



OPTIMIZING IMMUNITY THROUGH NUTRITION Q&A

Medical Disclaimer: This material by stating that the information presented in this presentation are general guidelines and recommendations, and while backed by research, it does not take into consideration any medical conditions or special dietary needs and should not be substituted for individual care or medical advice. Please speak with a medical provider before making any changes in diet.

Can you talk to "Saturated Fat" content in daily diet? We are told to avoid but are saturated fats important to a diet? Does the source matter? Or avoid, and focus on other "good" fats?

The American Heart Association recommends no more than 6% of total daily energy (calories) intake to come from saturated fat. For someone who consumes 2,000 calories a day, that would look like 13g of saturated fats per day. This does mean we need to avoid them completely, but because they are found in a variety of animal sources and tropical oils, we can easily go over this amount if we are not aware of the sources of them in our diet and how much we consume regularly. Research has indicated that higher intakes of saturated fats in the diet can raise LDL cholesterol and increase our risk of heart disease. We can all benefit from choosing unsaturated fats most of the time (nuts, seeds, olive oil, canola oil, avocado oil) and leaving the saturated fats for on occasion, like holiday baking or family recipes. You can read more from the AHA here: <https://www.heart.org/en/healthy-living/healthy-eating/eat-smart/fats/saturated-fats>

Can you eat Edamame without boiling? What are the best ways to cook it to preserve the nutrients it provides?

Edamame does need to be cooked before consuming. You can steam it in the pods or buy it precooked and shelled either in the refrigerated section or frozen section. For most foods, nutrients are best retained when cooked for shortest amount of time that is needed. Meaning steam or boil until it is cooked through but avoid overcooking.

Substitutes: What is a good substitute for soy? Is there a substitute for the tahini?

Soy substitutes can depend on the ingredient. Soy sauce, for example, can be substituted with coconut aminos for similar flavor profile. Soy protein such as edamame, tofu, or tempeh can be

substituted for beans and legumes for a plant-based protein option. Tahini is made from sesame seeds and does not contain soy, but if you are looking to substitute tahini in a recipe, you could use another seed or nut butter instead. The taste would be slightly different depending on the substitute you chose.

How long can the dressing and meal stay fresh for in the fridge?

The dressing will stay good for up to 3 days in the fridge. Be sure it is in an airtight container.

Benefits of intermittent fasting?

Benefits from intermittent fasting come from those who benefit from that type of schedule. Speak to a medical provider to determine what type of intermittent fasting schedule could work for you if this is something you are interested in exploring.

Opinions on bee pollen? Benefits? On the topic of bees, benefits of consuming local honey as we're entering spring/allergy season?

There is not sufficient research to support the benefits of bee pollen either way. Supporting local farmers has environmental benefits in terms of sustainability. While a natural ingredient, honey is considered to be an added sugar so be sure to monitor your sugar intake throughout the day. Speak with a Registered Dietitian to determine your needs.

***Vegan diet:* How do I get adequate protein? Is it possible to get too much protein while eating plant based?**

Tips for meeting protein needs on a vegan diet: first identify where your protein sources can come from: legumes, beans, soy proteins, nuts, and seeds, plant-based alternatives. This step in planning will provide you with options for protein sources you can include in meals and snacks. Following the plate model will help to guide balanced meals that contain proteins, grains, and produce.

Tomatoes and inflammation – thoughts? Nutrient benefits of tomatoes?

Tomatoes are a food we want to have in our diet on a regular basis because of the *anti-inflammatory* nutrients they contain. Tomatoes contain the antioxidants lycopene, shown to reduce risk of heart disease and certain cancers, and vitamin C which protects our cells from free radicals and stimulates white blood cell activity in our immune system. Tomatoes are relatively low in calories, contain some fiber, and can be consumed, raw, cooked, steamed, or even dried. Fun fact, lycopene content actually increases when tomatoes are cooked.

Tomatoes are included in Harvard Health's Anti-inflammatory foods list:

<https://www.health.harvard.edu/staying-healthy/foods-that-fight-inflammation>

Vitamin D: For those north of the equator, is a vitamin D supplement suggested? What foods provide the best sources of vitamin D? Are there any plant milks that are a good source of vitamin D? Recommended amount of vitamin D? What vitamin D supplements do you recommend?

Not necessarily, we would want to have our vitamin D levels checked by our health care provider first then discuss next steps: whether or not supplementation is needed and how much for how long. While we do not get a lot of vitamin D from foods, we can yield some from eggs (include the yolks), mushrooms exposed to UV lights, fatty fish like salmon, and fortified foods and beverages (check those nutrition labels for amounts).

For plant-based milks, ensure that it is fortified with calcium and vitamin D before purchasing.

The RDA for vitamin D is 600 IU for adults 19 years and older and 800 IU for adults over 70 years old. This recommendation of intake would differ if someone was deficient or low in vitamin D based upon labs. When choosing a supplement, we always want to look for a third-party testing or verification like USP. Consumer Labs also reports on third-party testing.

Pre- and Pro-biotics: What are other options to use in place of prebiotics? Are probiotics needed if diet already includes yogurt consistently? Not all yogurt is created equally; what are the best yogurt recommendations?

There isn't necessarily a substitute for prebiotics as these are a specific type of fiber fermented in the gut. Most individuals do not need a probiotic supplement and are better off including probiotic rich foods, like yogurt in their regular dietary patterns. When shopping for yogurt, keep an eye out for yogurts that provide more protein than added sugars, dairy will naturally contain some sugar due to the lactose content. Choosing lower fat yogurts (1%, 2%) will help keep saturated fat consumption in check.

Sleep: Foods to eat/avoid for a more restful night's sleep? Sleep supplement thoughts/recommendations, i.e., melatonin?

This is very individualized. A good rule of thumb is to try to not eat for about 2 hours before bedtime to help with promote most restful sleep. Speak to a Registered Dietitian if your schedule only allows for late night eating.

Should rice and quinoa be soaked in water for a certain amount of time prior to cooking?

This does not impact nutrient value. You can cook according to the package.

Thoughts on impact of nuts and cheese on cholesterol levels? If concerned about cholesterol, what are the best types of nuts to consume?

When trying to lower cholesterol, it is best to try and consume fiber and healthy, monounsaturated fats regularly. Most nuts are great source of monounsaturated fat so you can't go wrong. They also contain some fiber too!

Thoughts about ghee, coconut oil, avocado oil etc.?

Whenever choosing a healthy fat, aim for one that is low in saturated fat and high in monounsaturated fats.

How do you feel about "powdered meals" such as Huel, etc.?

We always err on the side of enjoying foods in their most nutrient dense form as much as you can and working with a medical provider to supplement when needed.

Do you take a HAES (Health at Every Size) and/or intuitive eating approach in your work?

Yes, and some of our dietitians work one-on-one with clients for this specific reason. This is a wildly studied methodology and many RDs follow this as part of helping clients develop a better relationship with food.

Thoughts on the blood type diet?

This is not fully supported by research at this time.

Welcome

Optimizing Immunity Through Nutrition

March 30th, 2022



*"We've built a company that we're proud of – from who we are to what we do and how we do it. Respecting the trust clients place in NFP is always top of mind."
– Eric Boester, EVP and Chief Marketing Officer*

Definition of a Mentally Strong Organization

Our people are our
most important asset.*

*“...when they are in
the **green zone.**”*

- Dr. Jeremy Hunter







Optimizing Immunity Through Nutrition

Christine Steerman MA, RD, LDN

Registered Dietitian

Team Lead

Wellness Coaches

- B.S in Hotel Restaurant, and Institutional Management- Penn State University
- Master of Arts in Nutrition Education- Immaculata University
- Dietetic Internship- Immaculata University
- Registered Dietitian Nutritionist- Commission on Dietetic Registration
- Philadelphia area native- now resides in Colorado



Agenda

- Immune Supporting Lunch Prep
- Overview of The Immune System
- Nutrients To Support Immunity
- Immune Supporting Dietary Pattern- Beyond what you eat
- Other Lifestyle Factors That Contribute To Immune Health
- Wellness Coaches Overview

Let's Reflect

What are you doing to support your immunity?



Lunch Time!



- **Immune Supporting Harvest Grain Bowl**
- **Ingredients**
- 1 cup cooked grain of choice (brown rice, wild rice, farro, quinoa)
- 1 cup packaged broccoli slaw
- 1 cup edamame
- 1/4 cup unsweetened dried cherries
- 1/2 cup walnuts or 1/4 cup of hemp seeds
- Optional Topping: 2-4oz goat cheese
- **Lemon Tahini Dressing**
- 1/4 cup tahini dressing
- 1/3 cup of water
- 1 Tbsp. maple syrup or honey
- 1 lemon, juiced
- 1 garlic clove, minced



The Immune System

A Rundown

- The immune system is the body's natural defense against infections and diseases
- When a pathogen enters our body, an immune system response is triggered
- It is a complex network of cells and proteins throughout the body
- During times of stress (either physical or psychological), our immune system is weakened
 - Nutritional needs increase during times of stress



Immunity And Diet

- Nutritional adequacy and variety are key for immune health
- Several nutrients have been identified as significant to immune system function
 - Antioxidants, Vitamin A, Vitamin C, Vitamin E, Vitamin D, Zinc, Magnesium, Omega-3 Fatty Acids, Probiotics, Prebiotics, & Protein
- Although we can promote optimal immune health, there is no food or supplement that can single handedly “boost your immune system”

Nutrients To Support Immune Health

Review From Lunch

- Magnesium
- Protein
- Omega 3
- Zinc
- Antioxidants:
 - Vitamin C
 - Vitamin A
 - Beta Carotene





What Are Antioxidants?

- An antioxidant protects cells against the effects of free radicals
 - Free radicals are unstable molecules that can cause damage to cells
 - Produced when the body is exposed to pollutants such as tobacco, smoke, radiation
 - Play a role in disease prevention
- Antioxidants are naturally produced by the body as well as being derived from foods consumed in our diet

Additional Antioxidant Sources



- **Lutein** supports eye health, reducing the risk of developing cataracts and macular degeneration
- **Selenium** has been shown to act as an antioxidant
- **Lycopene** may exert anti-inflammatory properties on the body
- **Vitamin E** may exert anti-inflammatory properties on the body

Vitamin D

- Important for bone growth, metabolism, and immune function
- Deficiency raises risk for contracting an infection
- Food sources:
 - Mushrooms, fatty fish, fortified sources like orange juice, milk, and non-dairy milks
- The sun can be a source of vitamin D for our skin
 - The UV rays that help our skin synthesize vitamin D are only available in warmer months (June, July, August)
 - The skin must be exposed completely (no clothing, sunscreen) in order for vitamin D synthesis to occur
- RDA
 - Adults >19 years: 600 IU daily
 - >70 years: 800 IU
- Vitamin D supplementation may be warranted if blood tests reveal deficiency or insufficiency



Herbs and Spices

- Antimicrobial properties
- Antioxidant properties
- Anti-Inflammatory properties
- Flavor Enhancer





Gut Health

- Prebiotics
 - apples, oats, asparagus, beans, garlic, onions, leeks
- Probiotics
 - yogurt, kefir, tempeh, kimchi, kombucha, or raw sauerkraut
- What about supplements?

Immune Supporting Dietary Pattern

Eat on a regular schedule - avoid skipping meals/going longer than 4 hours without eating

Include 3-4 food groups per meal

Refer to MyPlate

Plan ahead to ensure variety

Drink plenty of fluids: water, seltzer, herbal teas

Brightly colored foods and herbs/spices to enhance flavor and add immune boosting nutrition



Pause and Reflect

Does your current diet support your immune system?



Putting It Into Action

Putting It Into Action: A Day Of Swaps

Meal	Swap This	For This	Immune Benefit
Morning Coffee	Flavored Coffee Creamer	Milk and Cinnamon	Spices- Antioxidants Vitamin D- Lean milk
Breakfast	Protein Powder	Hemp Seeds or Chia Seeds	Magnesium (chia seeds) Zinc (Hemp Seeds)
Lunch	Side of fries	Side of fruit	Antioxidants
Snack	Bag of Chips	Greek Yogurt Parfait	Probiotics Protein
Dinner	Steak	Salmon	Omega 3s
Dessert	Ice Cream	Smoothie	Stay tuned!

Immune Supporting Smoothie

- 1 cup plain non-fat Greek yogurt or Kefir
 - probiotics and protein
- 1 Cup mixed berries
 - Vitamins C, Lutein
- 1 Cup spinach
 - vitamin E
- 2 Tbsp ground flaxseed
 - magnesium, selenium, omega-3 fatty acids
- Water or unsweetened vanilla almond milk or low fat milk
 - Vitamin D

Other Factors To Consider

Stress

- Stress impacts our risk for disease/infection in three ways
 - Increased heart rate/increased blood pressure
 - Digestive system irritation
 - Increased stress hormones (cortisol) suppresses immune response
- Influences our appetite and food choices
- Setting goals that promote relaxation and stress relief are important for health
 - Walking, journaling, listening to music, taking appropriate breaks, and meditation are all examples of ways to relax in times of stress



Physical Activity

- Moderate-light exercise daily can improve the body's resilience to fight infection
 - Walking, yoga, bike riding, moderate intensity strength training
- High intensity exercise causes stress on the body and lowers immunity
 - Marathon training, intensive weightlifting
 - If engaging in high intensity exercise, build in rest days to support your body's immune response
- Start small



Sleep



- Sleep is important for the immune system
 - During sleep our body produces cytokines which are a type of protein that responds to infection and inflammation
 - Lack of sleep leads to fewer cytokines produced, weakening the body's immune response
 - Studies have shown that chronic sleep deprivation can make the flu vaccine less effective
- Goal for 7-9 hours of continuous sleep each night
 - Naps can be an effective way to make up for some sleep loss, but only if they last about 20-30 min and no longer

Summary

- Eat a variety of foods from all the food groups - special attention to brightly colored produce and utilizing herbs and spices for cooking
- Maintain adequate hydration
- Engage in 20-30 minutes of physical activity each day
- Aim for 6-8 hours of sleep each night
- Incorporate relaxation and stress relieving activities into your daily habits
- Wash your hands!



Wellness Coaches

John Rickards RD,LDN

Senior Director of Client Success

- Oversee Client Success Team at WC, responsible for managing client relationships
- Registered Dietitian for close to 15 years
- Founder of Your Wellness Consultants



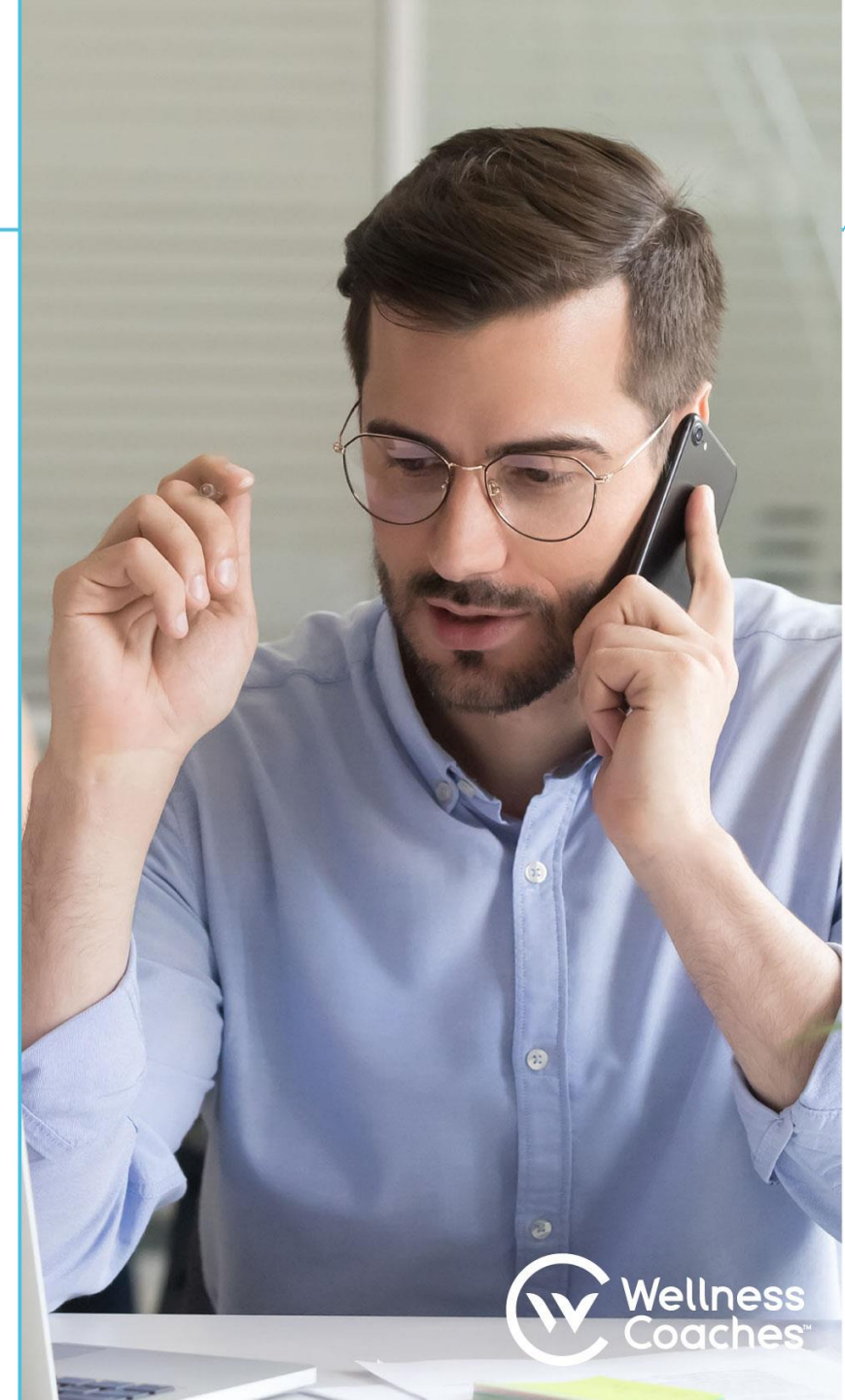
Your Full-Service Solution



We swarm the demands of **today** to give employees better outcomes **tomorrow**.

Additional Support:

- Reach out to us with questions and support:
 - Contact: jrickards@wcusa.com
 - Visit wellnesscoachesusa.com/contact-us/



Resources

<https://www.hsph.harvard.edu/nutritionsource/2021/01/19/healthy-living-guide-2020-2021/>

<https://www.hsph.harvard.edu/nutritionsource/nutrition-and-immunity/>

<https://www.health.harvard.edu/staying-healthy/understanding-antioxidants>

<https://www.sciencedirect.com/science/article/pii/S0022030293776171>

<https://www.todaysdietitian.com/newarchives/082508p50.shtml>

<https://pubmed.ncbi.nlm.nih.gov/10604207/>

<https://academic.oup.com/jn/article/132/3/518S/4687218>

<https://www.eatright.org/health/wellness/preventing-illness/support-your-health-with-nutrition>

<https://www.eatright.org/health/wellness/preventing-illness/how-to-keep-your-immune-system-healthy>

[https://healthyfamilyproject.com/5-food-habits-to-boost-your-immune-](https://healthyfamilyproject.com/5-food-habits-to-boost-your-immune-system/?utm_medium=email&utm_campaign=March%202020%20RD%20Newsletter%20Pt%204&utm_content=March%202020%20RD%20N)

[ewsletter%20Pt%204+CID_794065427dc912ab0864e0816a14157f&utm_source=Campaign%20Monitor&utm_term=Read%20More%E2%80%8B](https://healthyfamilyproject.com/5-food-habits-to-boost-your-immune-system/?utm_medium=email&utm_campaign=March%202020%20RD%20Newsletter%20Pt%204&utm_content=March%202020%20RD%20Newsletter%20Pt%204+CID_794065427dc912ab0864e0816a14157f&utm_source=Campaign%20Monitor&utm_term=Read%20More%E2%80%8B)

https://www.washingtonpost.com/lifestyle/wellness/immune-boost-coronavirus/2020/03/05/e111554a-5e73-11ea-b014-4fafa866bb81_story.html?wpisrc=nl_sb_smartbrief

<https://www.sciencedaily.com/releases/2013/02/130207131344.htm>

<https://medlineplus.gov/ency/article/002423.htm>

<http://www.orthomolecular.org/resources/omns/v13n22.shtml>

<https://www.sleepfoundation.org/articles/how-sleep-affects-your-immunity>

<https://www.simplypsychology.org/stress-immune.html>

THANK YOU!

Join NFP for our next virtual events: Scan the QR codes to register!

**Parenting Teens Summit:
Parenting Teens in Uncertain Times**

- April 25 – May 4 | 7:00 a.m. ET



Mental Health First Aid: Adult Session

- May 10 | noon – 1:00 p.m. ET



Mental Health First Aid: Youth Session

- May 12 | noon – 1:00 p.m. ET

