, Shelly, Simmons, Tarra, Slatter, Vandana, Springer, Larry, Stanford, Derek, Steele, Mike (LEG), Stokesbary, Drew, Stonier, Monica, Taylor, Jamila, Thai, My-Linh, Tharinger, Steve, Trudeau, Yasmin, Valdez, Javier, Van De Wege, Kevin, Volz, Mike, DOR Keith Wagoner, Walen, Amy, Walsh, Jim, Warnick, Judy, Wellman, Lisa, J.T. Wilcox@leg.wa.gov, Wilson, Claire, Wilson, Jeff, Wylie, Sharon, Ybarra, Alex, Alvarado, Emily, Barnard, Stephanie, Christian, Leonard, Cortes, Julio, Couture, Travis, Doglio, Beth, Kauffman, Claudia, Low, Sam, McClintock, Stephanie, Mena, Sharlett, Reed, Julia, Reeves, Kristine, Schmidt, Suzanne, Sandlin, Bryan, Shavers, Clyde, Street, Chipalo, Timmons, Joe, Torres, Nikki, Waters, Kevin, Wilson, Lynda, Stearns, Chris

Subject: "It's Time For The Scientific Community To Admit We Were Wrong About COVID & It Cost Lives"

External Email

https://www.zerohedge.com/covid-19/its-time-scientific-community-admit-we-were-wrong-about-covid-it-cost-lives

<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.zerohedge.com%2Fcovid-19%2Fits-time-scientific-community-admit-we-were-wrong-about-covid-it-cost-lives&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Cca521b1cf7c7452d566b08db04bfb512%7C11d0e22db1cf7c7452db1cf7c74452db1cf7c74452db1cf7c74452d

From: Henry Callahan

Sent: 2/25/2023 8:31:47 AM

To: DOH WSBOH

Cc:

Subject: Re: Ahora disponible: Orden del día definitivo de la reunión pública de la Mesa

Directiva de Salud del 8 de marzo



attachments\9D17291DD139428B_image001.png

attachments\47C95DAA985A4EA8_image001.png

External Email

English please

On Wed, Feb 22, 2023, 4:16 PM DOH WSBOH <WSBOH@sboh.wa.gov <mailto:WSBOH@sboh.wa.gov > wrote:

Ya está disponible el orden del día definitivo propuesto https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fsboh.wa.gov%2Fsites%2Fdefaultc02%2FWSBOH-Agenda-2023-03-08-

Draft_Spanish_0.pdf&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C0ad19a0fd1154d4b722108db174d7 para la reunión pública de la Mesa Directiva de Salud del miércoles 8 de marzo de 2023. Nos reuniremos de 10:30 a. m. a 3:10 p. m.

Lea la propuesta de orden del día para obtener más información sobre la reunión y sobre cómo hacer comentarios públicos. Puede acceder a la reunión de las siguientes maneras:

1. Registrese en línea en:

https://us02web.zoom.us/webinar/register/WN_has7tGYeQ9uKBC9EUwsD9g https://us02web.zoom.us/webinar/register/WN has7tGYeQ9uKBC9EUwsD9g>

- 2. Llame y participe a través de su teléfono:
 - 0. Llamada para el seminario web: +1 (253) 215-8782
 - 1. Id. del seminario web: 871 1231 5420
 - 2. Contraseña del seminario web: 952181

Comentarios públicos:

* Invitamos al público a enviar sus comentarios por escrito a la Mesa Directiva antes de la reunión. A fin de garantizar que los miembros de la Mesa Directiva tengan la oportunidad de leer y tener en cuenta sus comentarios antes de la reunión, envíelos por correo electrónico

<mailto:wsboh@sboh.wa.gov?subject=My%20Public%20Comments> antes del viernes 3 de marzo a las 12:00 del mediodía. Los comentarios por escrito recibidos después de las 12:00 del mediodía del viernes se compartirán con los miembros de la Mesa Directiva; sin embargo, es posible que estos no puedan leer o considerar sus comentarios durante el fin de semana anterior a la reunión o durante esta. Puede hacer comentarios verbales en la reunión durante los segmentos de comentarios públicos o de la audiencia sobre normas. Los comentarios públicos se publicarán en la página web de materiales de la reunión el miércoles 1 de marzo de 2023.

* Consulte el orden del día para obtener más información sobre cómo hacer comentarios públicos verbales.

Más información sobre la reunión:

* Esta reunión se celebrará en formato híbrido. La reunión en línea se realizará a través de la aplicación Zoom Webinar. La reunión física será en Trabajo e Industrias, en 7273 Linderson Way SW, Tumwater, WA 98501.

Gracias.

(360) 236-4110

P.O. Box 47990, Olympia, WA 98504-7990

Ubicación

<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.google.com%2Fmaps%2Fplata.9083621%2C17z%2Fdata%3D!3m1!4b1!4m5!3m4!1s0x549173f074205aa3%3A0x552ddc5f79ee44b6122.9061681%3Fhl%3Den&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C0ad19a0fd1154d4b722108dlata.9061681%3Fhl%3Den&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C0ad19a0fd1154d4b722108dlata.9061681%3Fhl%3Den&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C0ad19a0fd1154d4b722108dlata.9061681%3Fhl%3Den&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C0ad19a0fd1154d4b722108dlata.9061681%3Fhl%3Den&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C0ad19a0fd1154d4b722108dlata.9061681%3Fhl%3Den&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C0ad19a0fd1154d4b722108dlata.9061681%3Fhl%3Den&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C0ad19a0fd1154d4b722108dlata.9061681%3Fhl%3Den&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C0ad19a0fd1154d4b722108dlata.9061681%3Fhl%3Den&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C0ad19a0fd1154d4b722108dlata.9061681%3Fhl%3Den&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C0ad19a0fd1154d4b722108dlata.9061681%3Fhl%3Den&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C0ad19a0fd1154d4b722108dlata.9061681%3Fhl%3Den&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C0ad19a0fd1154d4b722108dlata.9061681%3Fhl%3Den&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C0ad19a0fd1154d4b722108dlata.9061681%3Fhl%3Den&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C0ad19a0fd1154d4b722108dlata.9061681%3Fhl%3Den&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C0ad19a0fd1154d4b722108dlata.90616484%3Fhl%3Den&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C0168648%3Fhl%3Den&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C0168648%3Fhl%3Den&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C0168648%3Fhl%3Den&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C0168648%3Fhl%3Den&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C0168648%3Fhl%3Den&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C0168648%3Fhl%3Den&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C0168648%3Fhl%3Den&data=05%7C0168648%3Fhl%3Den&data=05%7C0168648%3Fhl%3Den&data=05%7C0168648%3Fhl%3Den&data=05%7C0168648%3Fhl%3Den&data=05%7C0168648%3Fhl%3Den&data=05%7C0168648%3Fhl%3Den&data=05%7C0168648%3Fhl%3Den&data=05%7C0

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- https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftwitter.com%2FWASBOH&data=0 Subscríbase
- <mailto:wsboh@sboh.wa.gov?subject=Please%20Add%20My%20Name%20to%20the%20WSBOH%20Em

From: Alltuna verse

Sent: 3/3/2023 11:04:42 AM

To: DOH WSBOH

Cc:

Subject: Masks

External Email

About time, Any peer reviewed studies showing masks have worked for this plandemic? Plenty showing otherwise doctor.

Funny, other states have already abandoned the sharde but WA, as per usual, under the tiny tyrant Mr. Green jeans waits and waits for permission .from who?

Sent from Mail

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fgo.microsoft.com%2Ffwlink%2F%forWindows

From: Arne Christensen Sent: 1/19/2023 1:24:00 PM

To: DOH WSBOH

Cc:

Subject: face masks

External Email

Hello:

You should not have to put a covering on your face in order to obtain health care in Washington. That requirement needs to end today.

From: Garry Blankenship Sent: 2/13/2023 9:25:02 AM

To: Van De Wege, Kevin, Chapman, Mike, hcinfo.infosc@canada.ca, DOH

WSBOH, OADS@cdc.gov, ombuds@oc.fda.gov, sheriff@co.clallam.wa.us, mozias@co.clallam.wa.us, rjohnson@cdc.gov, sheriff@co.clallam.wa.us, rjohnson.gov, sheriff@co.clallam.wa.us, rjohnson.gov, sheriff@co.clallam.wa.us, rjohnson.gov, rjohnson.gov, sheriff@co.clallam.wa.us, rjohnson.gov, rjo

Herald,

(DOHi),chutton@heraldnet.com,joy.borkholder@heraldnet.com,customerservice@theolympian.com,news@sty Herald (DOHi),abinion@kitsapsun.com,kimberly.rubenstein@kitsapsun.com

Cc:

Subject: Jimmy Dore On Masking

External Email

Interesting point made in the video below, (among others). Many mask wearers have been "vaxed" four or five times. A logical question follows; if the "vaccines" work, why masks? Similarly; if masks work, why "vaccines"? Regardless, the data / science / studies prove masks do not work to prevent respiratory virus spread. The medical community must reconsider "safe and effective". The preponderance of vaccinated people contracting COVID removes effective from debate. "Safe" cannot be definitively determined until either mortality statistics controlled by the CDC are made public and/or a real vaccinated versus unvaccinated study is performed with the unvaccinated group being vaccine virgin and an inert placebo used, unlike the studies made to gain E.U.A.

https://youtu.be/mBFCopXrZfQ

From: Cascade Climber

Sent: 1/18/2023 7:26:25 PM To: DOH WSBOH,Inslee, Jay

(GOV),barry.moore@mail.house.gov,gary.palmer@mail.house.gov,david.schweikert@mail.house.gov,eli.cra Chamber of Commerce,Nic Bacetich,editor@methowvalleynews.com,DNR RE NORTHEAST REGION,electhawleysheriff@gmail.com,info@cspoa.org,info@codyhart.org,Ferguson, Bob

(ATG), secretary of state@sos.wa.gov, cacord@okanogancountyfd6.com, secretary@okanogancountyfd6.com, s Neal (ATG), Abbarno, Peter, Barkis, Andrew, Bateman, Jessica, Berg, April, Bergquist, Steve, Berry, Liz, Billig, Andy, Boehnke, Matt, Braun, John, Bronoske, Dan, Caldier, Michelle, Callan, Lisa, Chambers, Kelly, Chandler, Bruce, Chopp, Frank, Cleveland, Annette, Conway, Steve, Corry, Chris, Davis, Lauren, Dent, Tom, Dhingra, Manka, Dolan, Laurie, Donaghy, Brandy, Dozier, Perry, Duerr, Davina, Dye, Mary, Entenman, Debra, Eslick, Carolyn, Fey, Jake, Fitzgibbon, Joe, Fortunato, Phil, Frame, Noel, Gildon, Chris, Goehner, Keith, Goodman, Roger, Graham, Jenny, Gregerson, Mia, Griffey, Dan, Hackney, David, Hansen, Drew, Harris, Paul, Hasegawa, Bob, Hawkins, Brad, Holy, Jeff, Hunt, Sam, Jacobsen, Cyndy, Jinkins, Laurie, Keiser, Karen, King, Curtis, Klicker, Mark, Kloba, Shelley, Kretz, Joel, Kuderer, Patty (LEG), Leavitt, Mari, Lekanoff, Debra, Liias, Marko, Lovelett, Liz, Lovick, John, MacEwen, Drew, Macri, Nicole, Maycumber, Jacquelin, McCune, Jim, McEntire, Joel, Morgan, Melanie, DOR Gina Mosbrucker, Mullet, Mark, Muzzall, Ron, Nguyen, Joe, Nobles, T'wina (LEG), Orcutt, Ed, Ormsby, Timm, Ortiz-Self, Lillian, Orwall, Tina, Padden, Mike, Paul, Dave, Pedersen, Jamie, Peterson, Strom, Pollet, Gerry, Ramel, Alex, Ramos, Bill, Randall, Emily, Riccelli, Marcus, Rivers, Ann, Robertson, Eric, Robinson, June, Rolfes, Christine, Rude, Skyler, Rule, Alicia, Ryu, Cindy, Saldana, Rebecca (LEG), Salomon, Jesse, Santos, Sharon Tomiko, Schmick, Joe, Schoesler, Mark, Senn, Tana, Shewmake, Sharon, Short, Shelly, Simmons, Tarra, Slatter, Vandana, Springer, Larry, Stanford, Derek, Steele, Mike (LEG), Stokesbary, Drew, Stonier, Monica, Taylor, Jamila, Thai, My-Linh, Tharinger, Steve, Trudeau, Yasmin, Valdez, Javier, Van De Wege, Kevin, Volz, Mike, DOR Keith Wagoner, Walen, Amy, Walsh, Jim, Warnick, Judy, Wellman, Lisa, J.T. Wilcox@leg.wa.gov, Wilson, Claire, Wilson, Jeff, Wylie, Sharon, Ybarra, Alex, Alvarado, Emily, Barnard, Stephanie, Christian, Leonard, Cortes, Julio, Couture, Travis, Doglio, Beth, Kauffman, Claudia, Low, Sam, McClintock, Stephanie, Mena, Sharlett, Reed, Julia, Reeves, Kristine, Schmidt, Suzanne, Sandlin, Bryan, Shavers, Clyde, Street, Chipalo, Timmons, Joe, Torres, Nikki, Waters, Kevin, Wilson, Lynda, Stearns, Chris

Subject: HORRIFYING: INSLEE* FORCED This on Washingtonians: "435,897,435,897 Free Roaming Spike Protein Molecules After COVID Vax Booster - Their Hearts Will NEVER Fully Recover from the "Vax"" 50% +/- DEAD in < 5 YEARS?

External Email

Please DO NOT Harm #GOVIDIOT 'MAGGOT' INSLEE. Only a legitimate court of law may legally & lawfully charge & prosecute INSLEE for CRIMES AGAINST HUMANITY & GENOCIDE. It could also appear that #GOVIDIOT sabotaged WA by spreading APPLE MAGGOTS across E WA WHILE WA was HACKED as a distraction for HAMMER & SCORECARD to STEAL 2020, TREASON, SEDITION & SUBVERSIVE ACTS including "FOREIGN COLLUSION"? ELECTION FRAUD - OVERTHROWING GOVERNEMENT - SENICIDE - GENOCIDE & CRIMES AGAINST CHILDREN.

https://halturnerradioshow.com/index.php/en/news-page/world/435-897-435-897-free-roaming-spike-protein-molecules-after-covid-vax-booster-their-hearts-will-never-fully-recover-from-the-vax

https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fworld%2F435-897-435-897-free-roaming-spike-protein-molecules-after-covid-vax-booster-their-hearts-will-never-fully-recover-from-the-">https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fworld%2F435-897-435-897-free-roaming-spike-protein-molecules-after-covid-vax-booster-their-hearts-will-never-fully-recover-from-the-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fworld%2F435-897-435-897-free-roaming-spike-protein-molecules-after-covid-vax-booster-their-hearts-will-never-fully-recover-from-the-">https://gcc02.safelinks.protein-molecules-after-covid-vax-booster-their-hearts-will-never-fully-recover-from-the-">https://gcc02.safelinks.protein-molecules-after-covid-vax-booster-their-hearts-will-never-fully-recover-from-the-">https://gcc02.safelinks.protein-molecules-after-covid-vax-booster-their-hearts-will-never-fully-recover-from-the-">https://gcc02.safelinks.protein-molecules-after-covid-vax-booster-their-hearts-will-never-fully-recover-from-the-">https://gcc02.safelinks.protein-molecules-after-covid-vax-booster-their-hearts-will-never-fully-recover-from-the-">https://gcc02.safelinks.protein-molecules-after-covid-vax-booster-their-hearts-will-never-fully-recover-from-the-">https://gcc02.safelinks.protein-molecules-after-covid-vax-booster-fully-recover-from-the-">https://gcc02.safelinks.protein-fully-recover-fu

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435,897,435,897 Free Roaming Spike Protein Molecules After COVID Vax Booster - Their Hearts Will NEVER Fully Recover from the "Vax"

WORLD

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findex page%2Fworld&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C5c9c04f8858d4ded95b608daf9cce6d8%7HAL TURNER

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https://halturnerradioshow.com/images/2023/01/18/Peer-Reviewed-Study-Header_large.jpg

There's a new peer-reviewed research paper out regarding the COVID Vax. It's bad. How bad? I've shown it to two physicians so far. One said he "had a seizure" reading it. The other said something worse.

Long story short: 436 BILLION copies of spike protein are found circulating freely in blood plasma, a month after the COVID (Gene therapy) vaccine.

In kids.

Their hearts, screeching in pain with Myocarditis, will never fully recover.

You knew that, didn't you? But there is more than that . . . The graphic below, from this new study, shows the medical and scientific evidence:

https://pbs.twimg.com/media/FI0OTfUaYAYw6L4?format=png&name=900x900>

Below is the damning part of the graphic. The vertical scale is a log scale. The line at about 15pg/ml is the limit of detection, which is why the blue dots are there. There are still up to 100 billion molecules of spike in those patients - 20 days later.

https://pbs.twimg.com/media/FI007Q0aUAAw8jZ?format=png&name=small>

But in some of these cases the concentration of spike is RISING 20 days after vaccination (see the red lines going up), so we have no idea how much is actually circulating. Spike is toxic, particularly to the heart. If it's not toxic why do we need a "vaccine" against it?

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The authors of this new peer-reviewed study claim that the mean serum level of free spike protein in the patients with myocarditis was 34pg/ml. (There was less in the non-affected patients, but there was still a lot) How many molecules is that? Well there is about 3000ml of plasma in a 70kg male...

And the molecular weight of a spike protein monomer is 141kDa. That's 2.34 e-19 grams. So 34pg/ml x 3000ml is a total of 102ng (102e-9) of spike. Divide by 2.34e-19 gives you... 435,897,435,897 molecules. Of a toxic protein. Circulating in a young adult.

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It's worth noting also that the blue dots in the graphic don't indicate "no spike" - they are the lower limits of detection at 15pg/ml. That's a lot of spike.

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BUT... There are two other things that have come out of this paper.

The first is that the amount of spike protein circulating in the PLASMA (when we were told it didn't leave the arm, remember) weeks after the injection is shocking. So this . . .

was a lie:

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Yes, what you see above . . . what we were all TOLD . . . was a L I E.

The whole article in Conversation.edu from their "Researcher" @vasssssso was in fact a lie, so we've archived it. The claims in that article made by the authors have likely resulted in deaths of young adults. Look at the "partners" for the article - including RMIT again.

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In fact @ConversationEDU

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftwitter.com%2FConversationEDU8 has been pushing propaganda regarding COVID for at least two years.

Remember this doozy?

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fpbs.twimg.com%2Fcard_img%2F

LINK HERE TO ORIGINAL LYING ARTICLE

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftheconversation.com%2Fi-was-the-australian-doctor-on-the-whos-covid-19-mission-to-china-heres-what-we-found-about-the-origins-of-the-coronavirus-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftheconversation.com%2Fi-was-the-australian-doctor-on-the-whos-covid-19-mission-to-china-heres-what-we-found-about-the-origins-of-the-coronavirus-">https://gcc02.safelinks.protection.com%2Fi-was-the-australian-doctor-on-the-whos-covid-19-mission-to-china-heres-what-we-found-about-the-origins-of-the-coronavirus-">https://gcc02.safelinks.protection.com%2Fi-was-the-australian-doctor-on-the-whos-covid-19-mission-to-china-heres-what-we-found-about-the-origins-of-the-coronavirus-">https://gcc02.safelinks.protection.com%2Fi-was-the-australian-doctor-on-the-whos-covid-19-mission-to-china-heres-what-we-found-about-the-origins-of-the-coronavirus-">https://gcc02.safelinks.protection.com%2Fi-was-the-australian-doctor-on-the-whos-covid-19-mission-to-china-heres-what-we-found-about-the-australian-doctor-on-the-whos-covid-19-mission-the-australian-doctor-on-the-australian-d

155554&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C5c9c04f8858d4ded95b608daf9cce6d8%7C11d0 [Everything is archived]

But the worst thing about this new peer-reviewed myocarditis https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftwitter.com%2Fhashtag%2Fmyocstudy is this - and you might not have realized. The study showed, beyond a shadow of doubt, that the COVID "vaccine" was causing myocarditis, with elevated troponin (confirming heart damage).

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fpbs.twimg.com%2Fmedia%2FFl06

Troponin is an enzyme given off by cardiac cells when they are injured or dying. That's how Doctors can tell if a person is having a heart attack over a panic attack. If its an actual heart attack, there will be measurable Troponin in the blood. In cases of myocarditis, Troponin also occurs as heart cells are severely damaged -or dying - by the Spike Proteins.

You know, sometimes people have to do something BAD, to achieve something good. And this is no exception. You see, when the people doing this new peer-reviewed study saw the first few cases of Myocarditis, they should have STOPPED the study and sounded the alarm right away. You see, that was their duty. It was a duty as medical officers and as research officers. But to our knowledge they said nothing and kept recruiting for the study!

What mattered (to them) was finishing the study so they could publish. Of course, from the home of the #surgisphere

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftwitter.com%2Fhashtag%2Fsurgisauthors, what else would you expect?

This is the environment they operate in:

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fpbs.twimg.com%2Fmedia%2FFl0I

For those who want to read the ORIGINAL, full, complete, unedited peer-reviewed study, you can get it HERE

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ahajournals.org%2Fdoi%2Fr

WHAT THIS MEANS

First, this study was done and submitted for "peer-review" on May 26, 2022. It was ACCEPTED for publication (after peer-review) on November 23, 2022. So the world has known, as a matter of scientific research, these details, since May of last year. Yet no one . called for Vaccines to be HALTED.

They had scientific proof the vaccines were causing heart damage . . . myocarditis . . . which, incidentally, has a FIFTY PERCENT mortality rate within five years, and they said . . nothing.

Want to know why? MONEY.

They can't admit it's potentially harmful and deadly.

They can't suddenly stop the shots; To do so would be an admission of guilt.

So they'll continue, pretending everything's fine. In other words, doubling down on stupid

All those kids coming down with Myocarditis, have a fifty-fifty chance of DYING within the next five years. Oh, and the rest who took the vaccine and at least the first booster, the way things look right now, most of them (statistically) will be dead by the year 2027."

VVV

From: Cascade Climber

Sent: 2/19/2023 7:26:13 PM To: DOH WSBOH,Inslee, Jay

(GOV),barry.moore@mail.house.gov,gary.palmer@mail.house.gov,david.schweikert@mail.house.gov,eli.cra Chamber of Commerce,Nic Bacetich,editor@methowvalleynews.com,DNR RE NORTHEAST REGION,electhawleysheriff@gmail.com,info@cspoa.org,info@codyhart.org,Ferguson, Bob

(ATG), secretary of state@sos.wa.gov, cacord@okanogancountyfd6.com, secretary@okanogancountyfd6.com, secretary@okanogancountyfd6.com Neal (ATG), Abbarno, Peter, Barkis, Andrew, Bateman, Jessica, Berg, April, Bergquist, Steve, Berry, Liz, Billig, Andy, Boehnke, Matt, Braun, John, Bronoske, Dan, Caldier, Michelle, Callan, Lisa, Chambers, Kelly, Chandler, Bruce, Chopp, Frank, Cleveland, Annette, Conway, Steve, Corry, Chris, Davis, Lauren, Dent, Tom, Dhingra, Manka, Dolan, Laurie, Donaghy, Brandy, Dozier, Perry, Duerr, Davina, Dye, Mary, Entenman, Debra, Eslick, Carolyn, Fey, Jake, Fitzgibbon, Joe, Fortunato, Phil, Frame, Noel, Gildon, Chris, Goehner, Keith, Goodman, Roger, Graham, Jenny, Gregerson, Mia, Griffey, Dan, Hackney, David, Hansen, Drew, Harris, Paul, Hasegawa, Bob, Hawkins, Brad, Holy, Jeff, Hunt, Sam, Jacobsen, Cyndy, Jinkins, Laurie, Keiser, Karen, King, Curtis, Klicker, Mark, Kloba, Shelley, Kretz, Joel, Kuderer, Patty (LEG), Leavitt, Mari, Lekanoff, Debra, Liias, Marko, Lovelett, Liz, Lovick, John, MacEwen, Drew, Macri, Nicole, Maycumber, Jacquelin, McCune, Jim, McEntire, Joel, Morgan, Melanie, DOR Gina Mosbrucker, Mullet, Mark, Muzzall, Ron, Nguyen, Joe, Nobles, T'wina (LEG), Orcutt, Ed, Ormsby, Timm, Ortiz-Self, Lillian, Orwall, Tina, Padden, Mike, Paul, Dave, Pedersen, Jamie, Peterson, Strom, Pollet, Gerry, Ramel, Alex, Ramos, Bill, Randall, Emily, Riccelli, Marcus, Rivers, Ann, Robertson, Eric, Robinson, June, Rolfes, Christine, Rude, Skyler, Rule, Alicia, Ryu, Cindy, Saldana, Rebecca (LEG), Salomon, Jesse, Santos, Sharon Tomiko, Schmick, Joe, Schoesler, Mark, Senn, Tana, Shewmake, Sharon, Short, Shelly, Simmons, Tarra, Slatter, Vandana, Springer, Larry, Stanford, Derek, Steele, Mike (LEG), Stokesbary, Drew, Stonier, Monica, Taylor, Jamila, Thai, My-Linh, Tharinger, Steve, Trudeau, Yasmin, Valdez, Javier, Van De Wege, Kevin, Volz, Mike, DOR Keith Wagoner, Walen, Amy, Walsh, Jim, Warnick, Judy, Wellman, Lisa, J.T. Wilcox@leg.wa.gov, Wilson, Claire, Wilson, Jeff, Wylie, Sharon, Ybarra, Alex, Alvarado, Emily, Barnard, Stephanie, Christian, Leonard, Cortes, Julio, Couture, Travis, Doglio, Beth, Kauffman, Claudia, Low, Sam, McClintock, Stephanie, Mena, Sharlett, Reed, Julia, Reeves, Kristine, Schmidt, Suzanne, Sandlin, Bryan, Shavers, Clyde, Street, Chipalo, Timmons, Joe, Torres, Nikki, Waters, Kevin, Wilson, Lynda, Stearns, Chris Subject: "RUSSIA COMMENCES NUCLEAR ATTACK DRILL; NATO WARNS OF ATTACK IF THEY PERCEIVE RUSSIAN ACTUAL ATTACK!"

External Email

You can thank all those RINO PEDO BUDROW supporters & NAZI COLLABORATORS with their blue & yellow flags next to their BUDROW for SHERIFF Signs if RUSSIA NUKES US!

https://halturnerradioshow.com/index.php/en/news-page/world/russia-commences-nuclear-attack-drill-nato-warns-of-attack-if-they-perceive-russian-actual-attack <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fworld%2Frussia-commences-nuclear-attack-drill-nato-warns-of-attack-if-they-perceive-russian-actual-

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Russia, on Sunday, began large-scale exercises of its strategic nuclear forces, on the eve of Biden's visit to Europe.

The exercises include large-scale maneuvers for its strategic nuclear forces.

Meanwhile, the White House has told Zelenskyy to prepare for a major Russian offensive now!

There are "no plans" for President Biden to enter Ukraine during his upcoming trip to Poland, NSC spokesman John Kirby said Sunday. HOWEVER

Biden will address the citizens of Russia and Putin, during his visit to Poland on February 21 according to John Kirby

As of today, Russia has 5977 nuclear warheads; the most in the world. They also have the most advanced nuclear missile technology in the world.

NATO has said if they see activity of Russian nuclear forces that could possibly be preparation to launch a nuclear attack, NATO will attack Russian nuclear forces (with conventional weapons), it was said.

SARMAT?

Russia President Vladimir Putin is testing his hypersonic "SARMAT" missile and officials in remote districts in eastern Russia have been warned to be ready for a test launch between February 15 and 25

The giant 208-ton hypersonic missile is capable of carrying FIFTEEN individual nuclear warheads including Russia's new Hypersonic "Glide" Vehicles which cannot be stopped by any missile defense presently on earth.

Unusual Flights

As this story is written at 8:36 PM eastern US time Sunday night, there are unusual flights circling over Poland of RC-135W Rivet Joint (electronic surveillance), and Boeing E-3B Sentry (Airborne early warning and control) aircraft accompanied by KC-135T Stratotanker for refueling.

It's unusual because they very rarely fly at night over Europe, almost never.

I can also report a nuclear armed submarine has been placed on the 'highest level' of combat readiness and that strategic bombers have been moved to a base in Tambov, Russia.

HAL TURNER ANALYSIS

In a normal, rational, world, these Nuclear exercises would send a clear message. But in OUR world, this message will likely be laughed off by Biden. He doesn't seem to care.

In fact, I think Biden wouldn't understand a nuke being dropped on his head. In my view, he's so addled by Dementia, he's barely conscious.

At this point, I don't think anything can halt what is coming.

It is not about occupation it is about survival for Russia, NATO has made it clear they intend on crushing them and dividing it up into regions and exploit their natural resources. Russia is telling them to back the fuck up.

We are closer to WWIII today than we've ever been. This time, if nations continue down this road, there will be full blown world war.

Are we ready for that? Rationing? The threat of invasion? Bombings? Military policing? Internment camps? Bread lines? Hunger? Famine? Mass depopulation?

We can barely keep the supply chain going post-Covid. A world war?

Our government needs to let this Ukraine thing go. They, however, will not.

The one thing that bothers me about Biden's trip to Poland what if it turns into an "Arch Duke Ferdinand" moment?

What if the US "Deep State" plans to kill Biden while he's in Poland, and blame Russia?

Kamala Harris becomes President, and off to war we all go.

This week is likely to be historic. I hope you are all prepared as best you can be with emergency food, water, medicine, communications gear, etc."

From: Garry Blankenship Sent: 1/24/2023 2:03:42 PM

To: Berry, Allison 2

(DOHi),shahidafatin@gmail.com,gbsjrmd@sisna.com,ombuds@oc.fda.gov,hcinfo.infosc@canada.ca,DOH WSBOH,OADS@cdc.gov,sheriff@co.clallam.wa.us,Annika.Pederson@leg.wa.gov,Van De Wege

Kevin,news@peninsuladailynews.com,subscribe@peninsuladailynews.com,feedback@ground.news,oped@setHerald,

(DOHi),chutton@heraldnet.com,joy.borkholder@heraldnet.com,customerservice@theolympian.com,news@sty Herald (DOHi),abinion@kitsapsun.com,kimberly.rubenstein@kitsapsun.com

Subject: Study Proving No Vaccine Benefit for The Previously Infected

External Email

https://www.news-medical.net/news/20210608/No-point-vaccinating-those-whoe28099ve-had-COVID-19-Findings-of-Cleveland-Clinic-study.aspx Love the total covided the total covided to the total

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I watched a fairly lengthy video interview this am with Dr. Bryam Bridle / vaccinologist, relying exclusively on the Phizer study data submitted to get the E.U.A. approval. It clearly demonstrates there is no evidence of a net benefit from the COVID vaccines. Your constituency would like to know what data was relied upon to promote these injections ~ please. The bulk of this differential between professional and amatuer skeptics and the pro-vaccine medical community is attributable to the difference between "Relative Risk Reduction" / RRR which is exclusively used by pharma data and "Absolute Risk Reduction", which is the real exposure statistic. It is imperative that you know the difference between RRR and ARR. Using RRR is data obfuscation and denys patients informed consent. Once understood, there is no viable justification for the use of these mRNA drugs.

For Verification,

Garry Blankenship Sequim Resident _____

From: Arne Christensen Sent: 2/17/2023 3:35:08 PM

To: DOH WSBOH

Cc:

Subject: the covid vaccine mandates need to end today

External Email

It is utter nonsense that the state government hasn't acted and cancelled the mandates yet.

From: horseshoebill

Sent: 3/2/2023 2:15:49 PM To: mhummel88@gmail.com

Cc:

Subject: Fw: Urgent: help stop HB1333 "Ministry of Disinformation" Commission now

External Email

Fw: Urgent: help stop HB1333 "Ministry of Disinformation" Commission now

Hello Freedom Loving Patriots...

Please comment and oppose this evil.....(Right away) see live link below.

Below,

Scroll to bottom and click button TAKE ACTION to leave critical opposition comments and do quickly, this will be the end of freedom in Washington State if passed...

https://standforhealthfreedom.com/action/shb1333/

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fstandforhealthfreedom.com%2Facetype-1">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fstandforhealthfreedom.com%2Facetype-1">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fstandforhealthfreedom.com%2Facetype-1">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fstandforhealthfreedom.com%2Facetype-1">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fstandforhealthfreedom.com%2Facetype-1">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fstandforhealthfreedom.com%2Facetype-1">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fstandforhealthfreedom.com%2Facetype-1">https://gcc02.safelinks.protectype-1">https://gcc02.safel

Here's my letter...sent 3-2-2023

Seems like everyone on the planet is being controlled by such an extreme amount of evil, it's really hard to comprehend in this day and age.

Certainly Goebbels and Hitler would be very proud of AG Ferguson and his SS Henchmen backing this insane Rise of the Fourth Reich law.

If you want most of the people in Washington state to be forced to move out of state to a place where there is freedom and liberty and not this Socialist/Fascist/Communist insanity, then pass this evil law.

"Truth is a menace and Logic is the Enemy" That is how a dictator sees things.

That is from The Opposite Man Twilight Zone with Burgess Meredith.

I'd advise those that think this law is worth voting on to watch this episode first and while your at it, watch these as well.

"The Howling Man"

"The Hunt"

"Jezebel"

Please for the love of God, oppose this horrible, Rise of the Fourth Reich bill.

Unbelievable, this evil is even being considered, someone strong and patriotic enough to stand up for the truth, freedom and against medical tyranny to be labeled an enemy.

This is pure evil, un American and WRONG.

I OPPOSE, please vote NO

"The New World Order is the Enemy of Humanity"

"The world won't be destroyed by those that do evil, but by those that watch and do Nothing" $\ensuremath{\mathsf{Nothing}}$ "

Albert Einstein

Please to the right thing for humanity vote no.

"If they can make you believe absurdities, they can make you commit atrocities" Voltaire

"Be Ashamed to die, until you've won some victory for humanity" Horace Mann

Sent with Proton Mail

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Sent with Proton Mail

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Sent with Proton Mail

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fproton.me%2F&data=05%7C01%secure email.

From: Bill Osmunson

Sent: 3/2/2023 12:17:39 PM

To: DOH WSBOH

Cc:

Subject: March 8 Public Comment



attachments\4A55C70173684432_WSBH March IQ loss.pdf

External Email

Bill Osmunson DDS MPH bill@teachingsmiles.com <mailto:bill@teachingsmiles.com> Smiles of Bellevue 1418 112th Ave NE, Bellevue, WA. 98004. 425.466.0100 January 12, 2023

Dear Washington State Board of Health Members Keith Grellner, Chair; Kelly Oshiro, JD, Vice Chair; Socia Love-Thurman, MD; Stephen Kutz, BSN, MPH; Dimyana Abdelmalek, MD, MPH; Patty Hayes, RN, MN; Melinda Flores, Elisabeth Crawford, and Umair Shah Umair Shah, MD, MPH, wsboh@sboh.wa.gov <mailto:wsboh@sboh.wa.gov>.

The National Toxicology Program's 2019 (NTP) draft monograph[1] <file:///C:/Users/Bill%20Osmuson/Desktop/WSBOH%202023/WSBH%20March%20IQ%20loss.docx#_ftn1 of fluoride's neurodevelopmental and cognitive health effects included 159 human studies, 339 non-human studies, 60 in vitro, and many other publications . The "NTP concludes that fluoride is presumed to be a cognitive neurodevelopmental hazard to humans.".

Subsequent research and reviews are reasonably consistent with the NTP report,[2] <file:///C:/Users/Bill%20Osmuson/Desktop/WSBOH%202023/WSBH%20March%20IQ%20loss.docx#_ftn2 "0.5 mg increase in fluoride intake from infant formula corresponded to an 8.8-point decrement in Performance IQ" and a "4.4 FSIQ (Full Scale IQ) points among preschool children who were formula-fed in the first six months of life for each 0.5 mg/L increase in water fluoride concentration." Till (2020)

Currently, nine mother-child neurotoxicity studies have been published (Connett 2022). Eight of the studies (the first of USA/Canadian cohorts in 2020) report neurotoxicity at low concentrations.

Over 90% of the higher quality studies reported by the NTP at exposure levels of <1.5 mg/L fluoride in water or urine, reported significant adverse neurotoxic effects.

Remember, concentration is not dosage.

The WSBH's silence for ten years has cost over a quarter billion dollars in lost wages, with significant additional costs in special education, incarceration, job loss, homeless, and grief.

PLEASE Warn pregnant mothers and care givers to not drink fluoridated water or make infant formula with fluoridate water.

Here is the math.

In light of the known harm and lack of benefit for fluoride ingestion, the WSBH refusal to protect the brains of the developing fetus, infants and children borders on a criminal action. For over a decade I have been requesting the Board to protect the developing brains. Based on current research, the Board's failure has resulted in an estimated " Over 83,000 live births in Washington state each year. (March of Dimes) X 10 years = 830,000 infants, since the science has become clear, fluoridation probably lowers IQ, assume 46% on fluoridated water (380,000 fluoridated infants) assume half of mothers drink the water and make formula with the fluoridated water =190,000. Times an assumed 3 IQ point loss =570,000 IQ points lost.

Each IQ point represents an estimated \$500 lower income a year. X 57,000 IQ points = \$280,500,000

Bill Osmunson DDS MPH

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[1]
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<file:///C:/Users/Bill%20Osmuson/Desktop/WSBOH%202023/WSBH%20March%20IQ%20loss.docx#_ftnr. US Department of Health and Human Services, Office of Health Assessment and Translation, Division of the National Toxicology Program, National Institute of Environmental Health Sciences, National Institutes of Health. Systemic Review of Fluoride Exposure and Neurodevelopmental and Cognitive Health Effects, Draft NTP Monograph. September 6, 2019. (Note: an NTP final determination or Policy has been blocked from release politically and should be available in May) ASDWA <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.asdwa.org%2Fwp-content%2Fuploads%2F2019%2F10%2Fdraft_fluoride_monograph_20190906_5081.pdf&data=05%7C01%Accessed December 1., 2022.

[2]

<file:///C:/Users/Bill%20Osmuson/Desktop/WSBOH%202023/WSBH%20March%20IQ%20loss.docx#_ftnr . Bashash M, Thomas D, Hu H, et al. Prenatal fluoride exposure and cognitive outcomes in children at 4 and 6 – 12 Years of age in Mexico. Environmental Heal Perspect.

2017;125(9):097017. doi: 10.1289/EHP655. [PMC free article

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And Green, R., Lanphear, B., Hornung, R., Flora, D., Martinez-Mier, E.A., Neufeld, R., Ayotte, P. and Muckle, G., 2019. Till C Fluoride Exposure during Fetal Development and Intellectual Abilities in a Canadian Birth Cohort. JAMA Pediatr, 173(10), pp.940-8. [Google Scholar

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fpubmed.ncbi.nlm.nih.gov%2F314

And Till C, Green R, Flora D, Hornung R, Martinez-Mier EA, Blazer M, Farmus L, Ayotte P, Muckle G, Lanphear B. Fluoride exposure from infant formula and child IQ in a Canadian birth cohort. Environ Int. 2020 Jan;134:105315. doi: 10.1016/j.envint.2019.105315. Epub 2019 Nov 16. PMID: 31743803; PMCID: PMC6913880. [PubMed

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fpubmed.ncbi.nlm.nih.gov%2F317

And Connett E. American Environmental Health Studies Project. Unpublished. Link

https://gcc02.safelinks.protection.outlook.com/?url=https://3A%2F%2Ffluoridealert.org%2Fresearchers%iq-studies%2Fthe-mother-offspring-fluoride-

studies&data=05%7C01%7Cwsboh%40sboh.wa.gov%7C9f723f93ccad48c9755108db1b5aefa2%7C11d0e2 and Fluoride and IQ

<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Ffluoridealert.org%2Fsearch-results%2F%3Fq%3DIQ&data=05%7C01%7Cwsboh%40sboh.wa.gov%7C9f723f93ccad48c9755108db1b5aAccessed Dec. 27, 2022.

Bill Osmunson DDS MPH

bill@teachingsmiles.com

Smiles of Bellevue

1418 112th Ave NE, Bellevue, WA. 98004. 425.466.0100 January 12, 2023

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The National Toxicology Program's 2019 (NTP) draft monograph¹ of fluoride's neurodevelopmental and cognitive health effects included 159 human studies, 339 non-human studies, 60 in vitro, and many other publications. The "NTP concludes that fluoride is presumed to be a cognitive neurodevelopmental hazard to humans.".

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And Connett E. American Environmental Health Studies Project. Unpublished. <u>Link</u> and <u>Fluoride and IQ</u> Accessed Dec. 27, 2022.

¹. US Department of Health and Human Services, Office of Health Assessment and Translation, Division of the National Toxicology Program, National Institute of Environmental Health Sciences, National Institutes of Health. Systemic Review of Fluoride Exposure and Neurodevelopmental and Cognitive Health Effects, Draft NTP Monograph. September 6, 2019. (Note: an NTP final determination or Policy has been blocked from release politically and should be available in May) ASDWA Accessed December 1., 2022.

² Bashash M, Thomas D, Hu H, et al. Prenatal fluoride exposure and cognitive outcomes in children at 4 and 6 – 12 Years of age in Mexico. *Environmental Heal Perspect*. 2017;125(9):097017. doi: 10.1289/EHP655. [PMC free article] [PubMed] [CrossRef] [Google Scholar]

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Bill Osmunson DDS MPH

From: John Pavlik

Sent: 1/23/2023 8:45:23 PM

To: DOH WSBOH

Cc:

Subject: Healthcare Mask Mandate Questions/Concerns

External Email

Dear Health Board Member(s),

As the health care mask mandate you imposed appears poised to last forever I have some questions that I believe it incumbent on you to address.

- 1. The mandate orders have carve outs for individuals for whom mask wearing is deemed unsafe or presents a danger or significant impediment. Are there high quality studies that show that long-term masking (8 hours or more per day for several years) is safe for everyone else? Appeals to authority ("CDC says") are not proof of anything.
- 2. If there are not studies proving that masking is safe how can you, in good conscience in light of your Hippocratic Oath (for those that swore it), in alignment with the Precautionary Principle, force this on anyone?
- 3. None of the mask manufacturers' instructions that I have seen claim that their products stop respiratory viruses from spreading. If you make that claim on their behalf what proof do you cite? Once again I am looking for definitive studies, not appeals to authority.

I anxiously await your response. If you do not have robust and probative evidence supporting these orders then I respectfully insist, on behalf of your constituents, that you must repeal them without delay. An apology should also be offered but is not expected.

Sincerely,

John Pavlik

Tax Payer, Voter, Liberty Lover, Truth Seeker

From: Bill Osmunson

Sent: 2/23/2023 1:17:27 PM

To: DOH WSBOH

Cc:

Subject: For the Washington State Board of Health Members



attachments\B421BA04252F4FA5_WSBH EPA.pdf

External Email

Washington State Board of Health February 23, 2023 pdf attached

Dear Board Members,

US EPA "The MCLG is the maximum level of a contaminant in drinking water at which no known or anticipated adverse effect on the health of persons would occur, allowing an adequate margin of safety." Fluoride, under WSBH jurisdiction, is a contaminant of water and EPA has a 1:1 margin of safety for fluoride, none. In other words, there is no margin of safety for those drinking more than the mean amount of water.

The product chemical HFSA is a contaminated waste product of phosphate fertilizer manufacturing and much is coming from China with known contaminants. For example, Univar Solutions: HFS (fluoride added to public water) has from 5 to 50+ ppm of arsenic https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.univarsolutions.com%2Fproceategories%2Facids%2Fhydrofluosilicic-

acid&data=05%7C01%7Cwsboh%40sboh.wa.gov%7C82a3513c8a724057013908db15e3549c%7C11d0e21 . Although a small amount when diluted in water, any arsenic increases the dosage from other sources and other toxins. The WSBH is contaminating public water with a contaminated product.

RISKS: Potential harms are reported by the National Research Council in 2006 (NRC), such as cell function, teeth, skeleton, chondrocyte metabolism, arthritis, reproductive and developmental effects, neurotoxicity, neurobehavioral effects, endocrine system, gastrointestinal, renal, hepatic, immune systems, genotoxicity and carcinogenicity, more recently potential low birth weight. I treat dental fluorosis a known risk of excess fluoride exposure. EPA's 4 ppm for fluoride is not protective when Seattle at 0.7 ppm fluoride (added to water) causes dental fluorosis harm.

Additional research since 2006 has confirmed and strengthened the NRC 2006 report, fluoride ingestion is contributing and causing harm.

Judgment is required to evaluate the scientific facts. Endorsements are not science Simply following industry and associations or cherry-picked reviews and biased reviewers has harmed the public.

FLUORIDATION IS NOT COST EFFECTIVE: In order to demonstrate fluoridation's dental benefit, dental and public health researchers generally fail to include the cost of harm. A. NO randomized controlled trials (RCT) for fluoride ingestion (post-natal) have been published. Low quality research has serious risks of error.

B. Claims of cost benefit do not include any costs for treating harm, such as dental fluorosis. Almost no research on fluoride ingestion from fluoridated water included cost of treating harm. One reported more cost to treat the harm than saved. [PubMed https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fpubmed.ncbi.nlm.nih.gov%2F254 [(One prenatal fluoride supplement RCT reported no benefit). The Board has failed to

include the cost of treating harm caused by fluoridation.

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From: Arne Christensen Sent: 2/13/2023 3:50:42 PM

To: DOH WSBOH

Cc:

Subject: please end the remaining mask mandates

External Email

Hello:

You should not have to put a mask on your face in order to receive medical care, or live in a nursing home (or for that matter, a jail or prison). We need to do away with forced masking everywhere in Washington.

Also, surely the health department has seen the data showing that masks have little to no impact on virus spread. The masks simply don't work.

Arne Christensen

From: Cascade Climber

Sent: 1/30/2023 12:45:14 PM To: DOH WSBOH,Inslee, Jay

(GOV),barry.moore@mail.house.gov,gary.palmer@mail.house.gov,david.schweikert@mail.house.gov,eli.cra Chamber of Commerce,Nic Bacetich,editor@methowvalleynews.com,DNR RE NORTHEAST REGION,electhawleysheriff@gmail.com,info@cspoa.org,info@codyhart.org,Ferguson, Bob

(ATG), secretary of state @sos. wa. gov, cacord @okanogan countyfd 6. com, secretary @okanogan countyff 6. com, secretarNeal (ATG), Abbarno, Peter, Barkis, Andrew, Bateman, Jessica, Berg, April, Bergquist, Steve, Berry, Liz, Billig, Andy, Boehnke, Matt, Braun, John, Bronoske, Dan, Caldier, Michelle, Callan, Lisa, Chambers, Kelly, Chandler, Bruce, Chopp, Frank, Cleveland, Annette, Conway, Steve, Corry, Chris, Davis, Lauren, Dent, Tom, Dhingra, Manka, Dolan, Laurie, Donaghy, Brandy, Dozier, Perry, Duerr, Davina, Dye, Mary, Entenman, Debra, Eslick, Carolyn, Fey, Jake, Fitzgibbon, Joe, Fortunato, Phil, Frame, Noel, Gildon, Chris, Goehner, Keith, Goodman, Roger, Graham, Jenny, Gregerson, Mia, Griffey, Dan, Hackney, David, Hansen, Drew, Harris, Paul, Hasegawa, Bob, Hawkins, Brad, Holy, Jeff, Hunt, Sam, Jacobsen, Cyndy, Jinkins, Laurie, Keiser, Karen, King, Curtis, Klicker, Mark, Kloba, Shelley, Kretz, Joel, Kuderer, Patty (LEG), Leavitt, Mari, Lekanoff, Debra, Liias, Marko, Lovelett, Liz, Lovick, John, MacEwen, Drew, Macri, Nicole, Maycumber, Jacquelin, McCune, Jim, McEntire, Joel, Morgan, Melanie, DOR Gina Mosbrucker, Mullet, Mark, Muzzall, Ron, Nguyen, Joe, Nobles, T'wina (LEG), Orcutt, Ed, Ormsby, Timm, Ortiz-Self, Lillian, Orwall, Tina, Padden, Mike, Paul, Dave, Pedersen, Jamie, Peterson, Strom, Pollet, Gerry, Ramel, Alex, Ramos, Bill, Randall, Emily, Riccelli, Marcus, Rivers, Ann, Robertson, Eric, Robinson, June, Rolfes, Christine, Rude, Skyler, Rule, Alicia, Ryu, Cindy, Saldana, Rebecca (LEG), Salomon, Jesse, Santos, Sharon Tomiko, Schmick, Joe, Schoesler, Mark, Senn, Tana, Shewmake, Sharon, Short, Shelly, Simmons, Tarra, Slatter, Vandana, Springer, Larry, Stanford, Derek, Steele, Mike (LEG), Stokesbary, Drew, Stonier, Monica, Taylor, Jamila, Thai, My-Linh, Tharinger, Steve, Trudeau, Yasmin, Valdez, Javier, Van De Wege, Kevin, Volz, Mike, DOR Keith Wagoner, Walen, Amy, Walsh, Jim, Warnick, Judy, Wellman, Lisa, J.T. Wilcox@leg.wa.gov, Wilson, Claire, Wilson, Jeff, Wylie, Sharon, Ybarra, Alex, Alvarado, Emily, Barnard, Stephanie, Christian, Leonard, Cortes, Julio, Couture, Travis, Doglio, Beth, Kauffman, Claudia, Low, Sam, McClintock, Stephanie, Mena, Sharlett, Reed, Julia, Reeves, Kristine, Schmidt, Suzanne, Sandlin, Bryan, Shavers, Clyde, Street, Chipalo, Timmons, Joe, Torres, Nikki, Waters, Kevin, Wilson, Lynda, Stearns, Chris Subject: "Doctors and scientists gathered in Stockholm for a conference on 'Pandemic

Subject: "Doctors and scientists gathered in Stockholm for a conference on 'Pandemic Strategies Lessons and Consequences'"

External Email

Oh, it must be "MISINFORMATION"! Maybe the IDIOTS that locked down WA, MURDERED the ELDERLY with REMDESIVIR (Kirkland Nursing Home Victims?), LETHALLY INJECTED CHILDREN/ADULTS with NO INFORMED CONSENT in VIOLATION of the GENEVA CONVENTION & NUREMBERG CODE & DESTROYED the ECONOMY could learn something!:

https://expose-news.com/2023/01/29/stockholm-conference-on-pandemic-strategies/ <a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fexpose-news.com%2F2023%2F01%2F29%2Fstockholm-conference-on-pandemic-strategies%2F&data=05%7C01%7CWSBOH%40sboh.wa.gov%7C6d9918709be44a8f02b908db0302d8cc%

From: Darcie Jacobsen Sent: 2/2/2023 3:51:48 PM

To: DOH PCH Immunization Child Profile, DOH WSBOH

Subject: question - please reply

External Email

What ever happened to medical ethics??? Remember when a medicine killed too many people they would take it off of the market?? Now they use the state governments to PROMOTE bad medicine and scare you into taking it!!!!!

I would like to know when the WA state board of Health and vaccine department is going to STOP pushing these covid shots. I personally know of 4 people who died a sudden and strange death shortly after a booster and several more with life long injuries – while the government keeps pushing kids and now babies to take the shot. There is MASSIVE evidence that the shots are affecting menstrual cycles and causing still births, miscarriages and sterility. This is on top of the already admitted issues with heart attacks and strokes.

And for what???? So the state can have more control? To give unprecedented profits to the pharma companies making this poison????? The shots to NOT stop the virus from spreading and DO NOT stop you from getting covid – but they are killing people!

12 year olds should NOT be getting heart attacks. It is NOT normal.

Here is a recent admission from a Pfizer director about the medicine. You need to act to end this madness - or you are complicit in injuring and killing the people of Washington

https://rumble.com/v284pgu-pfizer-director-concerned-over-womens-reproductive-heath-after-covid-19-vac.html

<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Frumble.com%2Fv284pgu-pfizer-director-concerned-over-womens-reproductive-heath-after-covid-19-vac.html&data=05%7C01%7Cwsboh%40sboh.wa.gov%7C61ff93ea3bb74e9718df08db05785127%7C11d0

Please DO YOUR JOB and protect the people from these monsters. STOP ADVERTISING FOR THEM!!!!! STOP MAKING KIDS TAKE THESE SHOTS!!!!! You have NO IDEA the long term affect –

Darcie jacobsen

From: arnolfini@earthlink.net Sent: 1/9/2023 9:45:44 AM

To: DOH WSBOH

Cc:

Subject: comment for meeting today

External Email

The only plausible way for the health department to regain the trust of people who were mistreated by the DOH and the Inslee administration over covid, is to tell the truth to us, apologize for the grotesque mistakes of the last 3 years, and fire people at DOH who did the lying and advanced the terrible effort to force everyone, including 3-year-olds, to wear face masks.

From Court Plankonskin

From: Garry Blankenship Sent: 2/8/2023 8:25:16 AM

To:

news@peninsuladailynews.com, subscribe@peninsuladailynews.com, feedback@ground.news, oped@seattletischender.com, feedback@ground.news, feedback@grou

(DOHi),abinion@kitsapsun.com,kimberly.rubenstein@kitsapsun.com,hcinfo.infosc@canada.ca,DOH

WSBOH,OADS@cdc.gov,sheriff@co.clallam.wa.us,mozias@co.clallam.wa.us,rjohnson@co.clallam.wa.us,sha De Wege, Kevin,Tharinger, Steve,Chapman, Mike

Cc:

Subject: Neither Masks Nor Vaccines Work

External Email

The two links below dispel any belief that face masks work or that the vaccines works. The second/vaccine link is endorsed by most all existing governmental medical authority, (CDC, Lancet etc.). Can we now make these admissions public and stop this experimental chemical injection madness - - - please!

https://brownstone.org/articles/the-masking-debate-is-settled/

< https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fbrownstone.org%2Farticles%2Fthmasking-debate-is-

settled%2F&data=05%7C01%7Cwsboh%40sboh.wa.gov%7Ca4e3a63a78ff4ac9e0cf08db09f10daa%7C11d

https://www.cell.com/cell-host-microbe/fulltext/S1931-3128(22)00572-8 https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.cell.com%2Fcell-host-microbe%2Ffulltext%2FS1931-3128(22)00572-

8&data=05%7C01%7Cwsboh%40sboh.wa.gov%7Ca4e3a63a78ff4ac9e0cf08db09f10daa%7C11d0e217264

Garry Blankenship

Forman Tomaria Dalal

From: Travis Pahl

Sent: 2/2/2023 8:28:52 PM

To: DOH WSBOH

Cc:

Subject: Re: Mental health care mask requirement

External Email

Would someone be able to provide written explanation? Or alternatively give me a call to discuss? 425-516-1906

On Wed, 25 Jan 2023 at 21:08, Travis Pahl <travis.pahl@gmail.com <mailto:travis.pahl@gmail.com > wrote:

I would like to understand the boards reason for extending a mask requirement to mental health care facilities. Children with Autism often require treatment at centers that apply ABA therapy. These facilities fall under mental health care rules that require masks. The children and staff at these facilities are not in any way more vulnerable to COVID19 than the general population in public places throughout the community yet are treated like they are. The children already have difficult with social cues and forcing the staff to wear masks is harming these children in their most formative years.

Please explain the justification or end the requirement please.

Travis Pahl

From: Cascade Climber

Sent: 1/18/2023 11:26:39 AM To: DOH WSBOH, Inslee, Jay

(GOV),barry.moore@mail.house.gov,gary.palmer@mail.house.gov,david.schweikert@mail.house.gov,eli.cra Chamber of Commerce, Nic Bacetich, editor@methowvalleynews.com, DNR RE NORTHEAST

REGION, electhawleysheriff@gmail.com, info@cspoa.org, info@codyhart.org, Ferguson, Bob

(ATG), secretary of state@sos.wa.gov, cacord@okanogancountyfd6.com, secretary@okanogancountyfd6.com, s Neal (ATG), Abbarno, Peter, Barkis, Andrew, Bateman, Jessica, Berg, April, Bergquist, Steve, Berry, Liz, Billig, Andy, Boehnke, Matt, Braun, John, Bronoske, Dan, Caldier, Michelle, Callan, Lisa, Chambers, Kelly, Chandler, Bruce, Chopp, Frank, Cleveland, Annette, Conway, Steve, Corry, Chris, Davis, Lauren, Dent, Tom, Dhingra, Manka, Dolan, Laurie, Donaghy, Brandy, Dozier, Perry, Duerr, Davina, Dye, Mary, Entenman, Debra, Eslick, Carolyn, Fey, Jake, Fitzgibbon, Joe, Fortunato, Phil, Frame, Noel, Gildon, Chris, Goehner, Keith, Goodman, Roger, Graham, Jenny, Gregerson, Mia, Griffey, Dan, Hackney, David, Hansen, Drew, Harris, Paul, Hasegawa, Bob, Hawkins, Brad, Holy, Jeff, Hunt, Sam, Jacobsen, Cyndy, Jinkins, Laurie, Keiser, Karen, King, Curtis, Klicker, Mark, Kloba, Shelley, Kretz, Joel, Kuderer, Patty (LEG), Leavitt, Mari, Lekanoff, Debra, Liias, Marko, Lovelett, Liz, Lovick, John, MacEwen, Drew, Macri, Nicole, Maycumber, Jacquelin, McCune, Jim, McEntire, Joel, Morgan, Melanie, DOR Gina Mosbrucker, Mullet, Mark, Muzzall, Ron, Nguyen, Joe, Nobles, T'wina (LEG), Orcutt, Ed, Ormsby, Timm, Ortiz-Self, Lillian, Orwall, Tina, Padden, Mike, Paul, Dave, Pedersen, Jamie, Peterson, Strom, Pollet, Gerry, Ramel, Alex, Ramos, Bill, Randall, Emily, Riccelli, Marcus, Rivers, Ann, Robertson, Eric, Robinson, June, Rolfes, Christine, Rude, Skyler, Rule, Alicia, Ryu, Cindy, Saldana, Rebecca (LEG), Salomon, Jesse, Santos, Sharon Tomiko, Schmick, Joe, Schoesler, Mark, Senn, Tana, Shewmake, Sharon, Short, Shelly, Simmons, Tarra, Slatter, Vandana, Springer, Larry, Stanford, Derek, Steele, Mike (LEG), Stokesbary, Drew, Stonier, Monica, Taylor, Jamila, Thai, My-Linh, Tharinger, Steve, Trudeau, Yasmin, Valdez, Javier, Van De Wege, Kevin, Volz, Mike, DOR Keith Wagoner, Walen, Amy, Walsh, Jim, Warnick, Judy, Wellman, Lisa, J.T. Wilcox@leg.wa.gov, Wilson, Claire, Wilson, Jeff, Wylie, Sharon, Ybarra, Alex, Alvarado, Emily, Barnard, Stephanie, Christian, Leonard, Cortes, Julio, Couture, Travis, Doglio, Beth, Kauffman, Claudia, Low, Sam, McClintock, Stephanie, Mena, Sharlett, Reed, Julia, Reeves, Kristine, Schmidt, Suzanne, Sandlin, Bryan, Shavers, Clyde, Street, Chipalo, Timmons, Joe, Torres, Nikki, Waters, Kevin, Wilson, Lynda, Stearns, Chris Subject: While You Were Distracted by the FAKE BIDEN, Paper Gate, Twatter, "Pronouns"

& 'Climate Change': DNA (NAU) - EO 14067 (CBDC) &

WHO/WEF/GATES/SCHWAB/SOROS 5G EBOLA VAX PLandemic - Stardate: 47634.44?

External Email

Illegitimate Imposter Narcissistic Sociopath #GOVIDIOT 'MAGGOT' INSLEE will no doubt exercise his "EMERGENCY POWERS" to DESTROY the WASHINGTON STATE ECONOMY while he MURDERS WASHINGTONIANS with LETHAL 'VACCINES', imprisons Granny in SOLITARY CONFINEMENT for a virus with a 98.7% survival rate while placing 'COVID' patients in NURSING HOMES. After spreading APPLE MAGGOTS across E WA while WA was HACKED. HAMMER & SCORECARD - SABOTAGE - TREASON - SEDITION & SUBVERSIVE ACTS by #GOVIDIOT 'MAGGOT' INSLEE.

https://www.youtube.com/watch?v=b42fEYiCths

<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.youtube.com%2Fwatch%3F%2Fwww.youtube.com%2Fwatch%3F%2Fwww.youtube.com%2Fwatch%3F%2Fwww.youtube.com%2Fwatch%3F%2Fwww.youtube.com%2Fwatch%3F%2Fwww.youtube.com%2Fwatch%3F%2Fwww.youtube.com%2Fwatch%3F%2Fwww.youtube.com%2Fwatch%3F%2Fwww.youtube.com%2Fwatch%3F%2Fwww.youtube.com%2Fwatch%3F%2Fwww.youtube.com%2Fwatch%3F%2Fwatch%3F%2Fwww.youtube.com%2Fwatch%3F%2Fwatch%3F%2Fwatch%3F%2Fwatch%3F%2Fwatch%3F%2Fwatch%3F%2Fwatch%3Fwatch

DNA (North American Union)?

https://leohohmann.com/2023/01/16/biden-signs-onto-declaration-of-north-americadna-with-canada-and-mexico-is-the-planned-north-american-union-making-a-comeback/ < https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fleohohmann.com%2F2023%2F01signs-onto-declaration-of-north-america-dna-with-canada-and-mexico-is-the-planne

north-american-union-making-a-

comeback%2F&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Cdf7dbc8501dc4edfe0e708daf989e9e5%7

https://www.whitehouse.gov/briefing-room/statements-

releases/2023/01/10/declaration-of-north-america-dna/

< https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.whitehouse.gov%2Fbriefing-room%2Fstatements-releases%2F2023%2F01%2F10%2Fdeclaration-of-north-america-

dna%2F&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Cdf7dbc8501dc4edfe0e708daf989e9e5%7C11d0

https://www.presidency.ucsb.edu/documents/joint-statement-president-biden-and-

president-andres-manuel-lopez-obrador-mexico

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.presidency.ucsb.edu%2Fdocstatement-president-biden-and-president-andres-manuel-lopez-obrador-

mexico&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Cdf7dbc8501dc4edfe0e708daf989e9e5%7C11d0e

https://www.youtube.com/watch?v=ZRAa8BcDOCA

<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.youtube.com%2Fwatch%3Fw

https://www.youtube.com/watch?v=2IKSyj5z6I4

<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.youtube.com%2Fwatch%3Fw

"Executive Order 14067—Ensuring Responsible Development of Digital Assets" (CBDC)

https://www.presidency.ucsb.edu/documents/executive-order-14067-ensuring-responsible-development-digital-assets

< https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.presidency.ucsb.edu%2Fdocorder-14067-ensuring-responsible-development-digital-

"COVERT INTEL": READ THE COMMENTS!!! - "One Trillion Moved into BLOCKCHAIN in 72 Hours"???

https://halturnerradioshow.com/index.php/en/news-page/world/covert-intel-banks

<a href="https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fworld%2Fcovert-intel-page%2Fcovert-intel-page%2Fcovert-intel-page%2Fcovert-intel-page%2Fcovert-intel-page%2Fcovert-intel-page%2Fcovert-intel-page%2Fcovert-intel-page%2Fcovert-intel-page%2Fcovert-intel-page%2Fcovert-intel-page%2Fcovert-intel-page%2Fcovert

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"FEMA WHISTLEBLOWER - CAMPS FOR DISSENT & THE NEXT 5G PANDEMIC - SECRET FEMA DOCUMENTS - MARIA ZEEE"

https://www.bitchute.com/video/Uuz0uWcPOQ5X/

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.bitchute.com%2Fvideo%2Fl

"FEMA Whistleblower - Camps for Dissent & The Next 5G Pandemic - SECRET FEMA Documents" https://www.banned.video/watch?id=63c35ee9eb7b0916fc0e16c9

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.banned.video%2Fwatch%3F

As in Guayaquil & Wuhan: WHO/WEF/GATES/SCHWAB/SOROS 5G Global Rollout & the

EBOLA 'VAX' Hemorrhagic Fever Plandemic for DEPOPULATION

https://www.youtube.com/watch?v=K-hp_VY2EZc

NAC & BROMELAIN Vs. (Clot Shot) SPIKE PROTEIN - *This is NOT Medical Advice

https://halturnerradioshow.com/index.php/en/news-page/world/tonight-how-to-unfold-

the-spike-protein-of-covid-19-and-the-vax-making-it-go-away

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fworld%2Ftonight-how-to-unfold-the-spike-protein-of-covid-19-and-the-vax-making-it-go-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fworld%2Ftonight-how-to-unfold-the-spike-protein-of-covid-19-and-the-vax-making-it-go-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fworld%2Ftonight-how-to-unfold-the-spike-protein-of-covid-19-and-the-vax-making-it-go-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fworld%2Ftonight-how-to-unfold-the-spike-protein-of-covid-19-and-the-vax-making-it-go-">https://gcc02.safelinks.protection.go-">https:/

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END of the PETRO DOLLAR

https://halturnerradioshow.com/index.php/en/news-page/world/boom-saudi-arabia-announces-end-of-us-petro-dollar

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fworld%2Fboom-saudi-arabia-announces-end-of-us-petro-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fworld%2Fboom-saudi-arabia-announces-end-of-us-petro-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fworld%2Fboom-saudi-arabia-announces-end-of-us-petro-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fworld%2Fboom-saudi-arabia-announces-end-of-us-petro-">https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhalturnerradioshow.com%2Findexpage%2Fworld%2Fboom-saudi-arabia-announces-end-of-us-petro-">https://gcc02.safelinks.protection.prot

dollar&data=05%7C01%7CWSBOH%40sboh.wa.gov%7Cdf7dbc8501dc4edfe0e708daf989e9e5%7C11d0e2