Weathering the Storms of Change Pandemic Protection and Recovery

DR. ED BAUMAN



Bauman Wellness food • arts • community

Dedication

To our one world family from the grassroots up to the leaders of commerce and government, let's make wellness for all a priority. May the information in this book be respected, shared and included in the conversation on how we can integrate health, medicine, education, economy and ecology to alleviate suffering and nourish the Earth and all sentient beings.

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DISCLAIMER: This information is for educational purposes only. It is not intended to replace professional medical treatment, advice, and/or diagnosis. All professionals contributing to the programs in this guide are actively educating and treating individuals and families with COVID and are focused on early, home-based delivery of medical treatment options unless critical care in hospital is determined to be urgently needed. The contributors have no financial ties with any pharmaceutical company or product suggested in the protection or recovery algorithms.

All contributors have volunteered their time and expertise as a community service in this time of national emergency to help inform citizens of their options for research-based, peer-reviewed, safe treatments. They have received no remuneration for their contributions. The opinions expressed in this guide are those of the contributors and not those of <u>BaumanWellness.com</u>.



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Introduction

"We are the result of nature. This is a nature that existed for billions of years, always striving, and achieving greater biodiversity and intelligence on Earth. We may be the most intelligent species to occur within this nature, but that intelligence will have to move out of the fight-or-flight state if we are going to find new footing."

- DR. ZACH BUSH, 2021

Wellness Holds the Key to Resilience

We are all mightily challenged by the stressors of climate change, CoVid and socio-economic injustice. Wellness provides a way to navigate mental and physical crisis management and long-term sustainability. Here you will learn how to implement foundational wellness practices to support personal and community resilience and recovery.

Wellness Roots

Our roots connect us with the Earth, with our creator, and with people and communities who have lived in harmony for thousands of years. To nourish communities of wellness we are articulating our values and visions of how this current world can be transformed into one of peace, harmony, and well-being. We are evolving individually and collectively. We serve with humility and authenticity. We honor our ancestors, teachers, and parents, and aim to create a world wherein our children and their children will be well. Please click on the links in these articles to reflect on our guiding principles. If they resonate with you, please join our community and be a co-creator of wellness: baumanwellness.com

Wellness Works

Research documents that people who follow a single wellness practice such as eating well, movement, mindfulness, healing relationship, and service, live longer and cope better than people who rarely practice these proven, health promoting, disease preventing behaviors.

Wellness works when people reflect and respond, rather than react to stress. We will demonstrate how to integrate five restorative wellness practices into your daily routine. We will test the hypothesis that if one wellness practice works, the effect of following two, three, four or five wellness practices, will be exponentially greater.

food • arts • community



FIVE CORE WELLNESS PRACTICES

Bauman Wellness Principles

- 1. Wellness is a positive state of being.
- **2.** Wellness and illness are the outer poles of a quality-of-life continuum.
- **3.** Wellness is characterized by vitality, joy, and resilience.
- **4.** Wellness reflects individual, family, community, work-place, media, and environmental interactions.
- **5.** Wellness is sustained and strengthened by nourishing individual, family, and community life.
- **6.** Art is vital to our well-being as it opens us up to see and feel the world around us in a fresh way.
- **7.** Illness indicates a lack of resources needed to resolve insults, injuries, and threats to well-being.
- 8. Acts that harm the biosphere harm all organisms.
- **9.** Social injustice and lack of diversity, equity, inclusion, perpetuate societal unwellness.
- 10. Networking within community circles is a key to well-being. The greater the quality and diversity of one's connections, the greater the vitality, intelligence, and resilience.

Wellness for all is critical to building climate, CoVid and social-economic resilience

This guidance is not intended to replace competent medical care, but rather offer evidence-based information on selfcare practices and guidance from physicians on the front line about how health professionals can work with people who have been compromised from a combination of factors that may include infection, co-morbidities, immune dysregulation, mental health and metabolic vulnerability.

Curiosity + collaboration + respect for differing approaches is the recipe for implementing best practices to address and resolve the deep wounds that we all experience, with new variants, threats, and restrictions to life, liberty and the pursuit of well-being threatens all of us.

Now is the time to harmonize, not polarize; to unify and bring to light ways for us to weather the storms of change, together.



Dr. Ed Bauman has been at the forefront of the holistic health and nutrition renaissance for the past 50 years. He holds a MEd from the University of Massachusetts, a MS in Nutrition from Heartwood College, and a PhD in Community Health Promotion from the University of New Mexico. After studying traditional health and nutrition systems for more than 30 years, Dr. Bauman created the *Eating for Health*[™] approach, which forms the basis of his professional and community nutrition programs. He is the founder of Bauman College: Holistic Nutrition and Culinary Arts. Dr. Bauman's current passion is Bauman Wellness.com, a non-profit institute that nourishes cultures of wellness through healing foods, arts and community learning. Bauman Wellness is a diverse and inclusive community of professional, family and individual members. Dr. Bauman is the co-author of many renowned books, including the Holistic Health Handbook, Holistic Health Lifebook, Foundations of Nutrition Textbook, Therapeutic Nutrition Textbook, Flavors of Health Cookbook, Whole Food Guide for Breast Cancer Survivors, Spice for Life: Self-Healing Recipes, Remedies and Research, Affordable Nutrition, and Nutrition Essentials for Everyone. baumanwellness.com/books

Pandemic Protection

Targeted Nutrition for CoVid Protection and Recovery

The current pandemic has opened a *Pandora's Box* of risk and opportunity. Information is being shared, worldwide on best practices for ways to manage risk and contain infection from Coronavirus-19 and subsequent variations. This viral threat can be the wakeup call our global family needs to pivot from feeling personally endangered to becoming collectively empowered.

People with pre-existing health conditions like diabetes and heart disease are at higher risk of hospitalization and death due to COVID-19. In fact, some research suggests that people under 65 years of age that have a pre-existing condition have the same risk as people over the age of 65 with no pre-existing conditions. Consider the following:

- People with <u>pre-existing heart conditions</u> are three times more likely to die as a result of COVID-19
- <u>People with diabetes</u> are also three times more likely to die from COVID-19
- People with <u>chronic kidney disease</u> are twice as likely to die from COVID-19
- Some studies suggest that <u>obesity is second only to</u> <u>age</u> as a risk factor for hospitalization from COVID-19, even when no other health conditions are present. And young adults with obesity seem to be at particular risk.

These statistics are frightening. Almost 70 percent of the U.S. population is overweight, and 40 percent are now obese. One in three Americans has pre-diabetes or diabetes. Cardiovascular disease is the #1 cause of death in the US. *This means that roughly half of Americans are at increased risk of complications due to COVID-19.*

Most of the pre-existing conditions that increase the risk of morbidity and mortality from COVID-19 are driven by diet and lifestyle, and are preventable given adequate education, economy and support. They're a result of a mismatch between our genes, environment, and biology, compounded by infectious agents, a fragile physical, emotional and social structure, impacted by dramatic climate cataclysm, and chronic stress. What a set up for collapse and unprecedented vulnerability.

Promising Research on Using Nutrition to Build Resilience and Recovery

Many key nutrients — including vitamins A, B6, B12, C, D, E, and folate, plus trace elements, including zinc, iron, selenium, magnesium, and, play important and complementary roles in supporting both the innate and adaptive immune systems. Vital information on the role of these nutrients to support well being when living in threatening times is not included in the pandemic prevention narrative despite the widespread deficiencies in our society, especially among the elderly, who are most at risk for severe outcomes associated with viral infections. Suboptimal status in phytonutrients (colorful plant flavonoids and carotenes) micronutrients (vitamins and minerals) negatively affects immune function, decrease resistance to infection and slow recovery for those with complex health conditions.

When people are stressed, their nutrient reserves are depleted. Often, they cope with stress by eating worse, and relying on drugs, alcohol and distractions for temporary relief. With any viral infection, nutrient deficiencies increase the risk of complications, including the very uncomfortable, pain and fever symptoms of an inflammatory cytokine storm. Few studies have been done on the effect of a cooling, calming, nourishing, plant predominant diet on the prevention of COVID-19 and mitigation of its symptoms if it is contracted. However, a recent systematic review concluded that supplementation with many of immune supportive food, herbs and nutrients may be effective in improving the health status of patients with viral infections (Bour-Bour et al., 2020)

The Importance of Vitamin D and Zinc in Immunity

Two of the most essential nutrients for immune health are vitamin D and zinc. Vitamin D profoundly influences immunity, and a deficiency clearly increases the risk for respiratory infections. Many immune cells have vitamin D receptors that affect their function after ligand binding. A recent research review article highlighted the current status of vitamin D deficiency, the mechanisms of action of vitamin D and the current literature on the topic, with a special focus on the potential implications for the COVID-19 pandemic (Verdoia et al., 2020). Several recent studies have concluded that low levels of vitamin D are associated with increased risk of COVID-19 and/or severity of COVID-19 infections (Mitchell, 2020; Merzon et al., 2020).

Even marginal zinc deficiency can negatively affect immunity. Zinc is important for the maintenance and development of cells in both the innate and adaptive immune systems. A deficiency results in impaired formation, activation and maturation of lymphocytes, disturbs the intercellular communication via cytokines, and weakens the innate host defense (Mitchell, 2020; Merzon et al., 2020). Research studies suggest that zinc could have protective effects against COVID-19 by supporting anti-viral immunity and reducing inflammation.

Essential Fatty Acids and Inflammation

An inflammatory cascade (or 'cytokine storm') triggered by COVID-19 is one of the most dangerous aspects of the disease. It makes sense to consider dietary protocols that help the body naturally regulate inflammation.

Essential fatty acids have long been recognized for their role in calming inflammation. In particular, nutritional deficiencies in the essential fatty acids *eicosapentaenoic acid* (EPA) and *docosahexaenoic acid* (DHA) result in delayed or suboptimal resolution of inflammation (Hammock et al., 2020)

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection leads to severe tissue damage, which releases cell debris. Research shows that omega-3 fatty acid-derived EPA and DHA exhibit anti-inflammatory activity in various inflammatory diseases, including in the lung, heart, ocular angiogenesis, and pain (Schunck et al., 2018)

N-acetylcysteine (NAC) Blocks Inflammatory Cascade

N-acetylcysteine (NAC) is a potent redox-antioxidant, whose food source is the cruciferous vegetable family. Studies show that NAC is effective at reducing acute attacks of chronic bronchitis. A meta-analysis from 2000 looked at 8 different studies and concluded that NAC prevented acute exacerbations of chronic bronchitis (Moktari et al., 2017). Administration of NAC during the winter months appears to significantly reduce influenza and influenza-like episodes, especially in elderly high-risk individuals (De Flora, 1997). Since one of the main symptoms of COVID-19 is a cough, it's possible that NAC could help to reduce the severity of this symptom. It seems to help in a variety of lung disorders by affecting glutathione and reducing inflammation (Tiouvanziam et al., 2016)

Eating for Health™ (Bauman, 2021)

The basis of all evidence based nutritionally sound food plans is to eat a well-rounded, nutrient-dense, chemical free, whole food diet. The Bauman *Eating for Health™* model provides a unified food system consisting of beverages, colorful carbohydrates, booster food herbs, spices and condiments, quality protein and fats synergistically to build health. Other food models emphasize the value of one food category with a restriction of others. This reductionist approach is not only challenging to follow, but has diminishing returns over time, and certain valuable foods, such as complex carbohydrates or protein are limited.

Eating for Health[™] encourages one to eat as much **S.O.U.L.** (seasonal, organic, unprocessed and local) food as possible. It suggests limiting or eliminating refined sugar, gluten (wheat, rye, barley and oat) flour and grains, additives, preservatives, pesticides, fungicides, food coloring, and genetically modified food. These substances with an occasional or single exposure are tolerated by a healthy person. But, when combined and experienced on a daily basis, are disturbing to a compromised neurological, metabolic, and hormonal and or immune system. Repeated exposure to food and chemical antigens contributes to both hyper and hypo immune conditions, making a person more vulnerable to and slower to recover from a viral infection.

Hydration may be more important than food, as dehydration is both a cause and result of a compromised immune system. Caffeine, sugar and sugar substitutes (sports drinks and Coke Zero) contribute to dehydration. As such, a liter of soda or several cups of coffee are not healthy fluids. Drink a half a cup of water or unsweetened tea per hour each day to be ideally hydrated. This is preferred to drinking several cups at a time and then not hydrating again for several hours. Green tea is a more immune supporting beverage





than coffee. For most, 8-12 oz. of coffee in the morning is acceptable. Thereafter, make a liter of bioflavonoid rich white or green tea, masala chai and/or herbal tea. Decaffeinated green and black teas are available for those with caffeine sensitivity.

Minimizing one's intake of alcohol, drugs, tobacco, stimulants, aspartame, sweets and treats are suggested. For many, these are the substances they reach for when stressed or overwhelmed. *Eating for Health™* enables one to stay **C.A.L.M** (calm and living in the moment) rather than overwhelmed by **F.E.A.R.** (future expectations about reality). Exercise, meditation and creative arts are also wonderful wellness behaviors to practice dial in on a daily basis with more inner space now available due to social distancing.

Intermittent fasting, a practice wherein a person abstains from solid food for 12-14 hours a day, typically from an early dinner to breakfast the next day is a great way to enhance digestion, absorption, metabolism, and immune competency.

Integrative Health Solutions

A recent meta-analysis evaluating the effectiveness of herbal medicines for managing the symptoms of COVID-19 found that combining herbal medicine with Western medicine significantly improved symptoms caused by the virus, including cough, sore throat, and fatigue.

If this virus has taught us anything, it is that general health optimization is what really matters. Healing is not just about your immune system, or any one part of the body. Healing is about WHOLENESS and total VITALITY. All systems are connected, and this is why the foundation of what we do is to build robustness, enhance auto-regulation and auto-organization, and support adaptation and protection through herbal and nutritional support that is gentle, non-specific, and multi-faceted. (Donnie Yance, 2020)

Above is the *Eating for Health™ Model* (Bauman, 2020). Take a look at which of these categories you are eating on a daily basis and which ones you can add to improve your diet.

Spice for Life[™]

Adding herbs and spices to your meals, snacks and beverages will give you extra protections. A *Spice Warrior* blend consists of garlic, ginger, turmeric, ashwagandha, tulsi basil, pepper, and oregano to boost circulating and cellular immunity.

Key Foods and Combinations

- Allium family of vegetables: onions, leeks, chives, scallions and garlic
- Citrus fruit lemon, orange, tangerine, lime etc. Fruit and peels
- Beets, cooked greens (nettles is #1)
- Fresh orange juice is rich in vitamin c + quercetin, hesperetin and luteolin
- Carrots, celery, celery root, artichoke, asparagus
- Cruciferous vegetables with shiitake mushrooms: broccoli, cauliflower, cabbage, Brussels sprouts
- Fruit: pears (poached with ginger, honey, orange slices and a cinnamon stick)
- Homemade tomato sauce on spaghetti squash or spiralized zucchini
- pomegranates or pomegranate juice
- Apple cider drink combine ¼ cup vinegar, ¼ lemon juice, ¼ raw honey, 1 tsp. ginger juice , pinch of cayenne and 1-quart water, or a tea-blend. Drink 3-4 oz. with before or during meals
- Nuts, seeds and seaweed
- Lentil or Chicken Soup with garlic, ginger, turmeric, curry, oregano, thyme

Rest to Recover. Fatigue lowers our immunity and makes us more vulnerable to infection, injury and chronic illness. It slows our recovery. A personal or small group self healing retreat in a low risk area is a great way to create viral protection and recovery rather than being the subject of a forced quarantine. Both are a withdrawal from the outside world, but with a different mindset.

Foundational Immune Nutrition

Research is abundant that the following supplements, herbs, spices, essential oils and remedies significantly decrease the

frequency and severity of viral illness. Your diet should be checked first to see which of the following are most needed. It is advised to work with a certified nutrition consultant, naturopathic or integrative health provider to select the proper combination of nutrients and dosage that fits your age, health status, environmental exposures and health condition.

- Zinc: 30-45 mg, 2 x day
- Vitamin C: 500 mg, 3-5 x day. Best forms are amla (from gooseberries) buffered, liposomal or ester Vit C
- Vitamin D: 2000 -5000 IU/day based upon health status and body weight.
- **Probiotics**: These friendly bacteria, vital for good health, immunity and digestion. They have been shown to decrease the number of upper respiratory infections significantly. 50 billion units of a mixed flora product.
- Essential Fatty Acids: EPA/DHA from fish or algae is essential for our brain, nerves and immune system to work efficiently. Under stress, systems become inflamed. Recommendation: 2-3 grams EPA/DHA per day.
- N-acetylcysteine (NAC) 300 mg, 2-3 x day

For Greater Anti-Viral Protection for Anyone Over 60 or in Poor Health

- Quercetin: a cell protective bioflavonoid. 500-1000 mg/ day
- Vitamin A: 10,000 iu/day
- Selenium: 200 mcg, 2-3 x day
- Liposomal Glutathione: 250 mg, 2 x day
- Melatonin: 2-5 mg before bed

Herbal Support for Affected Body Systems

It is advised to work with a skilled herbalist or naturopathic physician to select the proper blend, dose and duration for you given your age, exposures and health condition.

Immune System

Astragalus

Select one or more of the following: taken 2-4 times per day

- Medicinal mushrooms
 Eleuthero
- Propolis
- LicoriceGarlic

Anti-Viral Herbs

For prevention and treatment of chronic or acute viral infection

- Osha Root
- Lomatium

Scutellaria baicalensis

Oregon Grape

- Andrographis
- Yarrow

Cordyceps

Boneset

Cool Inflammation, Lessen Pain, Regain Vitality

• Turmeric

 Huang Qin (Scutellaria baicalensis)

- Astragalus Rhodiola
- Japanese knotweed
- Kudzu

Respiratory Support

- Licorice Mullein
- Marshmallow Ginger
- Wild cherry
- Lobelia

Lymphatic Support

- Red root
- Cleavers
- Mullein

Essential Oils

Add several drops of one or more into a diffuser, in a bath or rubbed onto the soles of your feet

- Lavender
- Tea tree
- Eucalyptus

Grapefruit

Clove

Frankincense

Lemon Grass

Myrrh

• Thyme

Conclusion

A virus or other pathogen gains a foothold into our cells via a chronically weak or compromised body system. As such, being a health warrior is far better than being a disease worrier. CoVid-19 is in our biome, our world. So, too are trillions of healthy micro-defenders within our gut, cellular and humoral (circulating) immune system. Our best defense is staying away from crowds and toxic environments, and improving out Wellness Practices, which include

- **1.** Eating for Health[™]
- 2. Healthy Lifestyle
- 3. Mindfulness
- 4. Healing Relationships
- 5. Spiritual Practice

Our health is in our hands. It is ours to protect and improve. Let's not lose control of our health freedom or abdicate our responsibility to stay well. Panic feeds pandemics. It weakens our individual and collective body. Listen and follow guidance from sane and reliable sources, including your own inner knowing. To stay abreast of evidence based natural health viral protection, follow blogs and social media posting on BaumanWellness.com and BaumanCollege.org.

REFERENCES AND RESOURCES

- Bauman College: Affordable Nutrition Workbook and Program. Bauman College Press (2019)
- Bauman, E and Marx L, Flavors of Health Cookbook, Bauman College Press (2012)
- Bauman, E and Moorthy, S. Spice for Life: Self-Healing Recipes, Remedies and Research, self-published (2020)
- BourBour F, Mirzaei Dahka S, Gholamalizadeh M, et al. Nutrients in prevention, treatment, and management of viral infections; special focus on Coronavirus [published online ahead of print, 2020 Jul 9]. Arch Physiol Biochem. 2020;1-10. doi:10.1080/1381 3455.2020.1791188
- Buhner, S. https://www.stephenharrodbuhner.com/wp-content/ uploads/2020/03/coronavirus.txt.pdf?fbclid=IwAR1WP 8Dz-7fof au7tgzVUf cHPuodXSiRMjQwxjg2l8roX69emD1-YjZjc
- Centers for Disease Control: https://www.cdc.gov/coronavirus/2019-nCoV/index.html
- Cousens, G, CoVid19 Fact Sheet and Protocol https://mail. google.com/mail/u/0/?tab=wm&ogbl#inbox/FMfcgxw-JWrZSZvCMrgKFXsvVPcVPRrhRDe Flora*, C. Grassi**, L. Carati Attenuation of influenza-like symptomatology and improvement of cell-mediated immunity with long-term N-acetylcysteine treatment, Eur Respir J 1997; 10: 1535–1541 DOI: 10.1183/09031936.97.10071535
- Hendrick, R, Lockdown, https://m.facebook.com/story.php?story fbid=3594278763979372&id=100001918527596
- Kresser, C. Diet and Lifestyle are Driving COVID 19 Severity (blog Ap 28, 2020)

- Thyme • Elderberry





Figwort

Spilanthes

Kresser, C. Post Viral Complication of COVID 19 (Aug 4, 2020)

- Laird, E, Rhodes, J, Kenny RA, Vitamin D and Inflammation: Potential Implications for the Severity of COVID-19, *Irish Medical Journal*, Vol. 113, No. 5, P 81, <u>http://imj.ie/vitamin-d-and-inflammation-potential-implications-for-severity-of-covid-19/</u>, Aust. 11, 2020
- Merzon E, Tworowski D, Gorohovski A, et al. Low plasma 25(OH) vitamin D level is associated with increased risk of COVID-19 infection: an Israeli population-based study [published online ahead of print, 2020 Jul 23]. *FEBS J*. 2020;10.1111/febs.15495. doi:10.1111/febs.15495
- Mitchell F. Vitamin-D and COVID-19: Do deficient risk a poorer outcome? *Lancet Diabetes Endocrinol*. 2020;8(7):570. doi:10.1016/S2213-8587(20)30183-2
- Mokhtari, M.Sc.1, 2, 3, Parvaneh Afsharian, Ph.D.2, Maryam Shahhoseini, Ph.D.2, Seyed Mehdi Kalantar, Ph.D.1, Ashraf Moini, M.D. A Review on Various Uses of N-Acetyl Cysteine, CELL JOURNAL (Yakhteh), Vol 19, No 1, Apr- Jun (Spring) 2017
- Sharkawy, A, On Managing Virphobia. <u>https://www.facebook.</u> <u>com/abdu.sharkawy/posts/2809958409125474</u>
- Spector, M. <u>https://www.newyorker.com/news/daily-comment/</u> the-new-coronavirus-and-preparing-for-the-next-viral-pandemic

- Steinblock, R: <u>https://mindfulfamilymedicine.com/coronavirus-</u> what-you-need-to-know-how-to-stay-safe/
- Tiouvanziam, R, Conrad, C, Bottiglieri, T, Herzenberg, L, et al. (2006). <u>High-dose oral N-acetylcysteine, a glutathione prodrug,</u> <u>modulates inflammation in cystic fibrosis.</u> *Proceedings of the National Academy of Sciences of the United States of America*, 103(12):4628-33.
- Verdoia M, De Luca G. Potential role of hypovitaminosis D and Vitamin D supplementation during COVID-19 pandemic [published online ahead of print, 2020 Jul 31]. *QJM*. 2020;hcaa234. doi:10.1093/qjmed/hcaa234
- World Health Organization: <u>https://www.who.int/emergencies/</u> <u>diseases/novel-coronavirus-2019/events-as-they-happen</u>
- Yance, D. *Targeting CoVid-19 Utilizing Unitive Medicine Botanical, Nutritional, Dietary and Lifestyle Approaches.* SW Conference on Botanical Medicine, March 28, 22020
- Yance, D. New information on Coronavirus Transmission and Susceptibility, July 8, 2020. <u>https://www.donnieyance.com/new-in-</u> formation-on-coronavirus-transmission-and-susceptibility/



CoVid-19 Recovery and Health Building Program

Below are suggestions with a top-down preference if you are dealing with a CoVid-19 or variant infection or adverse reaction to a vaccine. It is important to eat well during your recovery albeit you may experience diminished taste, smell and appetite. Chicken or miso soup with herbs, garlic and greens, mushroom broth, smoothies and guacamole and pesto are suggested. More tea, less coffee, sugar and alcohol are keys to a speedy and durable recovery. Stay hydrated. Doses and combinations will vary depending on your health status, medications, progress, and challenges. These suggestions are not a replacement for capable medical care. Integrating allopathic and natural medicine is advised.

Multivitamin/Mineral

Important if you are not eating well or often. Take one caps with each meal. Good brands include *Source Naturals, Host Defense, Garden of Eden, New Chapter,* and *Primal Multivitamin.* A mixed green powder is a suitable replacement. **Comprehensive micronutrient and phytonutrients in good blend.**

Activated Quercetin with Bromelain

1000 mg, 2-3 x day while symptomatic. Favorite brand is *Source Naturals; Solaray, NOW.* Lowers pain, chills, cyto-kine storm

Buffered Vitamin C

The role of vitamin C in supporting the immune system has long been known. Take 1,000 mg in fresh citrus, coconut, pomegranate or pineapple juice, every 3 hours till symptoms recede. Limits viral replication. Flushes viral debris out of the body.

Vitamin D3

Adequate vitamin D status is critical for optimal immune function and this cannot be achieved without supplementation during the winter months. Studies have shown that people with vitamin D deficiency are 11 times more likely to get a cold or flu, while supplementing with vitamin D can reduce colds and flu by 42%. 5,000 IU, 2 x day if fighting infection. **Protects barrier systems to limit penetration into internal organs.**

Zinc Citrate

found in seafood — especially oysters — red meat, and pumpkin seeds are the best food sources. Take 30 mg, 2 x per day. Zinc lozenges also may be helpful. **Restore taste,** smell and appetite. Depleted by stress and immune response.

Probiotics

A healthy gut flora supports a healthy gut, a major barrier against pathogens and integral to the immune system. Look for brands that offer several species of good bacteria and contain at least 5-10 billion organisms per capsule. Lactobacillus plantarum and spore forms of Bacillus are the best for immunity.

Fish Oil (Arctic Cod Liver Oil)

This old-time remedy for good health and robust immunity. Cod liver oil contains the best food source of vitamins A, D and K. 1 Tbsp, 2 x day. **Important for the eyes, liver and nerves.**

Energy Tonics

Use tinctures of ginseng, ashwagandha, ginger and tulsi. Some or all of these. Add turmeric to lower inflammation. Lessens fatigue, tempers and overactive immune response

Food and Plant Antivirals

Garlic, oregano, thyme, olives, green tea, andrographis, astragalus, lomatium. Creates a host environment where viruses neutralized, buffered and flushed out.

Mushroom Extracts such as reishi, maitake, shiitake, turkey tail, and cordyceps

These provide immune-supporting properties. Cooking with medicinal mushrooms like shiitake in soups. **Modulates immune response.**

Sea vegetables

Premier source of iodine, selenium, germanium, and fibers that soothe and heal the gut. Examples are nori, dulse, Kombu, kelp, hiziki. **1 tsp to 1 Tbsp is a wonderful booster to soup, salad, and grains.**

CoVid-19: Stinging Nettle Lectin

PETER D'ADAMO, MARCH 24, 2020

"Out of this nettle – danger – we pluck this flower – safety." — WILLIAM SHAKESPEARE

hen I think of nettles, I remember an observation one of my student classmates at John Bastyr College shared with me that he had learned in an undergraduate botany class. Stinging nettles (Urtica spp.) have fine hairs on the leaves and stems that contain irritating chemicals, which are released when the plant comes in contact with the skin. When a forest is disturbed by fire the first plants that grow in the burnt, broken underbrush are nettles. Nettles are renowned for their stinging ability. In fact Roman soldiers in Northern England used to rub their legs with nettle to cause flushing and ward off the cold northern winds. My friend's botany teacher saw this as a perfect example of *Gaia*, the concept of the Earth as a living organism: The fast-germinating nettles act like barbed wire, preventing animals from rooting around in the disturbed area until it could begin to regenerate itself.

Nettle leaves have a long history as a potherb. They can be sautéed, or par-boiled in salted water, and have a taste between spinach (perhaps with a bit more of an 'iron' taste) and arugula (bit more peppery). The leaves have a long history of use in herbal medicine, where it has been used for osteoarthritis and skin inflammations. Nettle capsules can be used to <u>reduce sneezing and itching in people with hay</u> <u>fever</u>, and this likely constitutes its most frequent modern use.

Nettle root also has medicinal usage, <u>predominantly for</u> <u>benign prostatic hypertrophy</u>, where it is thought that elements in the root reduce symptoms such as frequent urination. It may be because it contains chemicals that affect hormones (including testosterone and estrogen) by <u>inter-</u> <u>acting with sex hormone binding globulin (SHBG)</u>.

The root also possesses what I consider one of the most interesting plant lectins, known as *Urtica Dioica Agglutinin* (UDA). UDA is known in immunology as a superantigen, a lectin that induces cell growth and division (clonal activation). When these lectins induce specific white blood cells to multiply, they are known as *mitogens*. Many plant lectins are mitogens; Poke Weed (*Phytolacca* spp.) and



Jimson Weed (*Datura* spp.) come to mind, but UDA is unique. It activates CD8+ T cells (often called cytotoxic T lymphocytes, or CTLs), which are very important for our immune defense against intracellular pathogens, including viruses and bacteria.

Which brings us this blog. For all intents and purposes, UDA lectin has properties that may make it worthy of consideration as an anti-coronavirus agent. It has been studied and shown to possess <u>antiviral activity against HIV, CMV, RSV,</u> <u>H1N1 and SARS-COV</u>.

Two targets of <u>possible antiviral intervention were identi-</u> <u>fied in the replication cycle of SARS-CoV</u>. The first target is located early in the replication cycle, most probably viral



attachment, and the second target is located at the end of the infectious virus cycle. This study also showed that UDA was a potent and selective inhibitor of SARS-CoV strain Frankfurt-1.

Plant lectins like UDA probably target viral attachment and fusion, and its eventual exit (exocytosis or egress) from the cell. In an article entitled "<u>Ready, Set, Fuse! The Coro-</u> <u>navirus Spike Protein and Acquisition of Fusion Compe-</u> <u>tence</u>" the authors noted that lectins such as UDA do not affect binding of the S-protein to the ACE2 receptor, but rather seem to inhibit viral entry at some undefined later stage.

In a separate study UDA lectin was tested for efficacy in lethal SARS-CoV-infected mice. All virus-infected mice receiving UDA treatments were also significantly protected against weight loss and had effectively reduced lung pathology scores. At day 6 after virus exposure, all groups of mice receiving UDA had much lower lung weights than did the placebo-treated mice, which indicates that their lungs were not filling up with liquids. The authors concluded that UDA inhibited severe *acute respiratory syndrome* (ARDS) associated with coronavirus replication. However, when UDA was exposed to the amino sugar N-acetylglucosamine the UDA lectin did not inhibit the virus infection. <u>UDA was reported to inhibit coronaviruses in vitro with</u> <u>some selectivity</u> in mice. The researchers concluded that UDA was a potent and selective inhibitor of SARS-CoV strain Frankfurt-1. The reduction of IL6 in lungs along with 50% survival of mice in this study was thought to provide evidence to support further investigation of UDA treatment regiments as potential antiviral therapies.

So what's the take home message for the man (and woman) in the street? I think nettle root may have significant benefit as a potential safe, low cost and readily available traditional medicine for CoVid-19. Health authorities should include this traditional medicine in the evaluation panels exploring potentially effective treatments for CoVid-19. Nettle root can obviously be found in its native form and simply lightly cooked and used with the greens as a potherb, or can be purchased as a nutritional supplement from any number of vendors. We would need to insure that the formula was from the root. A sure sign that the supplement contains the root would be a claim that the formula was useful for "prostate health."

As with all medicines, natural or otherwise, please consult with experts who are experienced in their actions, interactions, contraindications and potential side effects before starting this or any other supplement program.

Quercetin: What It Is and Why You Need It

https://www.greenmedinfo.com/blog/quercetin-what-it-and-why-you-need-it?

Find out more about quercetin and how this potent antioxidant flavonoid offers significant therapeutic benefits against a wide range of conditions, from diabetes to DNA damage

<u>Flavonoids</u> are one of nature>s many therapeutic gifts. Widely found in fruits and vegetables, these phenolic substances have <u>antioxidant</u> properties that protect cells from free radical damage.^[1] One of the most well-known and studied flavonoids is quercetin, a flavonol mostly found in onions, berries, citrus fruits, broccoli and grapes.

A potent antioxidant, quercetin boasts of anti-inflammatory, anti-hypertensive, antiobesity and anti-atherosclerotic actions. Since free radicals figure into the development of diseases, quercetin holds promise for benefitting conditions such as high blood pressure, vascular disorders and metabolic syndrome.^[ii] Here is compelling evidence of the health benefits of quercetin.

Potential Anti-Diabetes Aid

The development of <u>Type 2 diabetes</u> has been linked to oxidant stress caused by an unhealthy diet.^[iii] <u>Toona sinensis leaves</u>, which are rich in quercetin, may reduce the risk of diabetes by reducing oxidative stress in the liver.

A topical compound containing substances such as quercetin, ascorbyl palmitate and vitamin D3 was formulated to reduce the oxidative stress contributing to peripheral diabetic neuropathy.^[iv] A preliminary study in 2005 showed that the compound may safely relieve the symptoms of diabetic neuropathy and enhance quality of life.

Quercetin displayed protective effects in the kidneys and liver of obese animal models with Type 2 diabetes.^[v] Together with quinic acid, quercetin also helped ameliorate hyperglycemia, hyperlipidemia and insulin resistance in diabetic rats.^[vi]

Protection From DNA Damage

A 2011 study investigated the potential protective effects of quercetin against DNA damage and oxidative stress induced by methylmercury in animal subjects.^[vii] For over 45 days, animal models were orally treated with methylmercury



and the flavonoid with doses reflecting human exposure. The team then measured DNA damage in liver cells called hepatocytes and peripheral leukocytes (white blood cells).

The results revealed that methylmercury reduced the concentration of glutathione in the body by 17% and caused DNA damage to liver and blood cells. With quercetin, no such effects manifested. "In summary, our results indicate that consumption of quercetin-rich foods may protect mercury-exposed humans against the adverse health effects of the metal," the researchers wrote.^[viii]

What makes this benefit particularly crucial is that the prevention of DNA damage is involved in preventing cancer via dietary compounds. An aqueous horseradish extract and its main flavonoids <u>kaempferol</u> and quercetin, for instance, demonstrated potential for DNA damage protection likely by acting as antimutagens.^[M]

Chemopreventive Properties

Epidemiological studies vouch for the protective effects of phytochemicals against cancer risk. As a ubiquitous flavonoid, quercetin is an ideal candidate to fight cancer due to its antioxidant and antiproliferative actions.^[x]

It is known to modulate a plethora of molecules for multitargeted cancer prevention and therapy. Here are examples of quercetin's chemopreventive abilities:



- Incorporated in liposomes along with resveratrol, quercetin may be valuable in treating inflammation or oxidative stress associated with precancerous or cancerous skin lesions.^[xi]
- Quercetin exhibited a preventive effect on liver cancer in animal models.^[xii] Hepatocellular carcinoma, the most common form of liver cancer, is on the rise in many countries, with an estimated 905,677 new cases globally in 2020.^[xiii]
- Quercetin inhibited tumor growth and enhanced the sensitivity to thermotherapy, indicating a potential treatment option for hepatocellular carcinoma.^[xiv]
- The combination of quercetin and ionizing radiation might be a promising therapy for colon cancer treatment through targeting colon cancer stem-like cells and inhibiting the Notch-1 signaling.^[xv]
- Quercetin suppressed the metastatic ability of lung cancer, with potential therapeutic applications for metastatic non-small cell lung cancer in particular.^[xvi]

Prevention and Treatment of Various Infections

Quercetin may protect against the antibiotic-resistant Streptococcus pneumoniae infection mainly through inhibiting pneumolysin, a pore-forming cytotoxin and a major determinant of virulence.^[xvii] Separate findings previously highlighted quercetin>s therapeutic potential in treating sepsis as well.^[xviii]

The flavonoid derivative *quercetin-36-O-D-glucoside* (Q3G) also showed promising antiviral activity against two distinct species of Ebola, outbreaks of which occur frequently in African countries.^[xix]

Hyaluronic acid, chondroitin sulfate, curcumin and quercetin taken together were also effective in preventing recurrent urinary tract infections in postmenopausal women.^[xx]

Read more about scientific proof of the therapeutic value and significance of quercetin across numerous health issues and conditions in the <u>nearly 600 abstracts with quercetin</u> <u>research</u> found on the <u>GreenMedInfo.com</u> database.

REFERENCES AND RESOURCES

- i. David A et al. <u>"Overviews of Biological Importance of</u> <u>Quercetin: A Bioactive Flavonoid"</u> *Pharmacogn Rev.* 2016 Jul-Dec; 10(20): 84-89.
- ii. David A et al. <u>"Overviews of Biological Importance of</u> <u>Quercetin: A Bioactive Flavonoid"</u> Pharmacogn Rev. 2016 Jul-Dec; 10(20): 84-89.
- iii. Zhang Y et al <u>"Quercetin Isolated from Toona sinensis</u> Leaves Attenuates Hyperglycemia and Protects Hepatocytes in High-Carbohydrate/High-Fat Diet and Alloxan Induced Experimental Diabetic Mice" J Diabetes Res. 2016 ;2016:8492780. Epub 2016 Nov 15.
- iv. Valensi P et al <u>"A multicenter, double-blind, safety study of</u> <u>QR-333 for the treatment of symptomatic diabetic periph-</u> <u>eral neuropathy. A preliminary report"</u> *J Diabetes Complications*. 2005 Sep-Oct;19(5):247-53.
- v. Lai L et al <u>"Protective effects of quercetin and crocin in</u> <u>the kidneys and liver of obese Sprague-Dawley rats with</u> <u>Type 2 diabetes: Effects of quercetin and crocin on T2DM</u> <u>rats</u>" *Hum Exp Toxicol*. 2020 Oct 6:960327120954521.
- vi. Arya A et al. <u>"Synergistic effect of quercetin and quinic acid</u> by alleviating structural degeneration in the liver, kidney and pancreas tissues of STZ-induced diabetic rats: a mechanistic study" Food Chem Toxicol. 2014 Sep ;71:183-96. Epub 2014 Jun 19.
- vii. Barcelos G et al <u>"Protective properties of quercetin against</u> <u>DNA damage and oxidative stress induced by methylmer-</u> <u>cury in rats</u>" Arch Toxicol. 2011 Feb 1. Epub 2011 Feb 1.
- viii. Barcelos G et al <u>"Protective properties of quercetin against</u> <u>DNA damage and oxidative stress induced by methylmer-</u> <u>cury in rats</u>" Arch Toxicol. 2011 Feb 1. Epub 2011 Feb 1.
- ix. *Molecules*. 2014 ;19(3):3160-72. Epub 2014 Mar 14. PMID: <u>24637991 www.greenmedinfo.com/article/aque-ous-horseradish-extract-and-its-main-flavonoids-kaemp-ferol-and-quercetin-h</u>
- x. Priyadarsini R et al <u>"The flavonoid quercetin modulates the</u> <u>hallmark capabilities of hamster buccal pouch tumors"</u> Nutr Cancer. 2011 Feb 2:1. Epub 2011 Feb 2.
- xi. Caddeo C et al <u>"Effect of quercetin and resveratrol co-in-</u> corporated in liposomes against inflammatory/oxidative response associated with skin cancer" Int J Pharm. 2016 Nov 20 ;513(1-2):153-163. Epub 2016 Aug 5.
- xii. Seufi A et al <u>"Preventive effect of the flavonoid, quercetin,</u> on hepatic cancer in rats via oxidant/antioxidant activity: <u>molecular and histological evidences</u> J Exp Clin Cancer Res. 2009 ;28:80. Epub 2009 Jun 11.



- xiii. Medscape January 31, 2021 <u>https://www.medscape.</u> <u>com/answers/197319-39196/what-is-the-global-inci-</u> <u>dence-of-hepatocellular-carcinoma-hcc-worldwide</u>
- xiv. Dai W et al <u>"Quercetin induces apoptosis and enhances</u> <u>5-FU therapeutic efficacy in hepatocellular carcinoma"</u> *Tumour Biol.* 2015 Dec 1. Epub 2015 Dec 1.
- xv. Li Y et al <u>"Quercetin pretreatment enhances the radiosen-sitivity of colon cancer cells by targeting Notch-1 path-way</u>" *Biochem Biophys Res Commun.* 2020 Jan 18. Epub 2020 Jan 18.
- xvi. Chang J et al <u>"Quercetin suppresses the metastatic ability</u> of lung cancer through inhibiting Snail-dependent Akt activation and Snail-independent ADAM9 expression pathways" Biochim Biophys Acta. 2017 10 ;1864(10):1746-1758. Epub 2017 Jun 23.

- xvii. Lv Q et al <u>"Quercetin, a pneumolysin inhibitor, protects</u> <u>mice against Streptococcus pneumoniae infection"</u> *Microb Pathog.* 2020 Mar ;140:103934. Epub 2019 Dec 17.
- xviii. Cui W et al <u>"Quercetin Exerted Protective Effects in a Rat</u> <u>Model of Sepsis via Inhibition of Reactive Oxygen Species</u> (ROS) and Downregulation of High Mobility Group Box 1 (HMGB1) Protein Expression" Med Sci Monit. 2019 Aug 4 ;25:5795-5800. Epub 2019 Aug 4.
- xix. Qiu X et al <u>"Prophylactic efficacy of Quercetin-3-β-O-D-glucoside against Ebola virus infection"</u> Antimicrob Agents Chemother. 2016 Jun 13. Epub 2016 Jun 13.
- xx. Torella M et al <u>"Efficacy of an orally administered combination of hyaluronic acid, chondroitin sulfate, curcumin and quercetin for the prevention of recurrent urinary tract infections in postmenopausal women" Eur J Obstet Gynecol Reprod Biol. 2016 Dec ;207:125-128. Epub 2016 Nov 1.</u>



Weighing the Risk-to-Benefit Ratio of COVID-19 Vaccines

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https://www.donnieyance.com/weighing-the-risk-to-benefit-ratio-of-covid-19-vaccines/

G iven the ongoing discord within the scientific community regarding the short-term and long-term efficacy and safety of the different types of anti-SARS-CoV-2 vaccines, their experimental nature, and the availability of other therapeutic approaches,^[1] such information should be universal and should be provided to every potential vaccine recipient. The safety and tolerance of COVID-19 vaccines must be carefully considered and studied even when the benefits may outweigh the disadvantages.^[2]

Current research indicates that body weight, blood type, vitamin D and zinc status, and additional markers such as selenium are markers for determining your immunity or resistance to COVID. If we are healthy and weigh the markers I just stated, (besides old age) what is our actual risk of a severe or life-threatening COVID infection? If we focus on improving our health through diet, lifestyle, and normalizing the levels of these important nutrients for our immune system health, we could prevent more illnesses.

I believe that people should be informed about additional methods that can reduce their risk of contracting COVID-19. This should be provided for those who choose to forgo the vaccine, as well as those who want the vaccine and are interested in additional ways that they can bolster their resistance. As the pandemic continues, it is clear that the vaccine alone is not a guarantee of full-proof protection against the COVID virus.

What if we created a COVID-19 health report card and based on a score, we could better assess our risk-to-benefit when it comes to vaccinations?

Health Biomarker Risk Assessment:

- Metabolic Health Assessment Body Mass Index (BMI) (optimal range is between 18-25), HGB A1C (optimal range is <5.8), fasting insulin, leptin, c-peptide, lipid profile, C-reactive Protein etc.
- Vitamin D levels both 25 OH (optimal range is >40) and 125 diOH



- 3. Zinc levels (optimal range is 80-130)
- Neutrophil-to-lymphocyte ratio (optimal range is <3:1 ratio) — a drop in lymphocytes and an increase in neutrophils is associated with worsening of COVID-19 and mortality.^[3]
- Fibrinogen (Best if <375) and D-dimer (optimal range is
 <.4)
- 6. Selenium (optimal range is 100-150)
- Blood type blood group A might have a role in increased susceptibility to the COVID-19 infection, the blood group O might be somewhat protective.^[4]

I would also include a history of chronic diseases (and severity), medications, and certain life-style risks such as smoking.

Interpreting the Data on Vaccine Efficacy

There are many lessons to learn from the way studies are conducted and results are presented. When including only *relative risk reduction* (RRR) while omitting *absolute risk reduction* (ARR), reporting bias is introduced, which affects the interpretation of vaccine efficacy.



"Vaccine efficacy is generally reported as a relative risk. It uses the relative risk (RR) - i.e., the ratio of attack rates with and without a vaccine — which is expressed as 1-RR. Ranking by reported efficacy gives relative risk reductions of 95% for the Pfizer-BioNTech, 94% for the Moderna-NIH, 91% for the Gamaleya, 67% for the Johnson and Johnson, and 67% for the AstraZeneca-Oxford vaccines. However, RRR should be seen against the background risk of being infected and becoming ill with COVID-19, which varies between populations and over time. Although the RRR considers only participants who could benefit from the vaccine, the ARR, which is the difference between attack rates with and without a vaccine, considers the whole population. ARRs tend to be ignored because they give a much less impressive effect size than RRRs: 1.3% for the AstraZeneca–Oxford, 1.2% for the Moderna-NIH, 1.2% for the J&J, 0.93% for the Gamaleya, and 0.84% for the Pfizer-BioNTech vaccines."[5]

Unfortunately, comparing vaccines on the basis of currently available trial (interim) data is made even more difficult by disparate study protocols, including primary endpoints such as:

- 1. What is considered a COVID-19 case, and when is this assessed?
- 2. What are the types of placebo, study populations, background risks of COVID-19 during the study, duration of exposure, and different definitions of populations for analyses both within and between studies?
- **3.** What definitions of endpoints and statistical methods for efficacy were used?
- **4.** What are the serum levels of vitamin D, zinc, and selenium in the trial participants?
- What was the Body Mass Index? we know that obese patients pose the highest risk.^[6]

According to a recent systematic review and meta-analysis of 42 studies and 423,117 patients, chronic comorbidities, complications, and demographic variables including acute kidney injury, COPD, diabetes, hypertension, CVD, cancer, increased D-dimer, male gender, older age, current smoker, and obesity are clinical risk factors for a fatal outcome associated with COVID-19.^[7] What about the rest of us?

We are left with the unanswered question as to whether a vaccine with a given efficacy in the study population will have the same efficacy in another population with different levels of COVID-19 background risks. This question is not trivial, because transmission intensity varies between countries and is affected by factors, such as public health interventions and virus variants.^[8]

Concerns about the mRNA Vaccines

The current COVID-19 vaccines use different types of technology, with some being introduced for the first time, and some that have been rushed into testing, bypassing animal experimentation. Recent research into the physiological effects of these agents reveal that they might slowly induce stimulation of myeloid or plasmacytoid dendritic cells, generating an imbalance in the downstream cytokine pathways that play a crucial role in autoimmunity and autoinflammation.^[9]

The mRNA vaccines may actually bind to pattern recognition receptors in endosomes or cytosol, which can in turn activate several pro-inflammatory cascades, including the assembly of inflammasome platforms, the type I interferon (IFN) response and the nuclear translocation of the transcription factor nuclear factor (NF)-kB.^[10] Pathogens may trigger autoimmunity if a part of these epitopes resemble those of similar structures expressed on human cells, as demonstrated in several post-infectious diseases that trigger many of the well-known autoimmune diseases. This process is likely in the context of genetic predisposition, such as in those with the HLA-DQB1 gene,^[11] which is strongly suspected to be the cause of the narcolepsy that occurred in hundreds of children after their vaccination against the novel influenza A (H1N1) virus ("swine flu"), a vaccine that was later discontinued.

This process is known as molecular mimicry. Kanduc and Shoenfeld recently reported frequent similarities between numerous short sequences from the SARS-CoV-2 spike protein, which the virus uses to enter the cell, and human proteins.^[12] The present mRNA vaccines are designed to stimulate a human cell to become a pathogenmanufacturing site in which the cell produces the spike protein, which ultimately triggers the immune system to produce neutralizing antibodies against the spike protein and which may cross-react with one of the selfantigens and trigger an autoimmune disease,^[13] as recently



reported with the AstraZeneca and Johnson & Johnson vaccines. Vaccine-associated autoimmunity is a well-known phenomenon attributed to either the cross-reactivity between antigens and/or the effect of adjuvant.^[14]

In addition to molecular mimicry, mRNA vaccines may give rise to a cascade of immunological events, eventually leading to the aberrant activation of the innate and acquired immune system.^[15] Up-regulation of these immunological pathways is widely considered to be the basis of several immune-mediated diseases, especially in genetically predisposed individuals who have an impaired clearance of nucleic acids.^[16] Another concern, in the case of a switch in the immune system and in people with genetic predisposition is the risk of the continuous production of the spike protein and corresponding antibodies, which could lead to a state of chronic inflammation.^[17]

In these unprecedented times, it is essential to use the skills of critical thinking to arrive at a balanced perspective. According to the Children's Hospital of Philadelphia,^[18] the mRNA vaccines are not expected to have long-term negative effects for a few reasons:

- First, most negative effects occur within 6 weeks of receiving a vaccine, which is why the FDA asked the companies to provide 8 weeks of safety data after the last dose.
- 2. Second, the mRNA in the vaccine breaks down quickly because our cells need a way to stop mRNA from making too many proteins or too much protein.
- **3.** Third, even if for some reason our cells did not break down the vaccine mRNA, the mRNA stops making the protein within about a week, regardless of the body's immune response to the protein.

These observations and assertions add to the case that the mRNA vaccines may be safe, yet there is still much about the long-term effects that we don't know.

Potential Risks Need to be Communicated

Reviewing this data reminds us that there are potential risks associated with the current COVID-19 vaccines. As I said at the beginning of this post, the risks should be communicated to those who are getting the vaccine, and there should be a consent form included so that each individual can make a personal decision weighing the risk-to-benefit ratio. We should also be evaluating the relative risk of severe illness and death from COVID-19 for those who are unvaccinated based on the



previously mentioned biomarker health assessment and especially BMI, blood type, vitamin D and zinc levels in "less vulnerable" populations.

In general, I approach pharmaceuticals with caution and seek out natural alternatives to support my bodies innate healing capacity. This is based in my deeply rooted personal belief system. I am also well aware of the long list of drugs and chemicals that were approved by the FDA and subsequently taken off of the market when risks emerged. The reality is that almost every drug has long-term risks, even something as common as antibiotics. Many antibiotics, especially the fluoroquinolone class of antibiotics (such as Cipro), cause tendon weakness and ruptures. This was not known when the drugs were approved. Fluoroquinolones destroy collagen and connective tissue and cause DNA damage and mitochondrial disorder in tendon cells. ^[19] All antibiotics damage the gut microbiome and increase risk for secondary infections such as yeast infections, and they reduce the benefits of immunotherapy, which is an important treatment for many cancers (antibiotics cause dysbiosis or loss of microbial diversity and have been associated with a poor treatment response to immune checkpoint inhibitors).^{[20], [21]} The cumulative intake of antibiotics is associated with significantly increased risk for several cancers, including breast^{[22], [23]} and colon cancer. ^{[24], [25]} Even more recently, antibiotic administration was found to be associated with reduced efficacy of neoadjuvant therapy and poor prognosis in breast cancer patients. Despite the evidence, potential risks are rarely shared when prescribing an antibiotic.^[26]

Given the valid concerns on well-recognized short-term and long-term safety issues — such as *antibody-dependent*

enhancement (ADE) and other processes like molecular mimicry and potential genomic transformation, the experimental nature of the vaccination process, and the limited short-term follow-up in the main trials — obtaining informed consent that discloses the risks before deciding on any vaccine is reasonable and appropriate.

Myocarditis Risk with the COVID-19 Vaccine in Adolescents

Researchers that relied heavily on the *Vaccine Adverse Event Reporting System* (VAERS) data to characterize myocarditis risk with the COVID-19 vaccine in adolescents, particularly young boys, revealed in a new report by Tracy Høeg, MD, PhD, of the University of California Davis and colleagues, that rates of "cardiac adverse events" after the second vaccine dose were higher than previous CDC estimates. This was 162 per million among boys ages 12 to 15 and 94 per million among boys ages 16 to 17. (Rates were much lower for girls, at about 13 per million for each age group.)

The authors also concluded that the risk of hospitalization for cardiac adverse events following vaccination is higher than the risk of being hospitalized with COVID for healthy boys in both age groups.^[27]

Antibody Protection and Booster Shots

A decline in antibody levels against COVID-19 among some people who got vaccinated late last year is being cited as part of the scientific case for why millions of Americans need booster shots. But in reality, that basis is theoretical and not based on concrete evidence. There is considerable uncertainty about what detectable antibodies really mean when it comes to protection. And a lack of standardization among the commercially available tests for antibodies makes it even harder to decipher the results.^[28]

Antibody tests only give one view into the body's collection of defenses against the coronavirus. In fact, it's just a subset of antibodies, made in response to the virus or a shot of the vaccine, that neutralize the spike protein on the virus. The spike protein is what enables the coronavirus to break into cells and replicate. "We have a mix of antibodies. Some of them are very good and protective. Some are not as protective," and each person will have their own mix of these different types of antibodies, says Ali Ellebedy, an immunologist at Washington University School of Medicine in St. Louis who's studying the antibody response to the coronavirus.^[29]

Don't forget the immune system is more than just antibodies, so even with low detectable levels in your blood, you're not defenseless. "Antibody tests — it's really probing just one part of your immune system," says Elitza Theel, who directs the Infectious Diseases Serology Laboratory at the Mayo Clinic.

Your immune system really kicks into action if your body encounters the coronavirus. At that point, it generates new antibodies to block the virus and taps another line of defense — called T cells — which clear out the infected cells that have been converted into factories where the virus can multiply.^[30]

As we deal with the delta variant, we may soon have to take on the apparent vaccine resistant lambda variant. ^[31] In addition, the WHO is now monitoring yet another new coronavirus variant called "mu," which it says could potentially also evade immunity provided by a vaccine or previous coronavirus infection.^[32]

Unfortunately, the current pandemic isn't close to being over. Therefore, there has never been a more critical and urgent time to optimize our health and immune systems, which could be our strongest weapon against illness. As I said before, it is essential to use the skills of critical thinking to arrive at a balanced perspective. The mRNA vaccines are not expected to have long-term negative effects, but people should be aware of them before getting one. Each person, depending on their vulnerability health-wise, lifestyle habits and levels of exposure, needs to weigh the pros and cons of a vaccine and make educated decisions before getting one. Information by the Physicians for Informed Consent comparing the efficacy and risk of COVID-19 vaccines versus the risk of COVID-19 can be obtained at https://physiciansforinformedconsent.org/COVID-19-vaccines/



REFERENCES AND RESOURCES

- 1. Dagan N, Barda N, Kepten E, et al. BNT162b2 mRNA Covid-19 vaccine in a nationwide mass vaccination setting. *N Engl J Med.* 2021;384(15):1412-1423. doi:10.1056/NEJMoa2101765
- 2. Novak N, Tordesillas L, Cabanillas B. Adverse rare events to vaccines for COVID-19: From hypersensitivity reactions to thrombosis and thrombocytopenia [published online ahead of print, 2021 Jul 12]. *Int Rev Immunol*. 2021;1-10. doi:10.108 0/08830185.2021.1939696
- 3. Liu Y. Du X, Chen J et al. Neutrophil-to-lymphocyte ratio as an independent risk factor for mortality in hospitalized patients with COVID-19, *Journal of Infection (2020) 81(1) e6e12*, DOI: 10.1016/j.jinf.2020.04.002
- Göker H, Aladağ Karakulak E, Demiroğlu H, Ayaz Ceylan ÇM, Büyükaşik Y, Inkaya AÇ, Aksu S, Sayinalp N, Haznedaroğlu IC, Uzun Ö, Akova M, Özcebe OI, Ünal S. The effects of blood group types on the risk of COVID-19 infection and its clinical outcome. *Turk J Med Sci.* 2020 Jun 23;50(4):679-683. doi: 10.3906/sag-2005-395. PMID: 32496734; PMCID: PMC7379446.
- 5. Brown RB. Outcome reporting bias in COVID-19 mRNA vaccine clinical trials. *Medicina (Kaunas)* 2021;57:199.
- Mason KE, Maudsley G, McHale P, Pennington A, Day J, Barr B. Age-Adjusted Associations Between Comorbidity and Outcomes of COVID-19: A Review of the Evidence From the Early Stages of the Pandemic. *Front Public Health.* 2021 Aug 6;9:584182. doi: 10.3389/fpubh.2021.584182. PMID: 34422736; PMCID: PMC8377370
- 7. Dessie ZG, Zewotir T. Mortality-related risk factors of COVID-19: a systematic review and meta-analysis of 42 studies and 423,117 patients. *BMC Infect Dis.* 2021 Aug 21;21(1):855. doi: 10.1186/s12879-021-06536-3. PMID: 34418980.
- 8. Olliaro P, Torreele E, Vaillant M. COVID-19 vaccine efficacy and effectiveness-the elephant (not) in the room. *Lancet Microbe*. 2021;2(7):e279-e280. doi:10.1016/S2666-5247(21)00069-0
- Talotta R. Do COVID-19 RNA-based vaccines put at risk of immune-mediated diseases? In reply to "potential antigenic cross-reactivity between SARS-CoV-2 and human tissue with a possible link to an increase in autoimmune diseases". *Clin Immunol.* 2021;224:108665. doi:10.1016/j.clim.2021.108665
- Reikine S, Nguyen J.B, Modis Y. Pattern Recognition and Signaling Mechanisms of RIG-I and MDA5. *Front. Immunol.* 2014;5 doi: 10.3389/fimmu.2014.00342. 342-undefined
- 11. Khamsi R. Rogue antibodies could be driving severe COVID-19. *Nature.* 2021;590(7844):29-31. doi:10.1038/ d41586-021-00149-1
- 12. Kanduc D, Shoenfeld Y. Molecular mimicry between SARS-CoV-2 spike glycoprotein and mammalian proteomes: impli-

cations for the vaccine. *Immunol Res.* 2020;68(5):310-313. doi:10.1007/s12026-020-09152-6

- 13. Vojdani A, Kharrazian D. Potential antigenic cross-reactivity between SARS-CoV-2 and human tissue with a possible link to an increase in autoimmune diseases. *Clin Immunol.* 2020;217:108480. doi:10.1016/j.clim.2020.108480
- 14. Talotta R. Do COVID-19 RNA-based vaccines put at risk of immune-mediated diseases? In reply to "potential antigenic cross-reactivity between SARS-CoV-2 and human tissue with a possible link to an increase in autoimmune diseases". *Clin Immunol.* 2021;224:108665. doi:10.1016/j.clim.2021.108665
- 15. Vojdani A, Kharrazian D. Potential antigenic cross-reactivity between SARS-CoV-2 and human tissue with a possible link to an increase in autoimmune diseases. *Clin Immunol.* 2020;217:108480. doi:10.1016/j.clim.2020.108480
- Pelka K, Shibata T, Miyake K, Latz E. Nucleic acid-sensing TLRs and autoimmunity: novel insights from structural and cell biology. *Immunol Rev.* 2016;269(1):60-75. doi:10.1111/ imr.12375
- Mazraani M, Barbari A. Anti-Coronavirus Disease 2019 Vaccines: Need for Informed Consent. *Exp Clin Transplant*. 2021 Aug;19(8):753-762. doi: 10.6002/ect.2021.0235. PMID: 34407747
- Questions and Answers about COVID-19 Vaccines https:// www.chop.edu/centers-programs/vaccine-education-center/ making-vaccines/prevent-covid, July 21 2021
- Judith Sendzik, Mehdi Shakibaei, Monika Schäfer-Korting, Ralf Stahlmann, Fluoroquinolones cause changes in extracellular matrix, signalling proteins, metalloproteinases and caspase-3 in cultured human tendon cells, *Toxicology*, Volume 212, Issue 1, 2005, Pages 24-36, ISSN 0300-483X, https://doi. org/10.1016/j.tox.2005.04.002
- Naqash AR, Kihn-Alarcón AJ, Stavraka C, Kerrigan K, Maleki Vareki S, Pinato DJ, Puri S. The role of gut microbiome in modulating response to immune checkpoint inhibitor therapy in cancer. *Ann Transl Med.* 2021 Jun;9(12):1034. doi: 10.21037/atm-20-6427. PMID: 34277834; PMCID: PMC8267312
- 21. Huang XZ, Gao P, Song YX, Xu Y, Sun JX, Chen XW, Zhao JH, Wang ZN., Antibiotic use and the efficacy of immune checkpoint inhibitors in cancer patients: a pooled analysis of 2740 cancer patients. *Oncoimmunology*. 2019; 8(12):e1665973.
- 22. Velicer CM, Heckbert SR, Lampe JW, Potter JD, Robertson CA, Taplin SH. Antibiotic use in relation to risk of breast cancer. *JAMA*. 2004;291:827-835.
- 23. Johanna Simin, Rulla M. Tamimi, Lars Engstrand, Steven Callens, Nele Brusselaers, Antibiotic use and the risk of breast cancer: A systematic review and dose-response meta-analysis, *Pharmacological Research*, Volume 160,

2020,105072, ISSN 1043-6618, https://doi.org/10.1016/j. phrs.2020.105072.

- 24. Qu G, Sun C, Sharma M, Uy JP, Song EJ, Bhan C, Shu L. Is antibiotics use really associated with increased risk of colorectal cancer? An updated systematic review and meta-analysis of observational studies. *Int J Colorectal Dis.* 2020 Aug;35(8):1397-1412. doi: 10.1007/s00384-020-03658-z. Epub 2020 Jun 6. PMID: 32504337
- Cao Y, Wu K, Mehta R, Drew DA, Song M, Lochhead P, Nguyen LH, Izard J, Fuchs CS, Garrett WS, Huttenhower C, Ogino S, Giovannucci EL, Chan AT. Long-term use of antibiotics and risk of colorectal adenoma. *Gut.* 2018 Apr;67(4):672-678. doi: 10.1136/gutjnl-2016-313413. Epub 2017 Apr 4. PMID: 28377387; PMCID: PMC5628103
- 26. Zhang X, Yu L, Shi J, Li S, Yang S, Gao W, Yang S, Cheng M, Wang H, Guo Z, Geng C. Antibiotics modulate neoadjuvant therapy efficiency in patients with breast cancer: a pilot analysis. *Sci Rep.* 2021 Jul 7;11(1):14024. doi: 10.1038/s41598-021-93428-w. PMID: 34234229; PMCID: PMC8263554
- 27. Tracy Beth Høeg MD, PhD1; Allison Krug, MPH2; Josh Stevenson3; John Mandrola, MDSARS-CoV-2 mRNA Vaccination-Associated Myocarditis in Children Ages 12-17: A Stratified National Database Analysis, medRxiv preprint doi: https:// doi.org/10.1101/2021.08.30.21262866; this version posted

September 8, 2021; *Medscape* article https://www.medpagetoday.com/special-reports/exclusives/94530?xid=nl_covidupdate_2021-09-16&eun=g1065123d0r&utm_source=Sailthru&, 09/16/2021

- https://publichealth.jhu.edu/2020/the-potential-and-limits-of-antibody-testing, The Potential — and Limits — of Antibody Testing retrieved 09/07/2021
- 29. https://todayheadline.co/covid-antibody-tests-cant-measureyour-immunity-not-yet-shots-health-news-npr/, retrieved 09/08/2021
- https://www.npr.org/sections/health-shots/2021/08/28/ 1031287076/antibody-tests-should-not-be-your-go-to-forchecking-covid-immunity retrieved 02/08/2021
- 31. Izumi Kimura, Yusuke Kosugi, Jiaqi Wu, Daichi Yamasoba, E rika P Butlertanaka, Yuri L Tanaka, Yafei Liu, Kotaro Shirakawa, Yasuhiro Kazuma, Ryosuke Nomura, Yoshihito Horisawa, Kenzo Tokunaga, Akifumi Takaori-Kondo, Hisashi Arase,-The Genotype to Phenotype Japan (G2P-Japan) Consortium, Akatsuki Saito, So Nakagawa, Kei Sato, SARS-CoV-2 Lambda variant exhibits higher infectivity and immune resistance, bioRxiv 2021.07.28.454085; doi: https://doi. org/10.1101/2021.07.28.454085
- 32. https://www.cnbc.com/2021/09/01/who-says-it-is-monitoring-a-new-covid-variant-called-mu.html, retrieved 9/02/2021

Introduction to *Eating for Health*™ Recipes

"When diet is wrong, medicine is of no use. When diet is right, medicine is of no need." — AYURVEDIC PROVERB

We must eat as if our life and well-being depend upon it, because it does. Weathering the storm of change is demanding work and requires optimal nutrition for us to not be swept away in apathy, illness, and despair.

Our immune system permeates our entire body, from head to toe, from our skin, nose, lungs, gut, organs, lymph, and blood. When under situational or immune stress, our need for all our nutrients increases. Our body must up-regulate protective defenses, support detoxification, and balance our sensitive nervous system which is noticing signals from within and around us.

One of the adverse effects of the pandemic is unwanted weight gain, mood disorder, and restimulated post-traumatic stress. While vaccines provide a measure of protection, it is provocative by nature, increasing inflammatory cytokines. If one experiences a mild, moderate, or severe infection, the natural response is a fever, which serves a protective function, as it is an expression of an up-regulated immune system, working to oxidize threatening microbes. To calm and balance our immune system, we need to call on the mother of all healers, fresh, unprocessed, local food, gathered and prepared with love.

Eating for Health[™] encourages mindful, free choice. When someone is going through a health challenge, their food instincts change. Foods that used to taste good, no longer do. A person who is over heated will want and need cooling foods, such as fresh fruits and uncooked vegetables. A person who is cold and damp, will crave warming foods such as a savory soup. At times, a short fast or modified fast is appropriate, where teas, juices, and broths are the most digestible and nourishing foods. When a person is feeling weak, depressed, and craving sugar, that is when eating quality protein such as chicken or miso soup, is medicine for them. I have found that working with the healthy desires of a friend, client or family member is far more effective than categorically telling them what to do. We aim to empower people to make health decisions, especially when they are in an altered health state. This does not include enabling people to go to excess eating refined foods, alcohol, and what we call "nutrition bandits" which rob the body and mind of the nutrient density one

needs to stay strong or regain balance and vitality after suffering through a healing crisis.

Eating for HealthTM, with diverse, intuitive, mindful, local, seasonal foods, complements allopathic medicine and often mitigates side effects. Eating for HealthTM can contain most if not all the over 100 nutrients our body and mind need to be well. Dietary supplements are not a replacement for plant-based, whole food eating. The various nutrients mentioned in CoVid Protection and Recovery, such as amino acids, fatty acids, vitamin, minerals, and phytonutrients originate in food, not in lab-made supplements. Supplements are a valuable adjunct to natural and pharmaceutical medicine, and as such are best chosen under the guidance of a skilled health professional.

The most exciting research I have seen in the past decade is on the power of phytonutrients to support resilience and promote recovery by providing alkaloids that signal our genes on how to express toward wellness and to curb inflammation. The message I draw from this is that we are of the Earth and need Earth elements and organisms to stay grounded and well. Plants have remarkable power to absorb and transmute toxins in our environment. Plants adapt to climate change, pathogenic microbes, and industrial toxicity to generate protective phytonutrients to survive and even thrive. The further from the Earth we are as a species, relying on biotechnology, rather than on regenerative agriculture and biodynamic gardening, the more vulnerable we will be to viruses, variants, and unintended vaccine effects. Eating for Health™ strengthens the host, so it can quickly respond with a dazzling array of protective responses, which do not deplete the organism in doing so.

Herbs and spices are our most dependable natural allies. They are a key component of healing foods, imparting taste, texture, aroma, and nutrition. These plants, originally found in the wilds, and now cultivated for worldwide consumption, contain the most concentrated amounts of vitamins, minerals, and protective and restorative phytonutrient compounds of all the foods known to man. Spices have more nutrient density by weight than meats, dairy, grains, legumes, nuts, seeds, vegetables, or fruits. Spices enable us to optimally digest and assimilate our daily foods, which is especially important to an aging or ailing person or population.



For those who did not grow up in a household with traditional homemade food, spices may appear to be exotic, and taste strong, even off-putting. Pungent spices are often savory, bitter, and astringent. These, tastes are not common in standard bland, one-taste-fits-all, commercial cuisine that is familiar to an unseasoned palate. Herbs and spices, when effectively use by a skillful chef, give simple food a remarkable aroma, taste and wow factor. Spices provide the eater with a synergistic effect of hundreds, and in some cases thousands of phytonutrients, which gives the plants and the dishes and beverages that contain them, their bright color, complex flavor, and powerful medicinal effect.

Ethnic cooking from every part of the globe feature locally grown herbs and spices to give their food a distinctive aroma and flavor profile. Sadly, modern American cuisine is one of the least spice-centric of all world cuisine. Burgers and fries, meat and potatoes, cereal, cookies, milk, ice cream, diet soda and energy drinks, typically lack aromatic herbs and savory spices. Salt, pepper, fat and sugar predominate in conventional restaurant or processed, prepared food, rather than green tea, ginger, garlic, chili, saffron, cumin, oregano, and thyme that liven up Asian, Middle Eastern and Latin American dishes.

Cornell University researchers examined 4,500 recipes from one hundred cookbooks. They found that 93% contained at least one spice, with the average amount of spices per dish to be four. That average is a minimum for the healing cuisines of India, Thailand, China, European and the Mediterranean countries. It is the combination of fresh, whole food, plus distinctive local herbs and spices that define the elegance and signature of these beloved international cuisines.

I have organized these recipes around fresh or dried spices, which can be grated, ground, or made into tea or broth. As you follow these recipes, you are connecting to ancestors who loved to prepare delicious foods for their families. There is power in sourcing, shopping, preparing, and eating well spiced, well-grown, well-loved food to create well-being.

Learn to use spices to:

- blend in new taste sensations
- impart layers of flavor, such as sweet, salty, savory, sour, and hot

- serve as natural tenderizer for meats and gluten-free grains
- add body and texture to dishes, acting as thickeners and binders for sauces
- color a dish, making it a feast for the eyes
- promote a robust digestive process
- improve liver detoxification, immune function, and tissue healing

When herbs and spices are added to fresh, whole foods they enhance the benefit that contributes to strengthening all body systems. They cool inflammation, balance sensitive neuro-metabolic-hormone immune signals, build cellular resiliency, and slow the onset of premature aging and illness. Herbs and spices when used sensibly support modern medicine to manage and, often over time, reverse disease. This is the most exciting research we are witnessing today in the field of nutrition and integrative medicine. Learning how to cook is crucial to holding a family together and building their health. Knowing how and when to use flavorful herbs and spices, not only protects your family, but wards off infection and illness that could have wiped out a family, a tribe, or a whole population.

The current pandemic is bringing us to a crossroad. Which way will we turn to build health? Will we listen to the wisdom of our elders to come together and care for Mother Earth and all our relations, or damage the Earth, pollute our water and food, and hope that medicine and technology will protect us. To me the way is clearly to wake up now and return to our roots which begins with *Eating for Health™ and Resilience*.

The recipes that follow have been selected from the *Flavors* of *Health Cookbook* (Bauman and Marx, 2012) and *Spice for Life: Self-Healing Research, Recipes and Remedies* (Bauman and Moorthy, 2019). These remarkable books are available at <u>baumanwellness.com</u>. I invite you to try many of the recipes and remedies that follow. When you eat to live, you gain power that will enable you to navigate this storm and others that surely will come.

Bon Appetit!





Turmeric Spice Blends

Madras Curry Powder

In traditional Indian cuisine the concept of curry powder does not exist. It was a term made popular by the colonial empire and anglicized to suit the Anglo Indian palate. It became popular in the British Raj where a mix of spices was used. Later curry became very popular in Britain and in other parts of the western world. What makes the madras curry powder different is the inclusion of mustard seeds and curry leaves. Here is a great recipe for curry powder.

2. Remove from heat and allow to cool.

grinder to desired coarseness.

1. Dry roast all the ingredients, except salt and turmeric, in a

3. When cooled, add turmeric and salt and process in a spice

4. Stays fresh for 6 months if you store in a sealed container.

saucepan on a low heat until golden and fragrant.

YIELD: 1 CUP POWDER (Use 1/2 teaspoon per serving or as suggested in recipes.)

INGREDIENTS

METHOD

5. Use for curries.

- 2 tablespoons coriander seeds
- 1 tablespoon cumin seeds
- 1 teaspoon fenugreek seeds
- 4 dried red chilies
- 1/2 teaspoon fennel seeds
- 1 teaspoon mustard seeds
- 1 teaspoon ground black pepper
- 1 bay leaf
- Seeds from 4 cardamom pods
- 4 whole cloves
- 1-inch (2.5 cm) cinnamon stick
- 2 teaspoons dried curry leaves
- 1/2 teaspoon sea salt
- ¹/₂ teaspoons ground turmeric

SOURCE: Pramila Murthy

Sambhar Powder

Sambhar is delicious with vegetables and rice. Please explore with any vegetables and dal combinations from Brussels sprouts to okra, spinach, Swiss chard, potatoes, onions, green beans and carrots. You can cut this recipe in half, depending on your need for the Sambhar curry spice.

YIELD: 1-11/2 CUP

INGREDIENTS

- 1 cup dried red chilies
- 3/4 cup coriander seeds
- $\frac{1}{2}$ teaspoon fenugreek seeds
- 1 teaspoon cumin seeds
- ¹/₂ teaspoon ground pepper, optional
- 1/2 teaspoon asafetida
- ¹/₄ cup red gram (pigeon peas)

SOURCE: Pramila Murthy

METHOD

- 1. Roast all ingredients to a light golden brown until fragrant.
- **2.** Cool and grind into a smooth powder.
- 3. Store in a glass jar at room temperature.

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Tandoori Masala

Tandoori chicken is a dish Westerners think of when Indian food is mentioned. The smoky flavor of the tandoori meat or fish comes from the clay oven in which it is cooked, the slightly sour flavor from the spicing and yogurt marmalade. You can use this spice mixture for food cooked in the oven or over a grill.

YIELD: 1/3 CUP POWDER (Use as indicated in tandoori recipes.)

INGREDIENTS

- 1 teaspoon black pepper
- 2 teaspoons coriander seeds

2 teaspoons cumin seeds

- 1 teaspoon fennel seeds 2 b
- ³/₄-inch (2 cm) cinnamon stick
- 13-15 green cardamom pods
- 3 black cardamom pods
- 5-6 whole cloves

- 1 star anise
- 2 blades mace
- 2 pieces dried ginger 6-8 whole dried red chilies
- 1 teaspoon coarse salt

METHOD

- **1.** Place all the ingredients in a sauté pan and dry roast until fragrant. Do not allow to burn.
- 2. Cool spices and place in a blender or spice grinder. Process until finely ground and pour into a glass jar.
- **3.** Mark the jar with the date it was made and store in your pantry.
- 4. Retains optimum flavor for six months.

SOURCE: Recipe modified from Rimli Dey https://youtu.be/ITiAzfTBdCQ







Golden Milk

I (*SM*) grew up drinking this recipe with cow's milk, turmeric and black pepper. I have modified my grandmother's recipe to add cinnamon (both stick and powdered).

SERVES 1

INGREDIENTS

1 cup organic coconut milk

- 1 cinnamon stick
- 1 teaspoon ground turmeric
- 1/4 teaspoon ground black pepper

10-12 strands of saffron

¹/₂ teaspoon cinnamon powder to sprinkle

METHOD

- 1. Heat coconut milk in a pan with the cinnamon stick.
- 2. Add the turmeric, pepper and saffron strands.
- 3. Pour the warmed golden milk into a mug.
- **4.** Sprinkle with cinnamon powder and enjoy as a bedtime drink.

NOTE: You can also try the above recipe with goat or cow's milk if you are not lactose intolerant. We recommend organic cow's milk to avoid growth hormone-injected cow's milk.

Savory Cleansing Smoothie

This is my "go to" recipe to rehydrate after a workout. The fresh turmeric adds a rich savory taste.

SERVES 1

INGREDIENTS

- 1 medium apple
- 1/2 cup berries
- ¹/₂ cup celery
- 1/2 cup leafy greens
- 1-inch (2.5 cm) fresh ginger
- 1-inch (2.5 cm) fresh turmeric
- 2 tablespoons flax seeds
- 1 scoop protein powder
- 6 oz. kefir
- 3-6 oz. water or green tea

METHOD

- 1. Wash the apple, berries, celery and greens and roughly chop.
- 2. Peel the skin of the fresh ginger and turmeric and cut into smaller pieces.
- 3. In a blender, place a few ice cubes (optional) at the bottom, add all the ingredients and blend until smooth.







Turmeric Entrees

Brussels Sprouts Sambhar

A South Indian inspired creation, Sambhar is a staple for the region. You can substitute almost any vegetable to suit your tastes.

SERVES 4

INGREDIENTS

- 1 cup toor dal (split pigeon peas)
- 1 tablespoon ground turmeric
- 1 tablespoon tamarind, fresh or concentrate
- 4 cups Brussels sprouts, sliced in half
- 2 tablespoons ghee or extra-virgin coconut oil
- 1 teaspoon mustard seeds
- 1-2 tablespoons shredded coconut, grated fresh or dried (unsweetened)
- 1-2 green chilies*
- A handful curry leaves
- 1 pinch asafetida (optional)
- 1-2 tablespoons sambhar powder, depending on heat tolerance Sea salt to taste

METHOD

- 1. Soak the toor dal (peas) for 3-4 hours. Rinse with fresh filtered water. Boil in 3-4 cups of water with the turmeric powder until soft. Add water, if it becomes too dry. Drain any excess water and set aside.
- 2. Soak the fresh tamarind in hot water for 10 minutes. If fresh is in season, otherwise use concentrate.
- 3. In a saucepan, steam the Brussels sprouts until bright green.
- 4. In a large sauté pan, gently heat the ghee or coconut oil until melted, add mustard seeds, chilies, curry leaves and asafetida. Stir to combine and heat until the spices release their scent (a few minutes).
- 5. Stir in the steamed vegetables and then add the dal.
- **6.** Add the sambar powder and the soaked and drained fresh tamarind, or concentrate, and salt. Cook for 2-3 minutes to combine flavors.
- 7. Remove curry leaves. Sprinkle shredded coconut on top before serving.
- 8. Serve with quinoa, brown rice or millet and a side of green beans.

NOTE: *If you can't find Indian chilies in your local market, you can use ½ Anaheim or 1-2 Thai chilies depending on your heat level tolerance.



Chicken Tikka Masala

Chicken Tikka is seasoned chicken pieces cooked in a tandoor oven over high heat.

SERVES 4

INGREDIENTS

1 teaspoon Kashmiri red chili powder Salt to taste	1 tablespoon ginger garlic paste (equal parts garlic and ginger with salt)	2 tablespoons butter 1 onion, thinly sliced
Juice of ½ lemon	2-3 tablespoons tandoori masala (see page 78)	2 tablespoons mint, minced
1 pound boneless chicken, cut into	1 teaspoon ground turmeric	
small pieces	1 teaspoon kasuri methi (dried fenugreek powder)	
4 tablespoons yogurt	1 teaspoon ground black pepper	

METHOD

- 1. Place Kashmiri red chili powder, salt and lemon juice in a large bowl. Add chicken, stir to coat pieces, cover and set aside for 30 minutes.
- 2. In a second bowl mix the yogurt, ginger garlic paste, tandoori masala mix, turmeric, kasuri methi, and black pepper. Add the chicken, cover and set aside again for 30 minutes.
- **3.** You have two options for cooking. First, on the stove, using a griddle pan. Brush the grill with butter. Cook until browned. Flip and cook the reverse side.

- **4.** The second method is in the oven if you don't have a griddle.
- **5.** Preheat oven to 450°F (232°C). Arrange on a parchment lined baking sheet.
- Bake the chicken for about 10 minutes, on one side. Flip and bake another 10-15 minutes. Broil the last 2 minutes for a little more color, being careful not to burn.
- **7.** Serve the cooked pieces on a platter. Garnish with onions and fresh mint. Serve with mint chutney.

SOURCE: Recipe modified from Sanjeev Kapur Khazana: https://youtu.be/uxJIXHH-Wys

Delicious Daily Dal (Moong Dal)

A North Indian inspiration will go well with cauliflower curry and quinoa. You can substitute almost any dark leafy greens you can find.

SERVES 4

INGREDIENTS

- 1 cup moong dal (yellow lentils)
- Filtered water for soaking and cooking
- 1 tablespoon turmeric powder
- 3 cups spinach (or Swiss chard or kale), chopped
- 2 tablespoons extra-virgin coconut oil
- 1 teaspoon cumin seeds
- 1 teaspoon cayenne pepper
- I pinch asafetida
- Sea salt to taste

METHOD

- 1. Soak the dal (lentils) for 3 hours in a bowl of filtered water. Then cook with filtered water and turmeric. This is a relatively soft dal and cooks fast.
- 2. Steam or sauté the spinach or greens of your choice.
- 3. In a large sauté pan, heat the coconut oil on low and add the cumin seeds first, then the dal and the cooked greens.
- 4. Add the cayenne pepper, asafetida and salt last.
- 5. Taste and adjust seasonings.

Curried Cauliflower (Gobhi)

This is my (SM) favorite easy to make cauliflower recipe that is also flavorful and inspired by North Indian cuisine. SERVES 4

INGREDIENTS

- 1 tablespoon ground turmeric
- 1 tablespoon ground cumin
- 1 tablespoon ground coriander
- 1 teaspoon cayenne pepper
- 1 tablespoon extra-virgin olive oil
- 1 teaspoon cumin seeds
- 2 small green chilies*, thinly sliced
- 1 tablespoon fresh ginger, cut into thin strips
- 1 medium head cauliflower, cut into florets
- 2 tablespoons fresh cilantro, chopped and divided Sea salt to taste

METHOD

- **1.** Combine turmeric, cumin, coriander and cayenne in a small bowl and set aside.
- 2. In a large pot or sauté pan, heat the olive oil on low for about a minute and then add the cumin seeds. Heat until the seeds start making popping sounds.
- **3.** Add the sliced green chilies and fresh ginger strips. Cover the pan to allow them to soften for a minute or two.
- 4. Stir in the cauliflower florets.
- **5.** After a minute add half the dried spices in the bowl, and some fresh cilantro leaves, saving the rest for garnish.
- 6. Stir and cover, continue cooking on low. After a few minutes stir in the remaining dried spices from your bowl.
- 7. Cover and cook on low heat for 5-10 minutes more or until cauliflower is tender.
- 8. Add sea salt to taste.
- 9. To serve, garnish with remaining fresh cilantro.

NOTE: To make this dish a meal, add cubed red skinned potatoes and peas to complement the spices and flavors. *If you can't find Indian chilies in your local market, you can use Anaheim or Thai chilies depending on your heat level tolerance.



Fenugreek Pilaf (Methi Garlic Pulav)

Fenugreek leaves, when combined with garlic and basmati rice, exude a rich aroma. If not available, you can substitute kale, spinach or Swiss chard.

SERVES 4

INGREDIENTS

- 2 cups basmati brown rice
- 1 tablespoon ghee
- 2 tablespoons extra-virgin olive oil
- 1/2 teaspoon asafetida
- 1/2 teaspoon cumin seeds
- 12 cloves garlic, crushed or chopped fine
- 1-inch (2.5 cm) ginger, minced or grated
- 3 green chilies*, thinly sliced
- 2 large bundles methi or fenugreek leaves, rinsed well and roughly chopped
- 3-4 medium tomatoes, diced medium
- 1/2 teaspoon ground turmeric
- 11/2 teaspoon chili powder
- Sea salt to taste

1 cup peas, thawed if frozen

METHOD

- 1. Wash the basmati brown rice and soak for 3-4 hours.
- 2. In a heavy pot, over low heat, melt the ghee and extra-virgin olive oil. Add the asafetida, cumin, garlic, ginger and chilies. When the garlic starts to take on color, add the methi leaves and allow to soften for a couple of minutes. Add the tomatoes and continue to sauté until they break down.
- 3. Add the ground turmeric and chili powder and stir for a minute or two.
- **4.** Add the basmati brown rice and sauté for a few more minutes. Then add the salt and four cups of boiling water.
- **5.** Raise the heat and bring to a boil. Then cover and reduce heat to low for approximately 40-45 minutes until the rice is soft. Stir in the peas in the last five minutes.

NOTE: This can be served with raita (yogurt sauce) Accompaniments can be the dal for protein and vegetables for fiber. *If you can't find Indian chilies in your local market, you can use 1 Anaheim or 3 Thai chilies depending on your heat level tolerance.

SOURCE: Modified from Moorthy, V., *The Vegetarian Menu Book, A Comprehensive Guide to Authentic Indian Vegetarian Cuisine*. UBS (1993);

Green Bean Supreme

Green bean curry with rice or quinoa makes a deliciously satisfying meal.

SERVES 2

INGREDIENTS

- 2 tablespoons extra-virgin coconut oil
- 1 teaspoon mustard seeds
- 1-2 green chilies, thinly sliced
- A handful of curry leaves
- 1 teaspoon turmeric powder
- 1 pinch asafetida (optional)
- 2 cups green beans, minced fine
- 1-2 tablespoons fresh grated coconut or dried unsweetened
- Sea salt to taste

METHOD

- 1. In a sauté pan, heat the coconut oil, add the mustard seeds, chilies, curry leaves, turmeric and asafetida if using. Stir to combine and heat until the spices release their scent (a few minutes).
- 2. Add the greens beans, stir and cover. Add the coconut and salt and cook for 5 minutes more.
- 3. Remove curry leaves. Taste and adjust seasonings.
- **4.** Serve with quinoa, brown rice or millet and *Brussels Sprouts Sambhar* (see page 80).



Savory Sauté

This versatile, nicely spiced recipe can be made with you choice of protein and vegetables.

SERVES 2

INGREDIENTS

- 8 oz. extra firm tofu or chicken
- 1 teaspoon cumin powder
- 1 teaspoon coriander powder
- 1/2 teaspoon garam masala
- ¹/₂ teaspoon ground turmeric

- 2 teaspoons sesame seeds luice of $\frac{1}{2}$ a lemon 2 tablespoons extra-virgin
- olive oil, divided
- 1 teaspoon cumin seeds

METHOD

- **1.** Cube the tofu into $\frac{1}{2}$ -inch (1.27 cm) squares or slice chicken into strips.
- 2. Prepare a marinade with the cumin, coriander, garam masala, turmeric, sesame seeds, lemon juice and half the oil. Add chicken or tofu and set aside.
- 3. Heat the remaining oil over medium high heat in a sauté pan or wok and add the cumin seeds.
- 4. Once they start to pop, add the onions and sauté for a minute. Lower the heat to medium and add ginger and garlic, taking care not to burn the garlic.

- ¹/₂ cup onion, minced
- 2 teaspoon ginger, minced
- 2 cloves garlic, minced
- 1 cup spinach, roughly chopped
- ¹/₂ cup mushrooms, sliced
- 2 tablespoon cilantro, minced
- Sea salt to taste
- 4-6 lettuce leaves
- 5. When the onions are starting to soften, add the mushrooms and cook until golden. Stir in the spinach and cilantro until wilted. Add the tofu or chicken last.
- 6. Sauté for 2-3 minutes, or until chicken is cooked, then add remaining marinade and sea salt. Stir to combine. Taste and adjust seasonings.
- 7. To serve, take a lettuce wrap and add the tofu or chicken mixture and enjoy.

Turmeric Vinaigrette

Adding turmeric to a salad dressing or sauce offers a tangy flavor and bright orange color.

SERVES 4

INGREDIENTS

¹/₄ cup vinegar

- 1 tablespoon maple syrup
- 1-2 cloves garlic, minced
- 1 tablespoon green herbs
- 1 tablespoon chia seeds
- $\frac{1}{2}$ teaspoon salt
- 1 teaspoon turmeric
- 1/2 cup extra-virgin olive oil

METHOD

- 1. Mix all the ingredients in a blender except the oil. Turn on the machine and slowly add the oil until dressing is emulsified.
- 2. Store in a glass container until ready to serve.





Bringing Wellness to the World

With 2021 winding down, all of us are hoping for better days ahead. The question is how we can and will bring this about. I suggest it will be by bringing wellness to the world. Our mission is to promote personal, family, community, corporate, organizational, ecological, and global wellness.

What I find most exciting in the chaos of the pandemic is that people from all sectors of society are rallying around the cry, "Wellness for All!" What makes this so compelling is that it brings us together as human beings with a purpose to overcome the massive inequities that have been building up over the past five hundred years. What people want most is NOT a return to normalcy, which was far from healthy, but a step forward into health, sociability, security, and stability. This basic desire transcends race, gender, class, and culture. We want to be well to live well together and enjoy solving problems that must be addressed collectively. We yearn to achieve wellness to build a bridge to the future and leave a positive legacy to our children and their children.

The key is moving from the notion of health as a personal achievement to wellness as a social and cultural force. Our path forward is to grow from a me first mentality to a we first one.

Wellness is a state of vitality, inter-dependence, and cocreation. It is not the absence of disease as, for upwards to 50% or more of the world population, mental and physical illness. There is much more that can and must be done for people suffering from chronic illness, infection, and injury, beyond what modern medicine can provide. Wellness brings to individuals traditional healing practices they can do on their own at home and share with friends, family, and associates. When community engagement, social learning and group enthusiasm is combined with personal practice, a culture of pro-active wellness forms and impacts others noticing its salutary effect.

Community wellness is a cost-effective lifestyle-based innovation that is the secret sauce for healthy populations from ancient China to so called "blue zone" regions around the globe where the healthiest people live such as Greece, Okinawa, Sardinia, Costa Rica, and Loma Linda, CA.

As most of us reading this know, chronic disease responsible for greater vulnerability to COVID-19 and its subsequent variations and after-effects — is a conse-



quence of a lifetime of poor habits, choices, toxic exposures, traumas, social injustice, and insufficient resources for healing, including love, touch, fresh air, pure water, sunshine, exercise and seasonal, local, chemical free food. The exciting part of bringing wellness to the world is that the desire for people who are currently unwell is to get well as soon as possible. This opens a remarkable social and global learning opportunity. Through the wonder of virtual technology, people of all ages, spending more time at home, can meet, connect graciously and engage wellness practices as colleagues in the Bauman Wellness community.

I have always loved taking holistic health principles, the unity of life, the connection with nature and one another, and our capacity to self-heal and grow, and apply this in hands-on workshops, classes, retreats, and programs. Learning with others is exciting and provides an inspiration for improved personal practice and experimentation free of excessive pedagogy and a commercial agenda.

Whereas medicine treats disease, wellness builds health through mindful daily practice. The five areas of a Bauman Wellness practice that build a foundation for building vitality individually and together are:

- eating for health
- joyful movement
- mindfulness
- healing relationship
- soulful service



Let us bring this home, to work, to cities, and create wellness ecosystems in education, the workplace, integrative healthcare, and public health.

The **Bauman Wellness Community** is a virtual universe where people looking to be well can connect with others with similar aspirations and goals. It is a welcome antidote to the isolation and loneliness exacerbated by the pandemic. On the **BaumanWellness.co** website, we will be hosting a variety of moderated topics, events, programs, trainings, and celebrations, where new and old friends can exchange recipes, remedies, research, stories, and tips. The space we wish to hold is one of caring, sharing and respect for differing experiences, ideas, and beliefs. Wellness is based on building networks of diversity and inclusion. If we all thought, acted, or felt the same, it would be a limited community or microbiome, threatened, rather than enriched, by different points of view.

To change the world, we need to create a world within ourselves that builds unity, harmony, and resilience. We can all aspire to become a center of well-being when we recognize how important self-love is as a basis for self-care, on an ongoing basis. We all have room to grow, and can do so, better, when being with supportive colleagues in a wellness community, sharing best practices, difficulties, hardship and earned small or great wins.

With Bauman Wellness now our primary focus with an aim to facilitate a societal shift attitude and allocation of resources toward well-being, I invite you to make a generous donation of time, money, and participation to enable us to bring wellness to the world. We are looking for people with skills in media, marketing, business development, finance, technology, networking, and outreach to help us grow and serve communities of interest, in the Bay area and wherever you may be.

We are excited to be rolling out our innovative programs on **BaumanWellness.co**. These include Affordable Nutrition, Resilience and Recovery: Self Care Practices, Building Immune Resilience, Nutrition Essentials for Everyone, and our new Kidz Culinary Academy. Join us by becoming a professional or general member.

Cultivate Wellness Pay It Forward

We are happy to provide you with this copy of *Weathering the Storms of Change*.

Rather than charge a set fee, which may be a barrier to your owning, reading, and sharing this valuable resource, I invite you to click on this link:

www.baumanwellness.com/DONATE

...and contribute the value you recognize that Weathering the Storms of Change and our seasonal Wellness Week Programs provide to support the work of our non-profit, the Institute for Educational Therapy, dba Bauman Wellness.

All contributions of \$20.00 or greater will receive a letter of appreciation with our tax ID number which you can claim as an exemption on your tax return.



Join Our Community

To see HOW to join our new password-protected, membership fee-based community click here: <u>www.baumanwellness.co</u>

To explore WHAT benefits you receive from joining our new community click here: <u>www.baumanwellness.com</u>



Creating a New Normal of Wellness

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"The meaning of life is to find your gift. The purpose of life is to give it away."

- PABLO PICASSO

Bauman Wellness food • arts • community