SAFE HEALTH REPORT

Scientific Data … Informed Choice … Actionable

November 2023 *Health: The Purest Form of Wealth* *Issue 16*

Please repeat once before proceeding: He Can Do It, She Can Do It, I Can Do It!

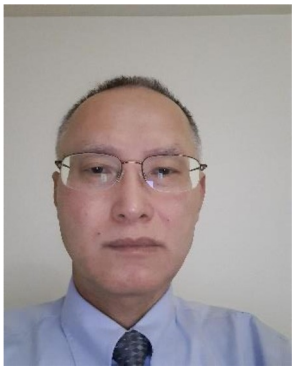
Inside …

California Bans Additives

Your Ticket to Exuberant Health for the Next 5 Years

California has become the first state in the US to ban four food additives that have been linked to serious health problems, including a higher risk of cancer, nervous system damage, hyperactivity, and other neurological conditions. The California Food Safety Act bans the use of four additives Brominated vegetable oil, potassium bromate, propylparaben, and red dye 3, which can be found in candy, cookies, and more, will be banned starting in 2027.

Governor Newsom signed the bill (AB 418) on Sept. 12, 2023, banning 4 food additives. This groundbreaking bill was passed with strong bipartisan support. The bill made headlines as "the Skittles ban" earlier this year because the original version of it would have prohibited a chemical used to add color to the popular candy. Last month, lawmakers amended the bill to allow the sale of products with that chemical, although it still would ban chemicals commonly used in other sweets. Skittles contain titanium dioxide, which is used to add whiteness to foods like candies and dairy products. The bill in its original text would have banned titanium dioxide. It was removed by an amendment and spares Skittle from implementing manufacturing changes. The bill gained momentum to become legislation when titanium dioxide was removed from the



Ike Kim
Editor

list. Titanium is a heavy metal and is commonly found as titanium dioxide (TiO_2), also known as E171, when used as a food additive). This white food coloring is often used to make

candies and processed foods look more appealing, and it is also used to whiten tablets. Although it may enhance the appearance of food, it does not provide any nutritional benefit. Although titanium dioxide is still included in the U.S. recipe for Skittles, it is set to be banned by the European Union in 2022 due to its possible carcinogenic effects. Studies indicate that after oral ingestion, titanium dioxide particles are generally not absorbed, but can accumulate in the bloodstream, kidneys, liver, and spleen. A 2021 study published in the Journal of Applied Toxicology found that when given orally to male and female rats over 90 days, titanium dioxide is considered safe as long as the exposure dose is between 100 and 1,000 mg/kg. However, more research needs to be done to evaluate the long-term effects of titanium dioxide. The Food and Drug Administration (FDA) currently states titanium dioxide can be used in food as long as it does not exceed 1 percent of the food's weight. To avoid potential risks, it is advised that titanium dioxide be used only in paint or coating applications, and not for human consumption due to its accumulation in the human vital organs.

Red Dye No. 3, also known as Erythrosine or E 127, is a synthetic dye made from petroleum. This dye has been used since

1907 to give foods and drinks a bright cherry-red color and is found in over 2900 products, such as Hot Tamales and Peeps marshmallows, strawberry-flavored Nesquik, PediaSure, Ensure, Yoo-hoo, Vigo saffron rice, Wise onion rings, Dole fruit cups and vegetarian bacon. The additive provides a distinct and recognizable color. However, in 1990, the

FDA banned the use of Red Dye No. 3 in cosmetics and externally applied drugs due to its potential link to thyroid cancer, based on its analysis of unpublished animal research. Further studies have shown the dye to cause cancer in animals when fed in high doses over long periods; it has also been linked to hyperactivity and behavioral problems in children. Therefore, it is important to watch out for Red Dye No. 3, especially around Valentine's Day, as it is found in many artificially-flavored and artificially-colored candies, as well as gumdrops, peppermints and candy corn.

Potassium bromate is an oxidizing agent commonly used in the baking industry as a cheap dough improver. It has a major

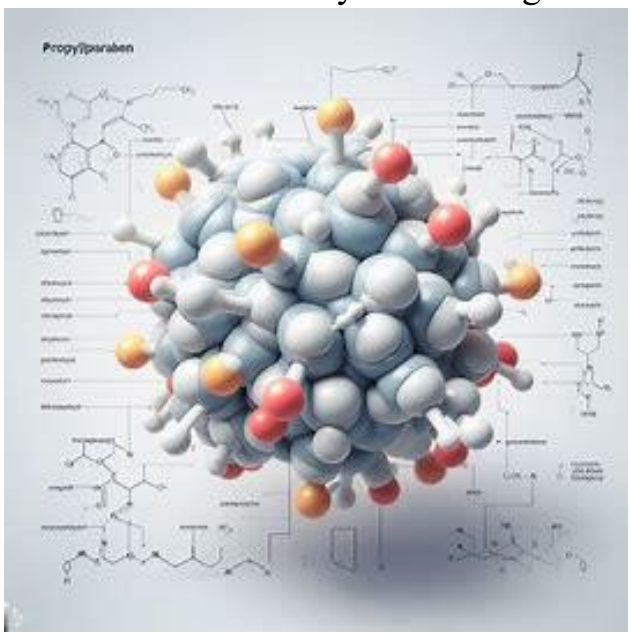
effect on food biomolecules like starch and protein by influencing the extent of gelatinization, viscosity, swelling properties, and gluten proteins. The International Agency for Research on Cancer (IARC), which is based in Lyon, France, has classified it as a potential human carcinogen and placed it in Group 2B: possibly carcinogenic to humans, the same category as gasoline exhaust. Due to this, many countries have partially or completely banned it, like in India, Brazil, Canada and in Europe, where Britain prohibited it in 1990 because of fears that it could cause cancer. The European Union's chemicals agency has labeled it as "toxic if swallowed" and "may cause cancer". The FDA states that it can be safely used for the malting of barley under certain conditions. The Environmental Working Group reveals that the FDA approved potassium bromate for use in the United States in the 1960s, but it hasn't been assessed since the 1970s. In California, any products containing this oxidizing agent must carry a cancer warning.

What is brominated vegetable oil (BVO) and where is it used? BVO is a food additive that contains bromine, which is also used as a fire retardant. It is sometimes used to keep the flavor evenly distributed by preventing ingredients from separating and floating to the top of beverages. According to the US Food and Drug Administration, BVO has been approved as a food additive. However, some studies have raised concerns over potential health risks associated with consuming BVO. Woodling K et al undertook a 90-day dietary exposure study

in six week old laboratory rats. They fed

diets containing 0 (control), 0.002%, 0.02%, 0.1%, or 0.5% brominated vegetable oil and analyzed the tissue distribution of the main metabolites. The results showed statistically significant increases in serum bromide in the high-dose group of both sexes and in the incidence of thyroid follicular cell hypertrophy in the two highest dose groups of males and the high-dose group of females. Additionally, an increase in serum thyroid stimulating hormone (TSH) was observed in the high-dose group for both sexes, as well as a decrease in serum T4 in the high-dose males. The authors published the results in the July 2022 edition of Food Chemical Toxicology. These findings support previous studies which suggest that oral exposure to BVO can lead to increased levels of organic and inorganic bromine in the body, and that the thyroid is a potential target organ for toxicities. This poses a potential risk of thyroid cancer. BVO is banned as a food additive in Europe, but is still used in Sun Drop citrus soda in the US, with the FDA allowing it to be used "in a small amount". Bromine in large quantities can cause neurological symptoms, such as memory loss and headaches. In 2014, Coca-Cola announced that it would be removing BVO from Powerade and the rest of its products, driven by Sarah Kavanagh, the 16-year-old girl from Hattiesburg, Mississippi, who gained more than 200,000 signatures against the additive. Pepsi followed suit, also removing BVO from its products including Gatorade.

Propylparaben is a widely used preservative used in cosmetics and as a food additive. It is very effective against



molds and yeasts and is also low in toxicity, with worldwide regulatory acceptance. It is found in over 13,200 formulations, usually at concentrations

lower than 0.3% in cosmetics. It is odorless and tasteless and does not discolor or harden, making it ideal to increase the shelf-life. It is also commonly found in baked goods and certain cake icing brands, and the FDA states that it is "generally recognized as safe" if it does not exceed 0.1 percent in food. However, it is not approved for use as a preservative in foods in the E.U., due to research suggesting that it has an impact on male rats' reproductive systems. During a study by the Centers for Disease Control and Prevention, it was found that it was present in most people's urine, however, this does not necessarily lead to adverse health effects. While propylparaben is not carcinogenic, mutagenic, teratogenic, or embryotoxic, it can and does cause contact dermatitis reactions in some individuals upon cutaneous exposure. Since these chemicals are still available and widely used, we recommend avoiding food additives including titanium dioxide.

Actionable Recommendation:

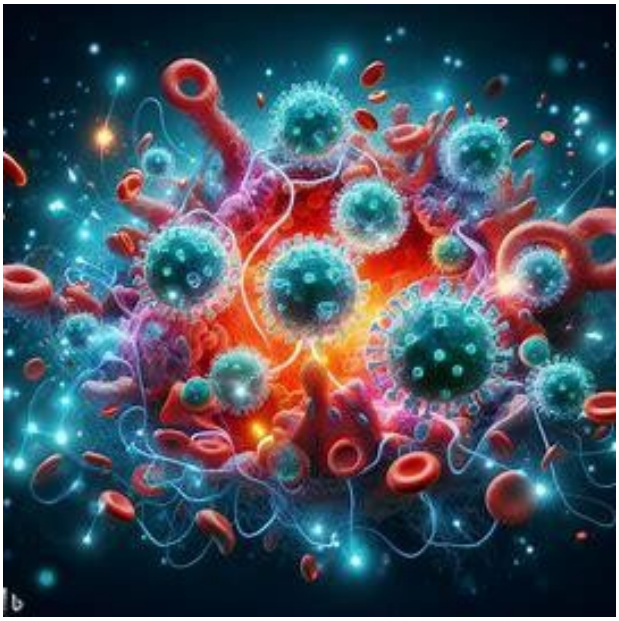
- ✓ **Avoid taking products containing brominated vegetable oil and potassium bromate due to their potential carcinogenic effects. Avoid daily consumption of commercially baked products. However, occasional consumption may be acceptable. In order to avoid potassium bromate and propylparaben, we recommend baking your own bread with these.**
- ✓ **Avoiding titanium dioxide and red dye #3 may be next to impossible due to their common use in medications. Taking medications far outweighs any risks from these two compounds.**

COVID-19: A Cardiovascular Disease

Patients with COVID-19 are at an increased risk of developing ischemic cardiovascular complications up to a year after infection. This condition is known as Long COVID. The virus that causes

COVID-19 can directly infect the arteries of the heart and cause the fatty plaque inside arteries to become highly inflamed, increasing the risk of heart attack and stroke. After the virus reaches the cells, the body's immune system sends in white blood cells known as macrophages to help clear the virus. In the arteries, macrophages also help remove cholesterol. When they become overloaded with cholesterol, they morph into a specialized type of cell called foam cells. The researchers thought that if SARS-CoV-2 could directly infect arterial cells, then the macrophages that are

normally turned loose might increase inflammation in the existing plaque. To test their hypothesis, Eberhardt and her team took tissues from the coronary arteries and plaques of people who had died from COVID-19 and confirmed the virus was present in those tissues first. Then they took arterial cells and plaques – including macrophages and foam cells – from healthy patients and infected them with SARS-CoV-2 in a lab dish. They found that the virus had also infected those cells and tissues.



The study focused on older people with fatty buildup, known as atherosclerotic plaque, who died from COVID-19. The researchers found that the virus infects and replicates in the arteries no matter the levels of plaque. Therefore, these findings could have broader implications for anybody who gets COVID-19. While systemic inflammation is a common feature of severe COVID-19, this study highlights how SARS-CoV-2 can directly infect arterial cells and cause cardiovascular complications. Specifically, researchers showed that SARS-CoV-2 can infect and replicate in the macrophages of plaques and arterial cells, this finding is only relevant to the original strains of SARS-CoV-2 and in older patients.

Reference:

Eberhardt, N., Noval, M.G., Kaur, R. et al. SARS-CoV-2 infection triggers pro-atherogenic inflammatory responses in human coronary vessels. Nat Cardiovasc Res 2, 899–916 (2023). https://doi.org/10.1038/s44161-023-00336-5

Actionable Recommendation:

- ✓ **The current study reinforces the importance of COVID-19 vaccination for those 65 and older. While the study was conducted on older patients with original SARS-CoV-2 infection, the study suggests that receiving the currently available COVID-19 vaccine may be beneficial. It is important to note that over 90% of COVID-19 deaths are occurring in the elderly so far in 2023.**

In Search of the Best Probiotic Part 4: Lactobacillus rhamnosus will be continued in November issue.

Recent FDA Medication/Food December Recall

Recall Date	Brand Name	Product Description	Recall Reason Description	Company Name
10/2//2023	Ion and Restore brands	Nasal Sprays	Potential Contamination with Microbacterium spp., Fictibacillus spp., Bacillus spp., and Paenibacillus spp.	Biomic Sciences
10/2/2023	Hospira	4.2% Sodium Bicarbonate Injection, USP, 1% Lidocaine HCl Injection, USP, and 2% Lidocaine HCl Injection, USP	Potential presence of glass particulates	Hospira, Inc
10/2/2023	KVK Tech	Betaxolol Tablets, USP	Potential Presence of Oxycodone HCl tablet	KVK-Tech, Inc.
10/16/2023	Jay Robb	Vanilla Flavored Egg White Protein	May contain hard plastic foreign material	Select Custom Solutions
10/20/2023	Kroger	Bagged Collard Greens	Possible Listeria monocytogenes contamination	Baker Farms
10/20/2023	Greenhead Lobster	Refrigerated and Frozen Cooked Lobster	Possible Listeria monocytogenes contamination	Greenhead Lobster Products LLC
10/23/2023	Gills Onions	Diced onions	Salmonella	Gills Onions
10/23/2023	Qilu Enterprise	Enoki Mushrooms	Listeria monocytogenes	Utopia Foods Inc.

Case Number 12: Wolff-Parkinson-White (WPW) syndrome and COVID-19 vaccine

What's the probability of 5-year survival for this 65-year-old female with osteoporosis?

The following real-life case examples are hypothetical stories in the palliative or hospice care settings, imagined by the author with the help of artificial intelligence. Frailty scores are commonly used not only to decide if a patient should be placed in palliative or hospice care but also to assess whether the patient is a suitable candidate for major surgery in the case of surgical intervention. Unfortunately, patients with low frailty scores often do not survive five years after a major health crisis. No one is an exception since everybody eventually succumbs to the law of gravity. Case examples may contain personalized ***Translational Medicine*** *from pre-clinical trials data.*

Duke Kimmel is a 65-year-old male with no prior medical history. He reports possibly suffering from a COVID-19 infection in February of 2022 but with no follow-up confirmatory tests. But he feels he had what appears to be a mild case of COVID-19 infection with fever, chills, cough, fatigue, fatigue, mild muscle and body aches, and headaches but without any breathing difficulties. Subsequently, every few weeks, he felt his "heart was beating unusual way which felt like blood was moving backwards. For a split second, he fell and almost lost consciousness."

Subsequently, he was referred to a cardiologist by his PCP and cardiac ablation was performed. He reports the unusual cardiac arrhythmias with a fainting spell is gone with the cardiac procedure, but reports "slight uneasiness in the heart with a slight shortness of breath. He seeks guidance as regards to new 2023 COVID-19 vaccine in October 2023.

Wolff-Parkinson-White (WPD) and COVID

While acute respiratory failure, septic shock, acute respiratory distress syndrome, and multiple organ failure are the leading causes of death and hospitalization, more patients with cardiac arrhythmias have emerged during the COVID-19 pandemic due to the effects of the virus on the respiratory and cardiovascular systems. Additionally, various anti-COVID drug therapies have been found to prolong QTc intervals, which can lead to arrhythmias. Furthermore, there are drug-drug interactions that promote arrhythmogenicity. The drugs used

Duke Kimmel

*All patient data is fictional and imagined by the author with AI assistance. Safe Health Report complies fully with US HIPPA regulations.

Age: 65
Sex: .....male
Weight: .....145 pounds
Height: .....5 feet 9 inches

Activities of Daily Living (ADL) components: transfer, bed mobility, toileting, and eating

- **0 – Independent: If the resident completed the activity with no help or oversight every time during the 7-day prior period.**
- **1 – Supervision: If oversight, encouragement, or cueing was provided three or more times during prior 7 days.**
- **2 – Limited Assistance: If resident was highly involved in the activity and received physical help in guided maneuvering of limb(s) or other non-weight-nearing assistance three or more times during the last seven days.**
- **3 – Extensive Assistance: If resident performed part of the activity over the prior 7 days, help of the following type(s) was provided three or more times: ▪ Weight-bearing support provided three or more times. ▪ Full staff performance of activity during part, but not all, of the prior 7 days.**
- **4 – Total Dependence: If there was full staff performance of an activity with no participation by the resident for any aspect of the ADL activity. The resident must be unwilling or unable to perform any part of the activity over the entire prior 7-day period. ▪ 7 – Activity occurred only once or twice: If the activity occurred but not 3 times or more. ▪**

8 – Activity did not occur: If, over the prior 7-day period, the ADL (or any part of the ADL) was not performed by the resident or staff at all. ADL support measures the most support provided by staff over the prior 7 days.

*Adapted from Minnesota Department of Health Guideline

Duke's ADL Score 0

during hospital stay that may promote polymorphic ventricular tachycardia include hydroxychloroquine, azithromycin, quinolones, lopinavir/ritonavir, favipiravir, tocilizumab, fingolimod, propofol, domperidone, Class IA and Class III antiarrhythmics, and haloperidol. Therefore, it is imperative to carefully monitor patients with arrhythmias promptly to prevent possible torsade des pointes and sudden cardiac death.

Wolff-Parkinson-White (WPW) syndrome is a heart condition that is present at birth. It is caused by an extra electrical pathway between the heart's upper and lower chambers, which leads to ventricular preexcitation that affects the accessory conduction pathways. The most common sign of WPW syndrome is a heart rate greater than 100 beats per minute. Such episodes of tachycardia, or a fast heart rate, can begin suddenly and may last a few seconds or several hours. Other signs and symptoms of WPW syndrome are related to the fast heart rate and underlying heart rhythm problems (arrhythmia). The most common arrhythmia seen with WPW syndrome is supraventricular tachycardia, which causes episodes of a fast, pounding heartbeat that begin and end abruptly. Some people with WPW syndrome also have a fast and chaotic heart rhythm problem called atrial fibrillation. In general, signs and symptoms that may occur in people with WPW syndrome include palpitations (a rapid, fluttering, or pounding heartbeat), chest pain, difficulty breathing, dizziness or lightheadedness, fainting, fatigue, shortness of breath, and anxiety. WPW affects between 0.1% and 3.0% of the general population.

The classic ECG pattern of Wolff-Parkinson-White (WPW) syndrome is characterized by two primary features: a short PR interval and a broadened QRS complex due to a delta wave. However, most patients with a WPW ECG pattern are asymptomatic. The primary question for our case is whether the COVID-19 virus or vaccine can exacerbate WPW with possible vaccine guidance for these individuals.

Eye of the Tiger Test for Duke Kimmel

***All patient data is fictional. Safe Health Report complies fully with US HIPPA regulations.**

Clinical Frailty Score

- **1 – Very Fit: Very fit for their age with no disease symptoms, very active, and exercise regularly- 5 days a week**
- **2 – Fit: Still no active disease as in 1 but exercise only occasionally – three times a week or only seasonally**
- **3 – Managing Ok: Disease symptoms are well managed. Not able to exercise at all other than walking.**
- **4 – Very Mild Frailty: Symptomatic disease. Not dependent on others for daily activities but disease symptoms slow down their activities. May need a cane for walking occasionally for example**
- **5 – Mild Frailty: Symptomatic disease limits daily activities. Needs walkers. Needs help with walking and shopping.**
- **6 – Moderate Frailty: Needs help with walking, shopping, climbing stairs, and bathing with disease progression.**
- **7 – Severe Frailty: Completely dependent for personal care and daily activities but seem stable and at risk of death within the next 6 months.**
- **8 – Very Severe Frailty: Same as 7 but unstable and even mild illness is likely to cause death.**
- **9 – Terminally Ill: As in 8 but not likely to live next 3-6 month.**

*Adapted from Rockwood & Theou 2020

Duke Frailty Score 1

The first example is a report by Caliskan F et al. A 30-year-old female with asymptomatic Wolff-Parkinson-White (WPW) syndrome was diagnosed with COVID-19 infection after experiencing fever, shortness of breath, and tachycardia for two days. A subsequent electrocardiogram (ECG) showed sinus

tachycardia, short PR interval, and delta wave, which suggests that COVID-19 virus infection may trigger signs and symptoms of WPW syndrome.

On the other hand, a case report by Kang et al. in 2022 reported that the COVID-19 vaccine may bring out symptoms of silent WPW. The authors described a case of a 43-year-old midwife who presented to the emergency department with a sudden onset of palpitation at rest, which occurred 25 hours after taking a booster dose of Comirnaty. The authors report that supraventricular tachycardia (SVT) occurrence that follows the administration of the COVID-19 vaccine may not be causally related to the vaccine itself, but it might be triggered in the pre-existing WPW. The midwife remained asymptomatic after undergoing ablation therapy.

Actionable Recommendation:

Based on these findings, we recommend closely coordinating with a cardiologist regarding future vaccination against COVID-19. However, opting out of the COVID-19 vaccine may potentially increase the risk of future exacerbations of WPD. Current symptoms more likely reflect incomplete therapy procedures. We recommend close coordination with a cardiologist regarding the current residual symptoms of WPW.

Reference:

Eberhardt, N., Noval, M.G., Kaur, R. et al. SARS-CoV-2 infection triggers pro-atherogenic inflammatory responses in human coronary vessels. Nat Cardiovasc Res 2, 899–916 (2023). https://doi.org/10.1038/s44161-023-00336-5

Ataul M, Qureshi M, Altemose, G et al. A Unique instance of Wolf–Parkinson–White pattern and congenital long QT syndrome. JICRM 2014 https://www.innovationsincrm.com/cardiac-rhythm-management/2014/july/620-wolf-parkinson-white-pattern

Manolis AS, Manolis AA, Manolis TA, Apostolopoulos EJ, Papatheou D, Melita H. COVID-19 infection and cardiac arrhythmias. Trends Cardiovasc Med. 2020 Nov;30(8):451-460. doi: 10.1016/j.tcm.2020.08.002.

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Kang HY et al. Booster COVID-19 vaccine comirnaty ignite supraventricular tachycardia in Wolff Parkinson White Syndrome. International Journal of Cardiology. 2022 DOI:https://doi.org/10.1016/j.ijcard.2022.10.104. https://www.internationaljournalofcardiology.com/article/S0167-5273(22)01615-1/fulltext

MrGineaPig's Core Long-Term Trial

LONG-TERM TRIAL	SUPPLEMENT	START DATE	
Muscle Weakness	Hyaloronic Acid	07/01/2019	50 mg-1 capsule daily
Back Pain	Pantothenic acid	09/1/202	500 mg 1 capsule daily
	Pantethine	09/01/2022	450 mg 1 capsule daily
Mealtimes	Breakfast 09:00 -Lunner (13:00)	01/07/2023	+Salad with Balsamic Vinegar Lunner = Lunch + Dinner

March Risk Factors for Premature or Unexpected Death

Immediate Risks	Internal Threat	External Threat	Other Topics
1. COVID-19 EG.5	1. Poor diet	1. War	1. Shortness of breath
2. Covid19 HV.1	2. Smoking	2. Earthquake	2. Back pain
3. COVID-19 FL.1.5.1	3. High blood pressure	3. FDA recalls	3. Hemorrhoids
4. COVID-19 XBB.1.16.6	4. Obesity	4. Meat preservatives	4. Incontinence
5. Fentanyl death	5. Sedentary Lifestyle	5. Trans fatty acid	5. Joint swelling
6. Drug shortages	6. Suicide	6. Pesticides	6. Fibromyalgia
7. RSV		7. Heavy metals	7. Health Insurance
8. Gun violence			

Topics Chosen: Covid-19 update, Clostridium difficile, Search of Best Diet Series

Format of Safe Health Report

Section 1: Conditions or internal environment that increases the risk of premature death or pose an immediate danger to your health (both mental and physical) as in an avalanche.

Section 2: External environment that increases premature death, FDA recalls.

Section 3: Case examples of premature death. If you are in a similar situation, remove yourself out of harm's way! Can we extend **our expiration dates** when in the eye of the storm before disease strikes at a tissue level. Remember epigenome is what activates a specific set of genes.

Purpose of Safe Health Report

If you feel you are being used by someone or somebody or institution or institutionalized philosophy or even by your parents or siblings or your coworkers or even your boss, you are a GineaPig. This newsletter is designed to empower GineaPigs in the area of human health and possibly decrease the risk of **premature death**.

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