

Thank you for joining!

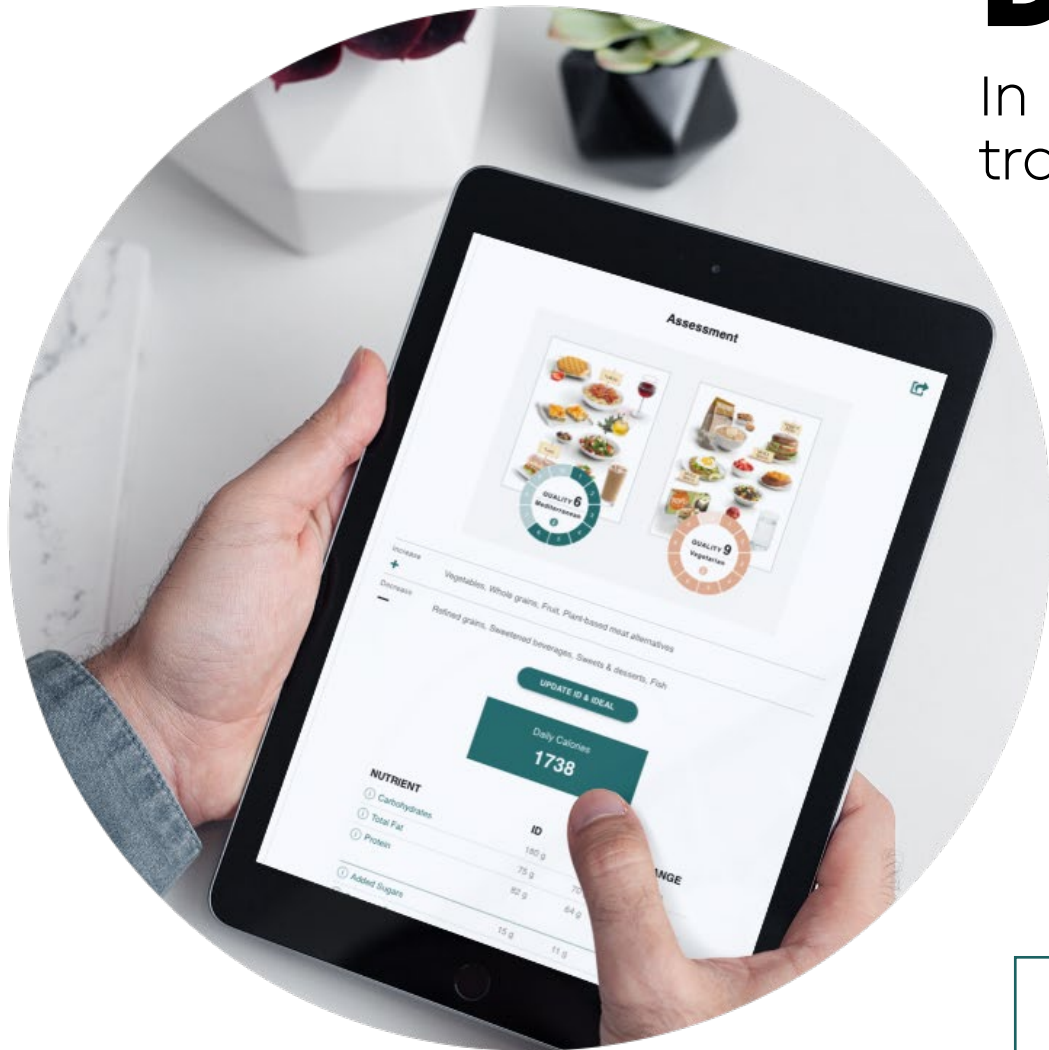


We will begin in just a few minutes

Diet ID – FREE ACCESS

In response to the impact of Covid-19 and the transition to digital care

- Digital Dietary Assessment + Goal Setting
- Completed in 2 minutes
- Real-time results
- Data include nutrient intake, food group intake, HEI Score, sample meal plans, and more
- Your own branded web app in 24 hours



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Diet and Immunity: Fact and Fiction

David L. Katz, MD, MPH

CEO, Diet ID; President, True Health Initiative

Philip Calder, PhD, DPhil, RNutr, FSB, FAFN

Prof. of Nutritional Immunology, U. of Southampton

Joshua Levitt, ND

Naturopathic Physician

Kathleen Zelman, MPH, RD

Director of Nutrition, WebMD

April 15, 2020

Corona virus before it reaches the lungs it remains in the throat for four days and at this time the person begins to cough and have throat pains. If he drinks water a lot and gargling with warm water & salt or vinegar eliminates the virus. Spread this information because you can save someone with this information

ScalerAide @scaleraide · Mar 9
 Corona Virus can't survive without its diseased single cells electron-dismantle it with our embedded electromagnetism & structured silver that uses it to **boost immunity** and immune response. No proliferation, no disease! No known side effects... proven scientifically since 98



Purifier

What can a pinch-a-day do for us?

Did you know?

- Boil 1 cup of water
- Add 1/4 teaspoon of peeled ground ginger, boil for 5 minutes
- Add 1/8 teaspoon of black pepper
- Add 1 teaspoon of turmeric powder (if using fresh turmeric root - boil it along with ginger)

Curcumin - the active ingredient in turmeric supplements, has anti-inflammatory, antioxidant, antibacterial, antiviral and antiparasitic property.

Diet and Nutrition 101 during the coronavirus pandemic: Dynamo expert shares his gameplan

April 12, 2020 4:09PM EDT

Simon Borg Editor-in-Chief

Follow @SimonBorg

#1 TRUE WIRELESS EARBUDD UNDER \$100

EAT PROTEIN

Today most of us already have a general idea about how to consistently healthy eating. However, stay-at-home isolation in the midst of the coronavirus pandemic adds a whole new twist to the theme. Between the lack of activity, limited takeout options and infrequent supermarket runs, it just takes a lot more time and effort to do healthy eating this these days.

So we tapped into a professional MLS sports dietitian, the Houston Dynamo's Brett Singer, to share how he's thinking about nutrition these days and what he's advising Dynamo players. Plenty of it can be applied by the non-athletes out there.

Alternative Medicine & Coronavirus

Immune Tonic

€25.00 Brand : Carahhealth

Natural Medicine Preparation for Coronavirus Outbreak

carahhealth

Holistic Health Coach, **Andrea Beaman**

New deadly virus is here! What to do to protect yourself...

Immune Boosting Mushroom Coffee
 Respiratory Support Infusion

Lactobacillus salivarius inhibited transmissible gastroenteritis coronavirus in vitro in stomach cells. Luckily for many of my patients, you are already taking a probiotic that contains one if not both of these strains for immune support. These probiotics include **Cyto-Matrix Multistrain 11** and **NEH BioSAP**. To read the research paper, click [HERE](#).

This Is What You Should Have In Your Bag To Avoid Coronavirus

A doctor gives her list of top things to stock up on during this virus scare!

Coronavirus and Your Health

by doconnor | Published January 26, 2020

Dr. Danielle O'Connor
 NATUROPATHIC DOCTOR

If you do go out, try to get additional treatments or services done to help further boost your immunity—Dr. Candy shares "IV Nutrient Therapy, IV Laser Therapy, and Acupuncture are some of the recommended treatments right now."

Lastly, we've amplified our Immune Boost IV for the Wuhan situation. It's a bouillabaisse of vitamins and antioxidants and is a good choice if you think you're especially at risk.

Vitamin C, hydrogen peroxide, and ozone IVs can help anyone suffering from an infection.

Your conventional doctor simply has no effective tools in his/her toolkit for this.

Iodine is essential

WORLD HEALTH DAY

FIGHT CORONA WITH FAITH, GIVE FEAR NO SPACE

- Do pranayama daily - for boosting immunity, gaining strength & strengthening the lungs
- Stay fit. Do jogging, if your space permits, or indoor exercises like yoga.
- Increase your will power and self confidence by meditating regularly.

ON THIS WORLD HEALTH DAY, LET US ALL PLEDGE TO LIVE WISELY AGAIN!

Silver Charms @Silvercharms · Mar 31

♥️ "Wearing silver anklets activates lymph glands in the body and boosts immunity." ♥️

Shop the perfect designs and get up to 25% off on Amazon! Amazon : bit.ly/SilverCharmsIn...



100-250mg of Zinc daily... And 3-4oz of Schweppes Tonic water daily, which contains high levels of quinine will clear your body of COVID-19 within 24-48hrs.

Chinese Journal of Integrative Medicine

Available online at link.springer.com/journal/11655
 Journal homepage: www.cjim.cn/zxyjhen/zxyjhen/index.aspx
 E-mail: cjim_en@cjim.cn

Hot Topic

Can Chinese Medicine Be Used for Prevention of Corona Virus Disease 2019 (COVID-19)? A Review of Historical Classics, Research Evidence and Current Prevention Programs*

Liu Hui^{1,2}, TANG Qiao-ling³, SHANG Ya-xi^{2,3}, LIANG Shi-bing^{2,3}, YANG Ming^{2,3}, Nicola Robinson^{2,4}, and LIU Jian-ping^{2,5}

ABSTRACT Objective: Since December 2019, an outbreak of corona virus disease 2019 (COVID-19) occurred in Wuhan, and rapidly spread to almost all parts of China. This was followed by prevention programs recommending Chinese medicine (CM) for the prevention. In order to provide evidence for CM recommendations, we reviewed ancient classics and human studies. **Methods:** Historical records on prevention and treatment of infections in CM classics, clinical evidence of CM on the prevention of severe acute respiratory syndrome (SARS) and H1N1 influenza, and CM prevention programs issued by health authorities in China since the COVID-19 outbreak were retrieved from different databases and websites till 12 February, 2020. Research evidence included data from

Lori Shemek, PhD @LoriShemek

Lion's Mane Mushrooms are excellent benefits seen in animal research:

- Reduces Inflammation
- Reduces Heart Disease Risk
- Manages Type 2 Diabetes
- Helps Protect Against Dementia
- Helps **Boost Immunity**
- Reduces Anxiety & Depression

UTILISE THE LOCKDOWN PERIOD TO ENHANCE YOUR IMMUNE SYSTEM TO FIGHT AGAINST DISEASES

- 1 -Take balanced and healthy meals
- 2 -Include cheese and pistachio in your diet
- 3 - Take Tulsi leaves in Milk or tea 3-4 times a day
- 4 -Do physical exercises like jogging (in space available at home) to stay fit and healthy
- 5 -Do pranayama

Saint Dr. MSG recommends regular exercises and healthy diet to stay fit.



Immunity Spray - Colloidal Silver Nanoparticles Infused

\$11.99

10 Health Benefits of... Sweet Potato

1. Calming for Stomach
2. Anti-Inflammatory
3. Full of Nutrients
4. Healthy Heart
5. Boosts Immunity
6. Rich in Beta-Carotene
7. Good for Lung Functions
8. Detoxifying of Heavy Metals
9. Regulates Blood Sugar Levels
10. Easily Digestible (& Full of Fibre)



'I Just Need the Comfort': Processed Foods Make a Pandemic Comeback

Shoppers, moved by nostalgia and hunting for longer shelf lives, are returning to old standbys like Chef Boyardee and Campbell's soup.

**As health professionals, we
need to reconcile people's...**

Desperation for a panacea

&

**Tendency to fall into bad
eating behaviors**

April 7, 2020 By Julie Creswell, *New York Times*
<https://www.nytimes.com/2020/04/07/business/coronavirus-processed-foods.html>



Basic Truths

- No dietary intervention can substitute for careful personal hygiene and relevant social distancing
- Eating habits absolutely influence the body's ability to resist and fight infection.



Valid Mechanisms of Nutrition and Immunity

Eating well, even in the short term, can impact risk:



Changes your vascular function, improving delivery of crucial nutrients to cells, bone marrow, etc.



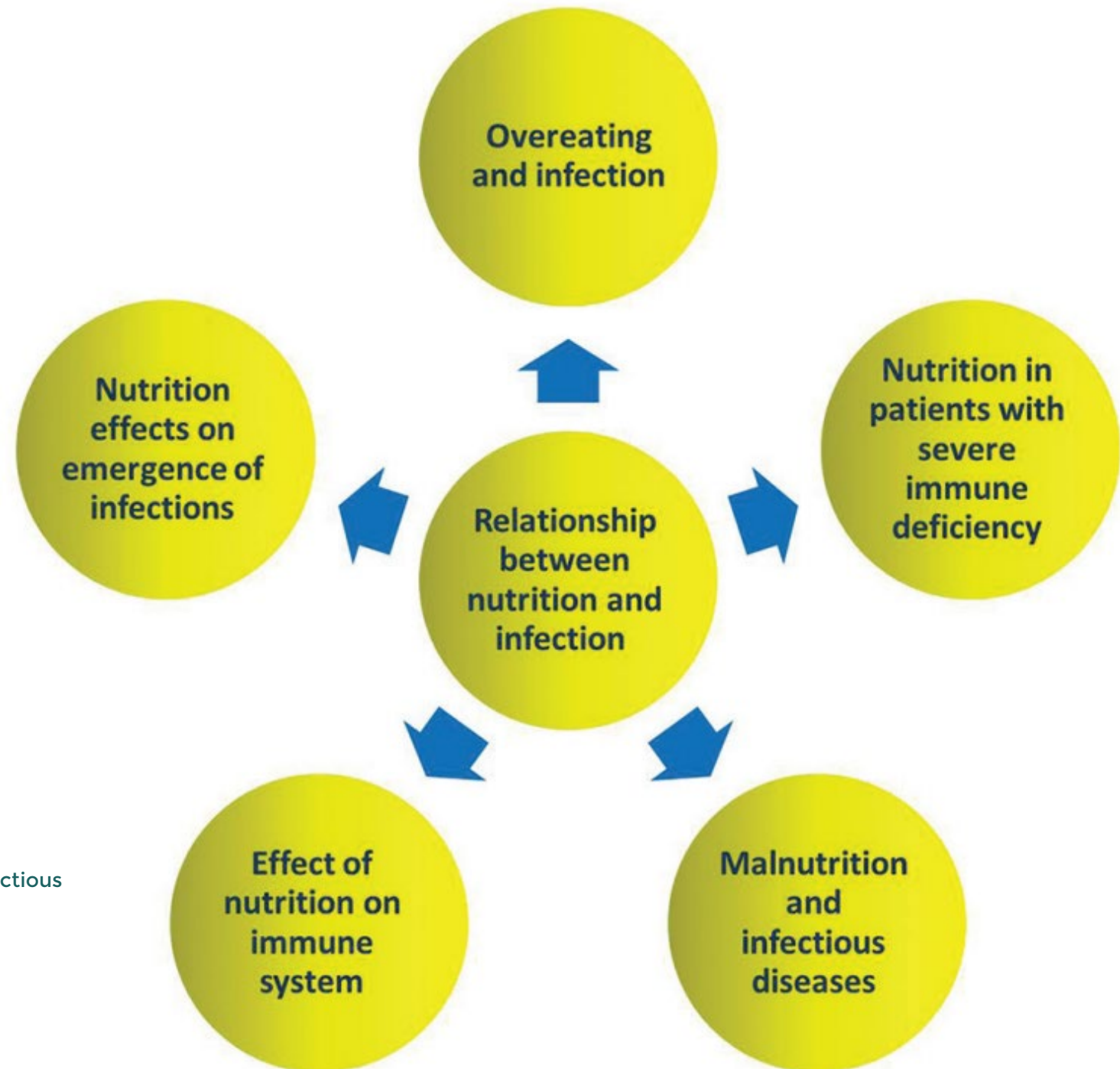
Optimizes the balance between PRO- and ANTI-inflammatory responses



Essentially allows the immune system to:

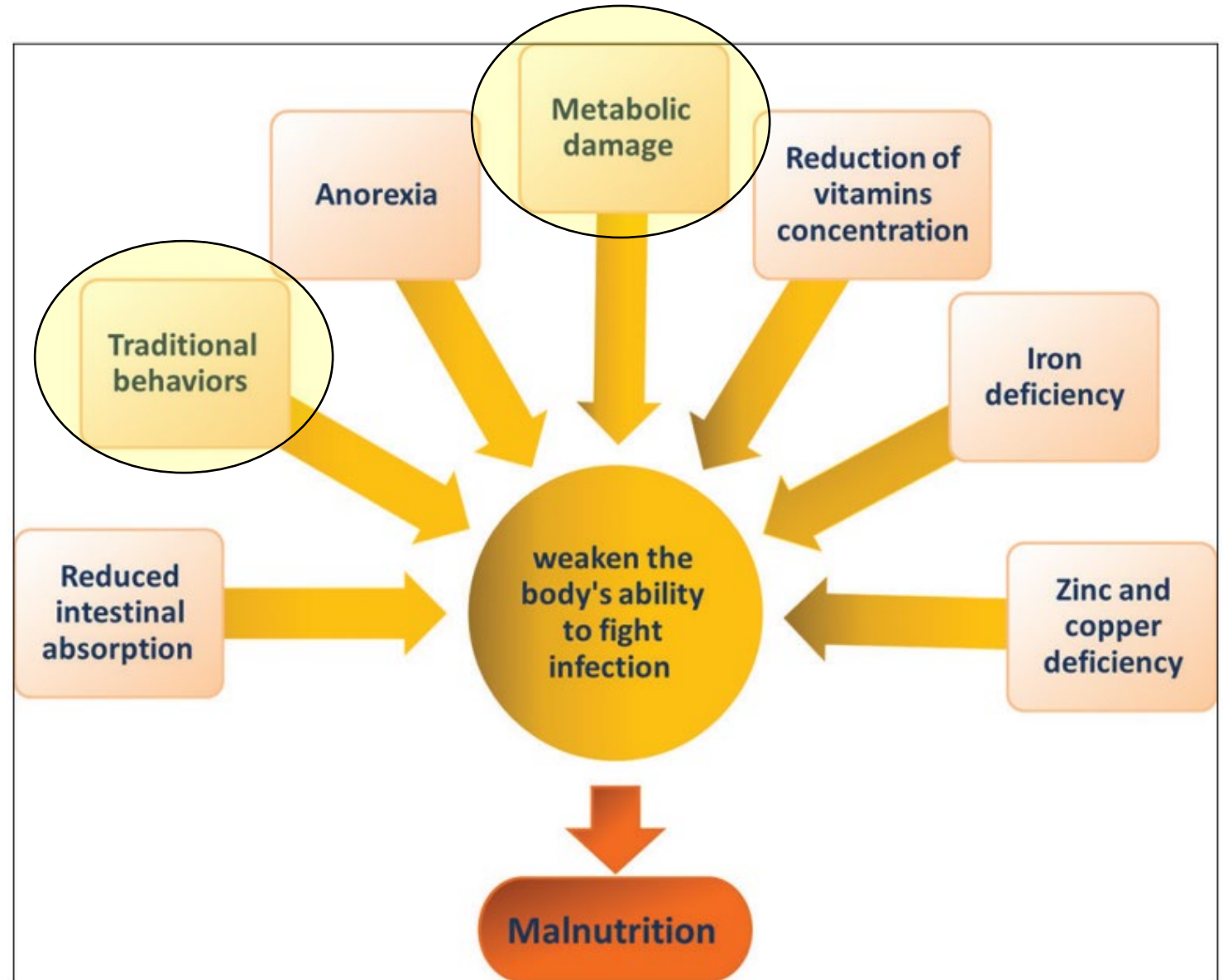
- More effectively fend off pathogens
- More effectively recover if infected

Relationship between nutrition and infectious diseases

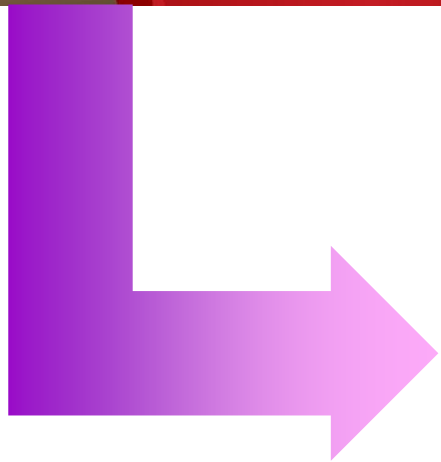
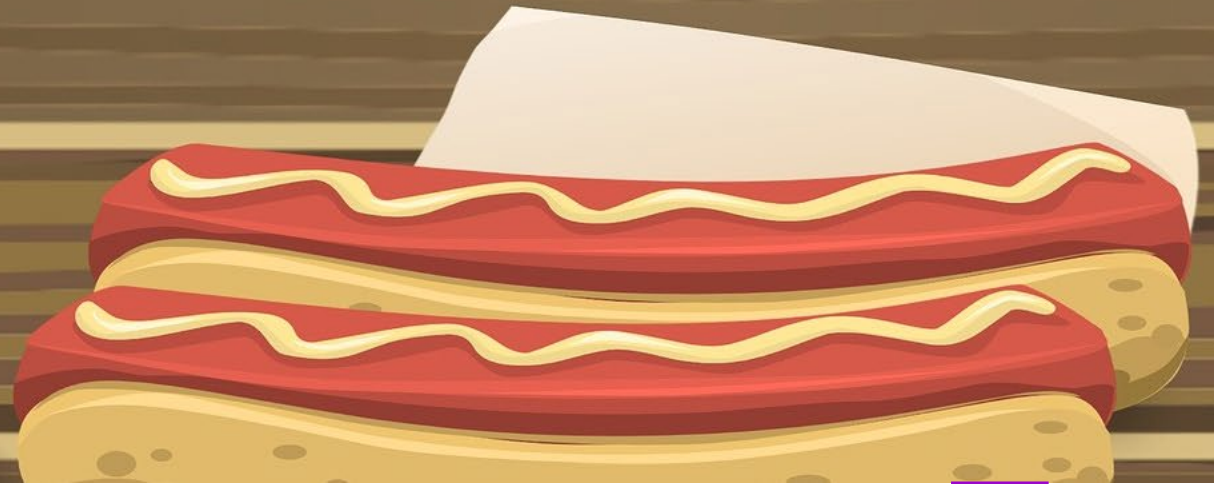


Farhadi S, Ovchinnikov RS. The Relationship between Nutrition and Infectious Diseases: A Review. *Biomedical and Biotechnology Research Journal* 2018;2:168-172.

Factors that weaken the body's ability to fight infection



Secondary Effects of Nutrition



Obesity
Insulin
Resistance
Diabetes
Hypertension
Heart Disease



Metabolic
Impairment



Compromised
Immune
Function



HIGH RISK /
POOR
OUTCOMES



Inflammation : Immunity

- Cannot directly study “strength of the immune system” in vivo
- Studies on diet and inflammation are useful in exploring diet therapies for immune system optimization
- Healthful diets reduce risk of chronic inflammation
- Healthful diets support the gut microbiome, key in immune function



Nutrients & Isolated Effects

- Protein
- Omega-3s
- B Vitamins
- Vitamin C
- Vitamin D
- Vitamin E
- Carotenoids
- Selenium
- Magnesium
- Zinc
- Iron
- Copper
- Pre/Probiotics
- Glutamine



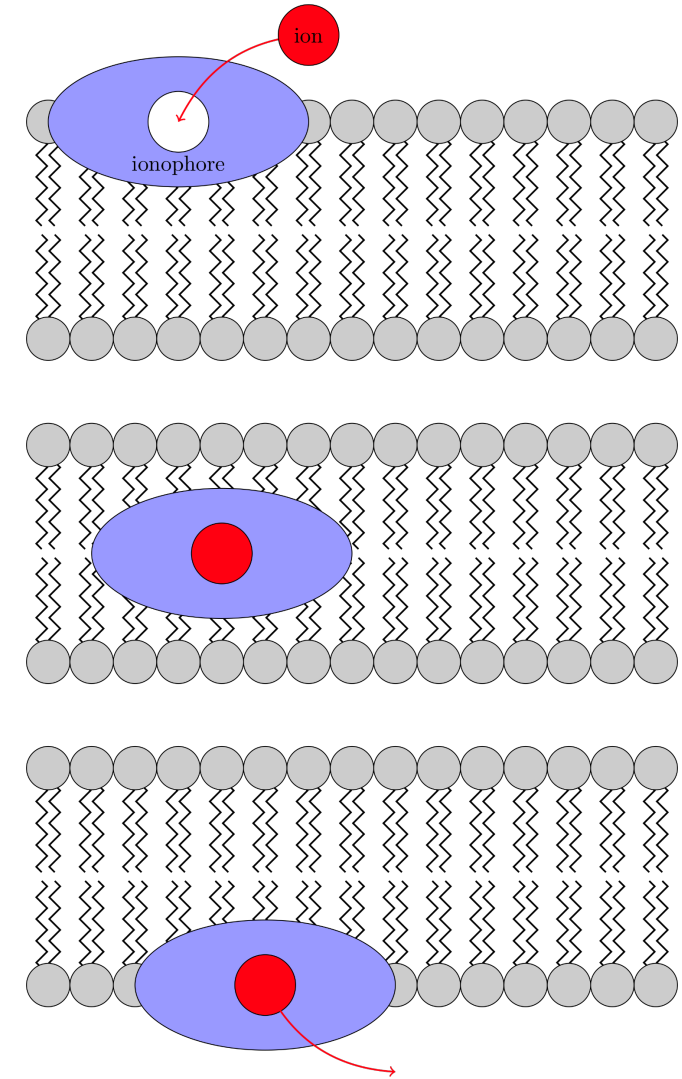
There is a difference between correcting a deficiency and using a nutrient as a drug...

Note: Megadosing can be toxic and/or interact with medications and can disrupt metabolism of other nutrients (mineral interactions, e.g. Zn/Cu)

- Childs CE, Calder PC, Miles E. Diet and Immune Function. *Nutrients* 2019;11:1993.
- Grant WB, Lahore H et al. Evidence that vitamin D supplementation could reduce risk of influenza and COVID-19 infections and deaths. Preprints 2020. <https://doi.org/10.20944/preprints202003.0235.v2>
- Maggini S, Pierre A, Calder PC. Immune function and micronutrient requirements change over the life course. *Nutrients* 2018;10:1531.

Zinc as an Ionophore

- Pyrithione (PT) Ionophore is needed to increase Zn uptake into cell (allow Zn across cell membrane), where the zinc blocks viral RNA replication
- Chloroquine is a zinc ionophore
- Regular dietary zinc does not include the ionophore
- RDA is 8mg (f) and 11mg (m); UL is 40. Zinc lozenge has at least 75 mg and up to 150mg.



Chloroquine

Zinc
ion

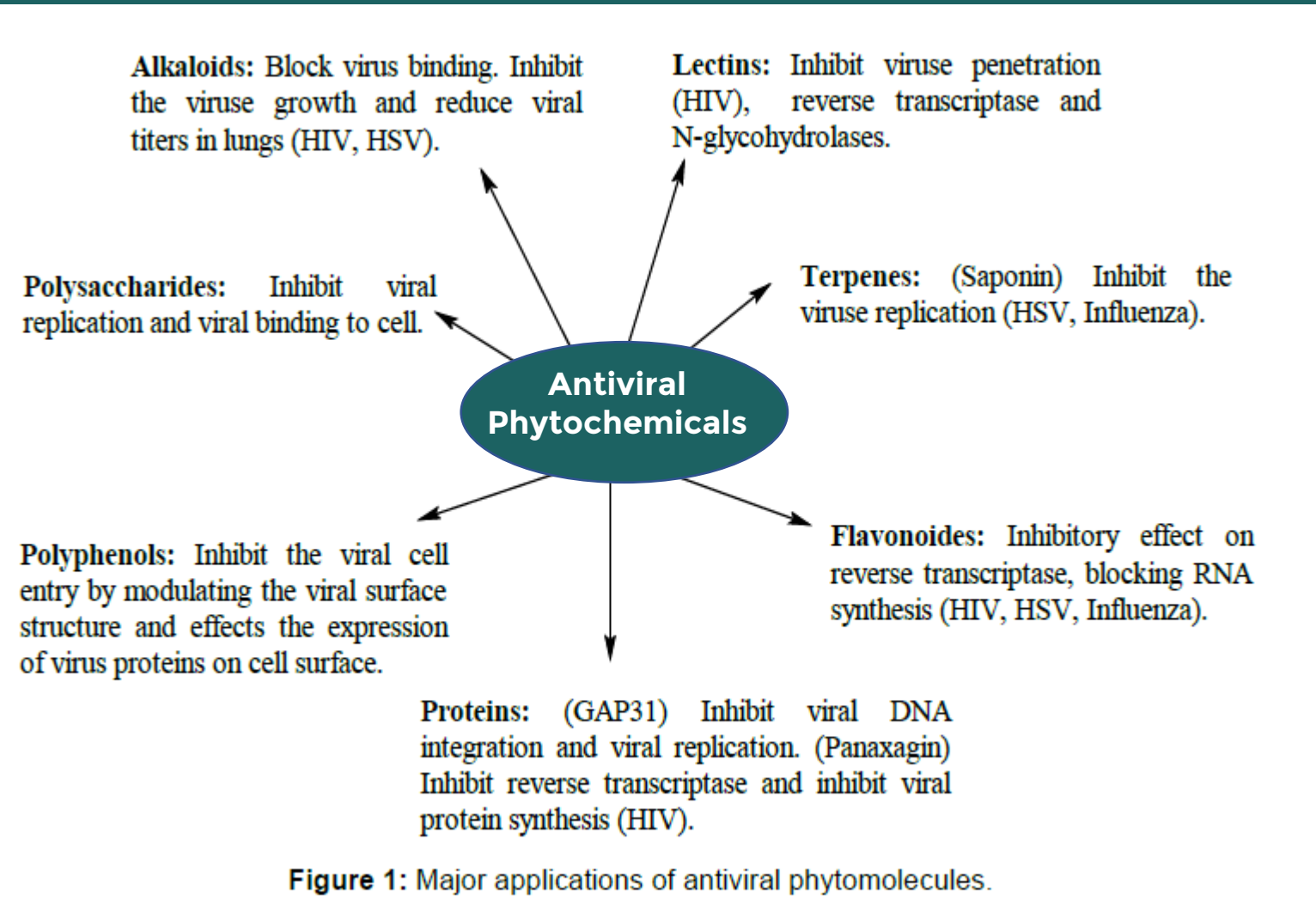


- Read SA, Obeid S, et al. The Role of Zinc in Antiviral Immunity. *Advances in Nutrition* 2019;10:696-710.
- teVelthuis AJW, van den Worm SHE, et al. Zn²⁺ Inhibits Coronavirus and Arterivirus RNA Polymerase Activity In Vitro and Zinc Ionophores Block the Replication of These Viruses in Cell Culture. *PLoS Pathogens Open Access* 2010;6(11):e100176.

Functional foods: Evidence?

- Nutrient composition vs whole food effect
- Mushrooms
- Green leafy vegetables
- Berries
- Yogurt
- Kombucha (and other fermented foods)
- Ginger
- Garlic
- Nutritional Yeast





Supplements: Evidence?

- Elderberry extract
- Andrographis
- Green Tea
- Colloidal silver
- Oregano oil
- Echinacea
- Turmeric
- NAC (N-Acetyl Cysteine)
- Quercetin
- Scutellaria Baicalensis (Skullcap)
- Sulforaphane
- Citicoline



- Liu H, Ye F, et al. Scutellaria baicalensis extract and baicalein inhibit replication of SARS-CoV-2 and its 3C-like protease in vitro. Preprints (Biology) [biorxiv.org/content/10.1101/2020.04.10.035824v1](https://doi.org/10.1101/2020.04.10.035824v1)
- Meyer M, Jaspers I. Respiratory protease/antiprotease balance determines susceptibility to viral infection and can be modified by nutritional antioxidants. *American Journal of Physiology – Lung Cellular and Molecular Physiology* 2015;308(12):L1189–L1201.
- Wu D, Lewis ED, et al. Nutritional modulation of immune function: Analysis of evidence, mechanisms, and clinical relevance. *Frontiers in Immunology* 2019;9:3160.

Foods for Optimal Immune Function

Whole plant foods

- Fiber stabilizes blood insulin and glucose
- High nutrient density ensures nutritional adequacy

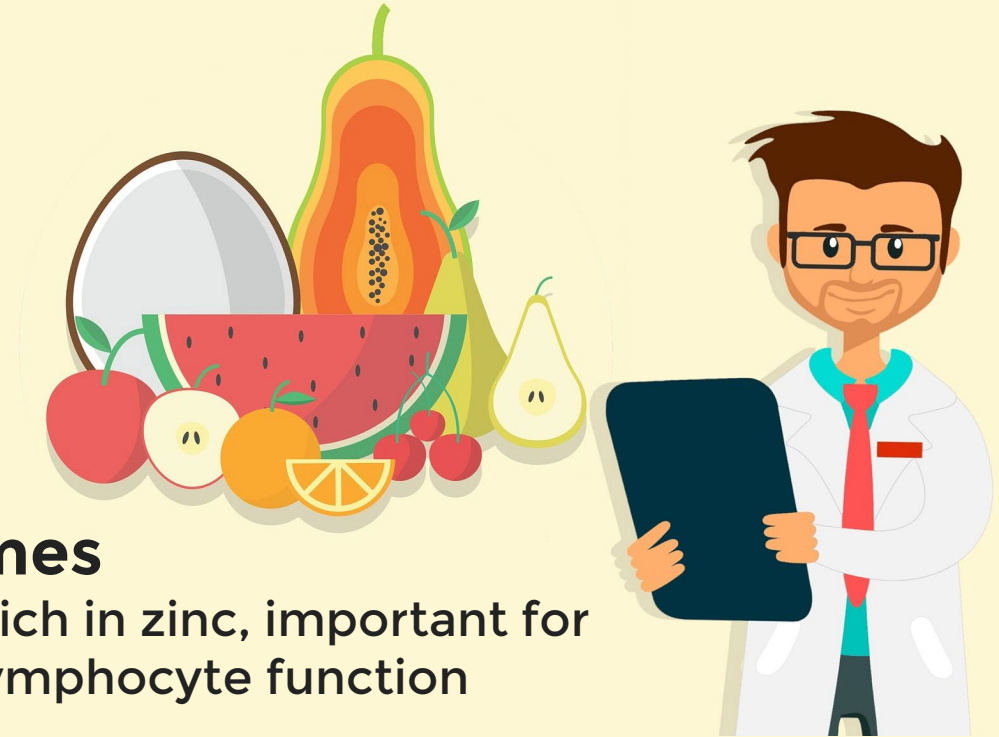
Fruits & vegetables

- Antioxidants/flavonoids/carotenoids/etc. protect cells from oxidative injury

Nuts, seeds, avocado, olives, cold pressed oils

- Help to regulate inflammatory response
- Rich in vitamin E, an anti-oxidant and immune system modulator

- Kapoor R, Sharma B, Singh Kaur S. Antiviral phytochemicals: An overview. *Biochemistry & Physiology Open access* 2017;6(2).
- Effect of fruit and vegetable consumption on immune function in older people: a randomized controlled trial. *American Journal of Clinical Nutrition* 2012;96:1429-36.



Legumes

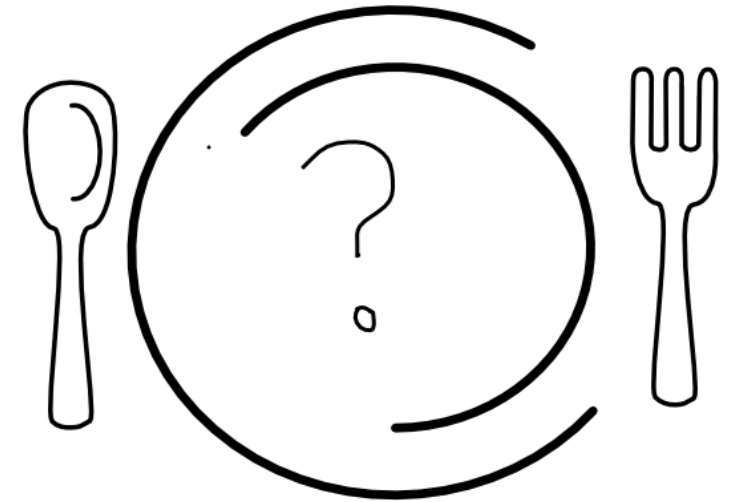
- Rich in zinc, important for lymphocyte function

Seafood

- Rich in vitamin D, may decrease susceptibility to infection by promoting optimal white blood cell function
- Rich in polyunsaturated oils and zinc

Dietary Patterns

- Nutrients in a variety of health supporting, whole foods work in synergy
- Diets that prevent chronic disease risk also support immune health
- Diet patterns with a high quality score (e.g. Healthy Eating Index 2015) have characteristics known to support immune health
- High in fresh foods, vegetables; low in processed foods, fast food, sugar, etc.



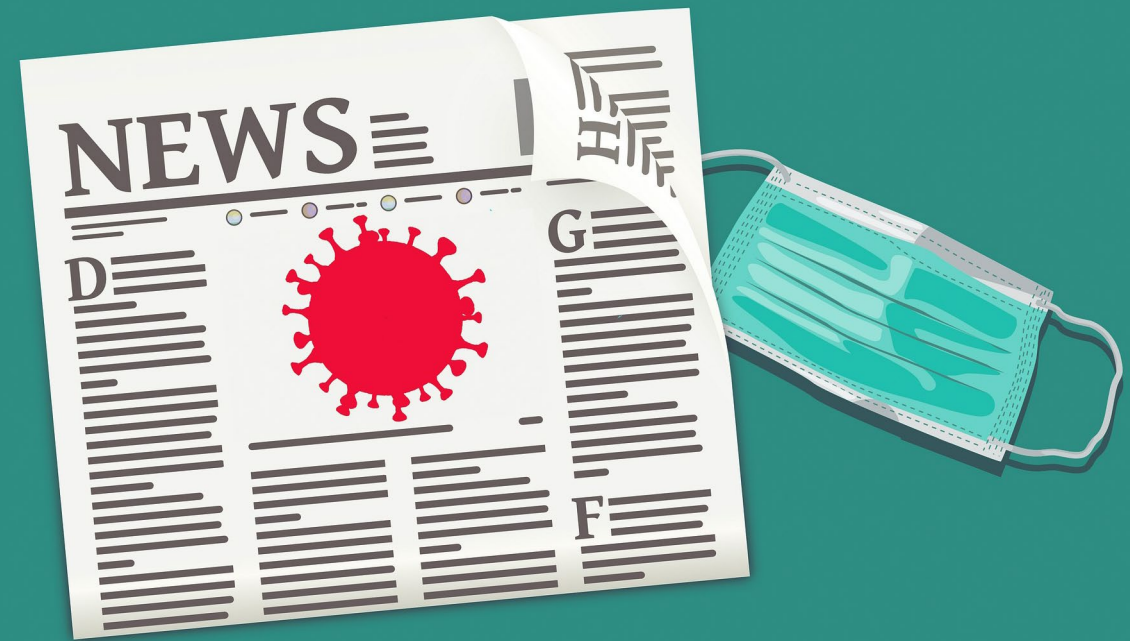
Clinical Implications

- Many patients (especially seniors) admitted are malnourished and benefit from supplements to correct deficiencies
- Some nutrient supplements are used for COVID-19 patients, including vitamin C infusions, zinc lozenges
- Once patients are hospitalized, good nutrition is very challenging



Consumer Communications

- Overall diet quality significantly influences immune system function and, of course, overall health.
- We have no data yet on specific protection against COVID-19, so must extrapolate from what we know about immunity in general.
- No dietary intervention can substitute for careful personal hygiene and relevant social distancing



Conclusions

- Joshua Levitt
- Kathleen Zelman
- Philip Calder
- David Katz

QUESTION & ANSWER



Please submit questions via Q/A feature



Thank you for attending!



We'll send out an announcement about our next webinar.
Make sure you're on our email list!