# Scientific Data ... Informed Choice ... Actionable

May 2023

Official Newsletter for MrGineaPig

Issue 10

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

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**May Issue Focus: In Search of Best Diet:** Part 5: Linda Loma In Search of Best Diet: Part 4 Your Ticket to Exuberant Health for the next 5 years The Nicoya household has the

Peninsula of Costa Rica was inhabited in the Neolithic period bv the Chorotega and Chontale tribes. The Nicova Peninsula of Costa Rica is a unique area that is home to a large population of indigenous people and is considered one of the world's Blue Zones. This area has long been known for its longevity and is believed to be due locals' to the healthy diet. The traditional diet of the Nicoya people remained has largely unchanged for centuries and consists of fresh. local ingredients. It is composed of fruits and vegetables, whole grains, and legumes. Each



Ike Kim, Editor household has their own garden, and the majority of their food is grown or gathered locally. This provides a wide variety of fresh, nutrient-rich foods that are high in antioxidants and other beneficial compounds.



The Nicoya peninsula was once covered in tropical dry forests, but it was converted into pastureland during the 1950s. Being separated from the rest of Costa Rica by the Tempisque river, the Nicoya peninsula is relatively isolated compared to the rest of the country. This, combined with the approximately 5% indigenous population of the peninsula, with the Chorotega ethnic group being the most notable, has helped to create a remarkable history of long-standing isolation in both genetic and cultural terms. Contrary to expectations, the inhabitants of Nicoya consume very little seafood. Four typical foods are consumed by both females and males with a high frequency; these include Gallo Pinto, tortillas de maíz, Cuajada, and Gallo Pinto con huevos. Alcoholic beverages, such as Guaros, were not consumed frequently by females, while males did not consume them more than two or three times a month. Other fermented beverages, such as Chicha and Chicheme, were also occasionally consumed.

The traditional diet of the Nicoyans is largely plant-based, with a focus on maize, beans, and squash - similar to the Mediterranean diet and to the traditional diets of some Indigenous people. This combination of foods is high in fiber, low in sugar and saturated fats, and rich in omega-3 fatty acids; it has been linked to better health outcomes and lower rates of chronic disease. Moreover, the traditional way of life of the Nicoyans - including physical activity, leisure activities like dancing and playing music, and strong social networks adds to their healthy, balanced, and nutrientdense diet. The favorable climate and clean air of the Nicoya Peninsula, as well as the nutrient-rich soil, help to provide the fresh that local ingredients support their traditional Blue Zone Diet, which the locals still follow to this day.

The Nicoyans also incorporated a period of fasting into their diets, known as the Siesta. This period of fasting typically lasted from noon to sunset and was used to give the body time to rest and digest. The Nicoyan diet is high in whole grains, fresh fruits, and vegetables. Many of the dishes are simple and can be easily recreated in any home kitchen. The core of this region's diet is made up of corn, beans, and rice, which form the basis of dishes such as Gallo Pinto, Tortillas de Maíz, Cuajada, and Gallo Pinto con Huevos. Tortillas are a staple and can be served with a variety of toppings. Beans are also often served as a side dish or in soups. Rice is a common ingredient and is typically cooked with vegetables. Additionally, the Nicoya Peninsula diet is also rich in fresh fruits and vegetables such as plantains, squash, and tomatoes. Plantains are usually boiled and served as a side dish or in soups, while squash is usually roasted and served as a side dish or in salads. Tomatoes are used in a variety of dishes, such as salsa de tomate or tomato sauce, and ceviche de camarón is another popular dish from the region. By recreating these dishes and incorporating the traditional ingredients of the area into your diet, you can enjoy the same flavors and health benefits as the people of this region.



#### Nicoyan Diet

The Nicoya people of Costa Rica typically ate three meals a day. Breakfast was usually a light meal comprised of fruits, nuts, and seeds. Lunch was typically the biggest meal of the day, often including soup or a stew made with vegetables, beans, and/or corn. Dinner was typically a lighter meal, such as a fried plantain or tamale. Although the exact times of day may vary based on a family's preferences, breakfast is typically eaten between 6 and 8 a.m., lunch is eaten between noon and 2 p.m., and dinner is typically eaten between 6 and 8 p.m. This traditional diet has been around for centuries and remains a part of many local households today, offering an example of how traditional diets can lead to improved health and longevity.

#### Actionable Recommendation:

- ✓ Incorporate plant-based Nicoyan diet rich in legumes, fresh vegetables.
- Make your lunch biggest meal of the day.
- ✓ Do not go to bed in full stomach.

#### **8000 Steps to Prevent Premature Death?**

Inoue K. et al from Kyoto University and the University of California, Los Angeles studied the association between the number of days taking a 8000 steps throughout the week by looking at 3101 representative sample of participants aged 20 years or older from the National Health and Nutrition Examination Surveys 2005-2006 who wore an accelerometer for each week and their mortality data through December 31, 2019. The researchers found that those who walked 8,000 steps (approximately 4 miles) one or two days a week were 14.9% less likely to die over a 10-year period than those who never reached 8,000 steps one or two days a week.

For those who walked 8,000 steps or more three to seven days a week, their mortality risk was even lower, at 16.5%, with a mere 1.6% difference. People aged 65 and over who walked 8,000 steps one or two days a week had a 19.9% lower risk of death over a 10-year period. For those aged 65 and over taking at least 8,000 steps three to five days a week, they had a 27.7% lower risk of death compared to those who walked 0 days a week, suggesting a more pronounced benefit. The authors found that "the association between the number of daily steps and the risk of death was curvilinear, with the protective association plateauing at 3 days per week". Similar results were observed when different thresholds such as 6,000 and 10,000 steps were used. The results were published in the March 28<sup>h</sup>, 2023, online edition of JAMA Network.

#### Actionable Recommendation:

- ✓ Taking 8000 steps one or two days a week is highly recommended to prevent all-cause mortality or those less than 65.
- ✓ Taking 8,000 steps at least three times a week is recommended for those aged 65 to prevent premature death.

## What's all the commotion about Skittle ban?

Lawmakers in California are trying to pass a bill that would prevent the manufacture, sale, or distribution of certain foods, such as Skittles, Nerds, Hot Tamales, cake icing, and Strawberry Nesquik containing red dye No. 3, titanium dioxide, potassium bromate, brominated vegetable oil, or propylparaben. These chemicals are already banned in the European Union and other countries and are believed to potentially be dangerous.

Titanium is a heavy metal and is common as titanium dioxide (TiO2, 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. for and not 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 over potential health concerns 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 neurological quantities can cause 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 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. It is unclear if the bill will gain enough momentum to become legislation, but the lawmaker behind the bill has stated that it is unlikely to lead to a ban on Skittles.

#### 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 propyl paraben, we recommend baking your own bread.

- ✓ Avoiding titanium dioxide and red dye #3 may be next to impossible due to their common use in medications. Taking medications far outweighs any risk from these two compounds.
- ✓ In summary, if you are Skittle lover and eat them only every few weeks to once a month, you need not worry so much! If you are 'Granola' boy or girl, avoid them entirely!

#### Vitamin D: To supplement or not

It is hypothesized that taking vitamin D may improve skeletal health and enhance bone mineralization by elevating intestinal calcium absorption. To test this hypothesis, LeBoff M et al. conducted an ancillary study of 25,871 U.S. participants taken from the Vitamin D and Omega-3 Trial (VITAL), which included men over the age of 50 and women over the age of 55 randomized to receive 2,000 international units of vitamin D each day or a placebo. Results showed a total of 1,991 incident fractures in 1,551 participants (769 of 12,927 participants in the vitamin D group and 782 of 12,944 participants in the placebo group) over a median follow-up of 5.3 years, with no significant difference observed between the two groups. Specifically, supplemental vitamin D3 had no effect on total fractures (hazard ratio, 0.98; 95% confidence interval [CI], 0.89 to 1.08; P=0.70), nonvertebral fractures (hazard ratio, 0.97; 95% CI, 0.87 to

1.07; P=0.50), or hip fractures (hazard ratio, 1.01; 95% CI, 0.70 to 1.47; P=0.96). These results, which were published online on July 27, 2022, in The New England Journal of Medicine, indicated no benefits from supplemental vitamin D3 on major osteoporotic fractures, wrist fractures, or pelvic fractures.

The original VITAL study reported no benefits on primary end points of cancer or major cardiovascular disease events. However, secondary analyses of VITAL showed that a statistical interaction by baseline body weight, whereby randomization to vitamin D supplementation versus placebo was associated with a 24% lower cancer incidence, 42% lower cancer mortality, and 22% lower incidence of autoimmune disease among participants with normal body weight (body mass index [BMI] <25.0). Tobias D et al. found this intriguing and conducted an ancillary study to determine if biomarkers associated with vitamin D metabolism differed based on individual body weight. Results, which were published online on January 17, 2023, on the JAMA Network Open, revealed that vitamin D supplementation increased most of the biomarkers associated with vitamin D metabolism in all individuals, though those with elevated BMIs had significantly smaller increases after two years of supplementation. This suggests that some of the observed differences in the effectiveness of vitamin D may be associated with obesity status.

#### Actionable Recommendation:

 ✓ Continue 2000 units a day vitamin D supplement if your BMI is less than 25. If your BMI is greater than 25, see your PCP for dose adjustment.

#### 9HEALTH RECIPE #2 SHE CAN DO IT, HE CAN DO IT, I CAN DO IT!

## [Icaria-Style Bean Soup]

Servings: [2 Servings] Prep time: [20 min] Total time: [80 min]



Ingredients

[2 tablespoonfuls olive oil] [1 large onion chopped] [2 cloves of minced garlic] [1 cup dried white beans soaked overnight] [2 carrots, sliced] [2 celery stalks, chopped] [2 bay leaves] [1 teaspoons dried oregano] [2 tablespoonfuls tomato paste] [4 cups vegetable broth] [2 tablespoons chopped fresh parsley] [salt and pepper to taste]

#### Directions

1. Heat the olive oil in a large pot over medium heat.

2. Add the onion and garlic and sauté until onion is translucent.

3. Drain the beans and add to the pot along with the carrots, celery, bay leaves, oregano, tomato paste, and vegetable broth.

4. Bring to a simmer and cook for 1 hour, or until beans are tender.

5. Stir in the parsley.

6. Season with salt and pepper to taste.

#### Special Cooking Information

[Max Cooking Heat for Olive Oil: Extra Virgin – 350°F, Virgin – 420°F, Olive oil – 390°F-470°F, once boiling point is reached, olive oil becomes toxic]

#### Recall Product **Recall Reason** Company Date **Brand Name** Description Description Name Ascend 3/22/2023 Dabigatran Detection of N-Ascend Etexilate Laboratories nitroso-dabigatran Laboratories. Capsules, USP (NDAB) Impurity LLC with risk of cancer 3/29/2023 HyVee Hamburger Chili Undeclared Milk Gilster-Mary Macaroni Skillet Allergen Lee Corp. Meal 3/31/2023 Camber Atovaquone Oral **Potential Bacillus** Camber Suspension cereus Pharmaceuticals, Contamination Inc. 3/31/2023 Biltmore Biltmore Smoked Potential Foodborne Seven Seas Wild Sockeye Illness/Listeria International Salmon USA, LLC. 4/5/2023 Multiple brand Lettuce & Salad Listeria Revolution names Farms Kits monocytogenes Salad Kits Fresh Express 4/7/2023 Fresh Express & Listeria Publix monocytogenes Incorporated 4/10/2023 Fresh From Premade Salads Potential Listeria Meijer Meijer monocytogenes contamination Ground cumin 04/20/2023 Lipari Foods Salmonella Lipari Foods contamination Kawasho Foods 04/22/2023 GEISHA GEISHA Potential contamination with Medium Shrimp, USA, Inc. Clostridium 4 oz can botulinum TruVision 4/27/2023 Various Dietary Unapproved Truvy, TruVision Hordenine and Supplement Health

### FDA Medication/Food December Recall (updated on 2/8/2023)

reFORM

octodrine/DMHA

Capsules

#### **Case Number 8: Fentanyl Toxicity**

#### What's the probability of 5-year survival for this 42-year-old male with cancer and newly discovered addiction to fentanyl?

The following real life-like case examples are hypothetical stories about palliative or hospice care, 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 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.

Jessup Andrews Potter, named after the town of Jessup, Georgia, is a 42-year-old Caucasian male found face down on the floor on hospital day 36 on 04/15/2023. *He is no exception since everyone else also succumbs to the law of gravity eventually*. Significant medical history includes diabetes (insulin dependent), hypertension, anemia, blood transfusion, cancer (myelodysplastic syndrome-MDS), myocardial infarction (2015 cardiac stents placed), DOE (dyspnea on exertion), sleep apnea, rectal lesion.

Assessment and plans on the morning of 04/14/2023 includes: 42 year old male with high risk myelodysplastic syndrome admitted with short of breath and chest pain who was found to have pneumonia, treated with 7+3 induction chemotherapy found to have persistent disease, now getting treatment with G-CLAC salvage chemotherapy (clofarabine-based granulocyte colony-stimulating factor, clofarabine, high-dose cytarabine).

**Myelodysplastic Syndrome**: high risk 7+3 induction, bone marrow biopsy on 03/30/2023 showed AML 60% blasts. Now treatment day 14 (04/14/2023) of G-CLAC chemotherapy. -Hand/Foot Syndrome: 2/2 to Clofarabine, on palms of hand only, painful and red. Continue hydrating cream and triamcinolone for hand/foot areas.

-Rash: petechial, pruritic, scattered over chest, abdomen, arms and thighs, marked improvement with triamcinolone cream.

- Pancytopenia as expected, plan for stem cell transplant if able to achieve remission.

- Support with blood products as needed to maintain Hgb > 8 and PLT >10,000.

-PLT count increases after transfusion, but not holding onto PLTs greater than 12-24

r
Jessup Andrews Potter *All patient data is fictional and imagined by the author with Al assistance. Safe Health Report complies fully with US HIPPA regulations.
*Adapted from Minnesota Department of Health Guideline Jessup's ADL Score 1

hours (most likely secondary to consumption).

Infections: afebrile

-Pneumonia: concerning for fungus or other atypical infection. Negative bronchoalveolar lavage, follow-up chest X-ray negative. Reports dyspnea with exertion but not hypoxic today.

- Recent chest X-ray showed no acute process.

- Peri-anal abscess: status post incision and debridement on 03/30/2023, continue piperacillin/tazobactam antibiotic therapy along with topical mupirocin since abscess was not cultured.

- Continue prophylaxis with acyclovir and voriconazole.

-C. Difficile PCR negative. Denies having diarrhea at this time.

-Loperamide as needed for diarrhea.

**Central IV Line**: PICC line has migrated on X-ray report and will need to be replaced.

**Diabetes**: iatrogenic hyperglycemia 2/2 dexamethasone.

-Glucose management team to manage insulin regimen.

**Cardiovascular**: history of MI with cardiac stents (2015), increase in premature atrial contractions today. EKG showing normal sinus rhythm with frequent premature atrial contractions with isolated premature ventricular contractions otherwise remain rate controlled.

-Continue metoprolol 50mg twice a day.

-Limit QT prolonging medications with weekly EKG.

**Hypertension**: improving SBP 135-145s but with occasional spikes in 160s systolic

-Continue amlodipine 10mg PO daily.

-Continue hydralazine 25mg prn.

**Food/Nutrition**: neutropenic diet, encourage oral intake, protein, replace electrolytes as needed, follow up magnesium and potassium.

**Mental Status**: Neurological: alert and oriented to person, place and time. Continues to ambulate in halls, out of bed daily.

Vitals:

	4/14/23	4/14/23	4/14/23
	0600	1200	1700
Temp	37.2	37.8	37.2
BP	124/59	161/85	189/97
HR	87	90	107
RR	20	18	24
SpO2 (RA)	95	91	94

Labs:

Lab Values @	Reported	Reference
4/14 AM labs		Range
White Blood Cell	< 0.1	4.0 - 11.1
		10^9/L
Hemoglobin	8.0	14.3 - 18.1
Hematocrit	24.0	39.2 - 50.2 %
Platelet Count	11	150 - 400
		10^9/L
Potassium	2.7	3.5-5.1 mmol/L
	(0400),	
	3.3	
	(04:50),	
	3.0	
	(1315),	
	3.3	
	(18:00)	
Glucose	125	70 - 199
Creatinine	0.81	0.70 - 1.30

#### **Current Medications:**

Acyclovir 400mg PO TID 4/13/2023: 0600, 1400, 2100 4/14/2023: 0600, 1500 \_ Amlodipine 10mg PO Daily 4/13/2023: 5mg PO 0800 & 0900 -04/14/2014: 10 mg PO 0800 Filgrastim 5mcg/kg SQ Q24H - 4/13/2023: 1700 4/14/2023: 1400 Gabapentin 300mg PO TID - 4/13/2023: 0600, 1400, 2100 - 4/14/2023: 0600, 1500 Insulin lispro TID 4/13/2023: 0900 (5 Units), 1400 (7 Units) - 4/14/2023: 0800 (5 Units), 1500 (5 Units) Insulin lispro OHS - 4/13/2023: 2200 (2Units) - 4/14/2023: Metoprolol Tartrate 50mg PO BID - 4/13/2023: 0900, 2100 4/14/2023: 0900 Mupirocin topical cream - 4/14/2023: 1200 Zosyn 3.375gm Q6H Cumulative dose of 30 days, 10 days of drug-free period in between - 4/13/2023: 0500, 1200, 1800 - 4/14/2023: 0100, 0500, 1300 Senna 17.2mg PO BID - 4/13/2023: 0900, 2120 - 4/14/2023: 0900 Triamcinolone topical BID - 4/13/2023: 0900, 2100 -4/14/2023: 0900 Voriconazole 300mg PO Q12H Cumulative dose of 37 days, no drug free periods - 4/13/2023: 0900, 2100 4/14/2023: 0900 **PRN Medications:** 

Magnesium Sulfate 2gram/50ml (4%) IVPB premix 2gram

- 4/13/2023: 0700, 1000, 1500
- 4/14/2023: 0500, 0600

Potassium chloride (K-DUR, KLOR-CON)

- 4/13/2000: SR tab 20 mEq 0900, 100, 1400
- 4/14/2023: SR tab 20 mEq 0800, 100

Potassium chloride 10 mEq in 100mL IVPB

- 4/13/2023: 0900, 1200, 1500
- 4/14/2023: 0800, 1000

Potassium Phosphate 5mmol in NS 100ml IVPB

- 4/13/2023: 1300
- 4/14/2023: 1600

#### Marcee Kunzelman, RN Note at 2100

At 1700 the nurse entered the room where the patient was calling out to the nurse from the bathroom; he was found face down on the floor. Also found on the bathroom floor were what turned out to be pills laced with fentanyl. Patient stated that he was reaching to pull up underwear when he fell forward. The patient was bleeding from his nose and hand an abrasion on nose and arm. Patient was lifted into bed by staff and sent for STAT CT of head, platelets ordered and administered. Patient complains of blurry vision and difficulty stopping nosebleeds.

#### Imaging after fall:

04/14/2023 CT of brain without contrast: No acute intracranial abnormality or fracture. Frontal scalp hematoma and swelling involving the nose. Fluid with the nasal cavity and dependent aspect of the sphenoid sinus is suspicious for blood in patient with given history.

#### Contributors to a fall:

\*Illegal pills laced with fentanyl

\*Hypertension: high systolic readings of >180 could have the potential to exert symptoms of dizziness, blurred vision, headache and shortness of breath.

\*Hypokalemia: The patient was consistently hypokalemic over several days prior to his fall. Voriconazole has been associated with causing hypokalemia he was started on this on 07/08/2014 and was continued through 08/14/2014.

\*Voriconazole: adverse reactions: ophthalmic (visual disturbances 19%), Cardiovascular (tachycardia ≤2%), Endocrine and metabolic (hypokalemia ≤2%)

\*Zosyn: adverse reactions: Cardiovascular (hypertension 2%)

#### Synopsis:

The main cause of the patient's fall is attributed to fentanyl-laced pills that he acquired from another hospitalized patient. I've seen a similar incident with illegally acquired oxycodone and hashish within a health system. This would be

Eve of the Tiger Test for Jessup Potter \*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 cane for walking occasionally for example • 5 – Mild Frailty: Symptomatic disease limit daily activities. Needs walkers. Needs help with walking and shopping. - 6 - Moderate Frailty: Needs helps with walking, shopping, climbing stairs, 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 III: As in 8 but not likely to live next 3-6 month. \*Adapted from Rockwood & Theou 2020 Jessup's Frailty Score

the first incident where hospitalized patients traded illicit fentanyl-laced pills for an inadequate amount of narcotics provided by physicians due to an addiction. The patient's blood pressure was rising over the course of the day on 04/14/2023 and was recorded to be 161/85 mmHg at 1200. Sudden changes in a patient's blood pressure is also one of the causes of the fall. Other potential causes of the fall include low serum potassium and chronic administration voriconazole. of It is disheartening to see illegal drugs infiltrate even hospitals. Not only does the patient have a debilitating medical condition with MDS, but also a newly discovered addiction to narcotics. If the patient can overcome MDS with chemotherapy and a subsequent bone marrow transplant, he may possibly survive the next five years, but it is doubtful at this juncture!

#### **Take Home Lesson:**

- ✓ Illegal street drugs are everywhere. There needs to be better public education campaign on illicit drugs at all levels of governmental.
- ✓ I would strongly recommend carrying the newly approved overthe-counter naloxone for anyone with addiction or anyone with family members with addiction.

#### **Fentanyl-laced Pills:**

Figure 1. Fentanyl from China, cooked in Mexico, sold in the US.



\*Source: DEA.gov. Accessed 4.23.2023.

Over the twelve-month period between April 2021 and March 2022, an estimated 110,315 people in the United States died due to fatal drug overdoses. Of these, 66 percent were attributed to the presence of synthetic opioids, such as fentanyl. Fentanyl is a potent and highly addictive synthetic opioid that is roughly fifty times more potent than heroin and one hundred times more potent than morphine. In fact, just two milligrams (2000 micrograms) of fentanyl, a quantity that fits on the tip of a pencil, is considered a potentially lethal dosage.

According to the Drug Enforcement Agency (DEA), the prevalence of fentanyl-laced fake prescription pills has risen from four out of ten in 2021 to six out of ten in 2022, making them an especially dangerous drug. Drug cartels often mass-produce counterfeit pills that look identical to real prescription medications, such as OxyContin® and Xanax®. In 2021, the DEA seized over 20.4 million counterfeit pills. Despite these efforts, fentanyl-laced drugs are still widespread in many American communities, especially in small towns. This is particularly true of hospitalized patients and endangers unsuspecting travelers who seek medication for ailments such as severe headaches or migraines.

The fentanyl epidemic necessitates policy changes regarding addiction treatment, at a lower cost, and more accessible legal means of obtaining anxiety and pain medications. We must take responsibility for the state of the fentanyl epidemic and make the necessary changes.

#### **Recommendations:**

- Never take a pill that wasn't prescribed directly to you. Never take a pill from a friend. Never take a pill bought on social media.
- ✓ When traveling to Mexico, please take your pain or migraine medications with you and avoid purchasing medications from local Mexican pharmacy.

## ✓ To avoid premature death, please avoid fentanyl-laced pills.

#### COVID 19 Update (April 24, 2023):

According to the US Centers for Disease Control, there were 94,142 new COVID-19 infection cases and 1,160 deaths per week as of April 19, 2023, which is significantly lower than the 282,036 new cases and 17,480 deaths each week reported on February 1 and 2, 2023, respectively. While the number of deaths due to COVID-19 is substantially lower than it was three months ago, people over the age of 65 and immunocompromised individuals should still take precautions, as COVID-19 is still a major cause of premature death in the US.

Although the US federal government has ended the COVID-19 national emergency, this does not mean that COVID-19 has been eliminated. It simply means that the government will no longer be covering the expenses related to COVID-19. You and your health insurance will have to cover them instead. Therefore, it is still essential to remain conscious of this pandemic and its potentially destructive consequences, despite the so-called "COVID fatigue".

What are the top COVID-19 Omicron variants as of April 24, 2023?

Lineage Number	Percent Total
XBB.1.5	73.6%
XBB.1.16	9.6%
XBB.1.9.1	7.9%
XBB.1.9.2	2.9%
XBB.1.5.1	2.2%
FD.2	1.6%

Other	2.2%

As of April 24th, 2023, the COVID-19 Omicron subvariant XBB.1.5, also known as 'Kraken', constitutes a majority of cases. Although the XBB.1.5 strain is more easily spread even in those who have been vaccinated or previously infected, the risk of death appears to be much less than previous variants. Symptoms range from typical cold-like symptoms, such as cough and congestion, to more severe symptoms, like shortness of breath and low oxygen levels, which medical require emergency attention. particularly for elderly the and immunocompromised.

#### **Recommendations:**

- ✓ It still makes sense to wear N-95 masks to protect yourself from others if you are older and immunocompromised.
- ✓ Regular masks will not not protect you. It is meant to protect others from you.

#### **Opinion for the Month of April:**

With the presence of both fentanyl and COVID-19, doesn't it feel like someone is trying to wipe us out? It makes zero sense since American consumer market is essential for anyone who makes consumer products. We should not pay so much attention to the fringes of society. We need national attention on the economy as we are on the brink of economic disaster which does not bode well for the health of majority of Americans or for that matter the fringes as well.

#### MrGineaPig's Core Long-Term Trial

	SUPPLEMENT	START DATE		
Muscle Weakness	Hyaloronic Acid	07/01/2019	50 mg-1 capsule daily	
Digestive Aid	Bacillus coagulans	10/4/2022	take one gummy bear daily after dinner	
Back Pain	Pantothenic acid Pantethine	09/1/202 09/01/2022	500 mg 1 capsule daily 450  mg 1 capsule daily	
3PH/ prostatitis Prevention	Cranberry Extract 600 mg	12/20/2022	1 capsule three times a day	
Vealtimes	Breakfast 09:00 -Lunner (13:00)	01/07/2023	+Salad with Balsamic Vinegar Lunner = Lunch + Dinner	
			l your doctor or 911 immediately.	
	permitted by law, Safe Health Report DIS	edical emergency, call CLAIMS ALL REPRES	ERGENCY	

#### March Risk Factors for Premature or Unexpected Death

Immediate Risks	Internal Threat	<b>External Threat</b>	Other Topics
1. Covid 19 - XBB.1.5         2. Fentanyl-laced pills         3. Gun violence	<ol> <li>Poor diet</li> <li>Smoking</li> <li>High blood pressure</li> <li>Obesity</li> <li>Sedentary Lifestyle</li> </ol>	1.Earthquake2.War3.FDA recalls4.Meatpreservatives5.Trans fatty acid6.Pesticides7.Heavy metals8.K Bromate	<ol> <li>Shortness of breath</li> <li>Back pain</li> <li>Hemorrhoids</li> <li>Incontinence</li> <li>Joint swelling</li> <li>Fibromyalgia</li> <li>Suicide</li> <li>Health Insurance</li> </ol>
Topics Choson: Cov	id 10 undata Clastridi	um difficile Search of 1	Rost Diat Sarias

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 immediate danger to your health (both mental and physical) as in avalanche.

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

Section 3: Case examples of premature death. If you are in 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 the tissue level?



#### **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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