

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



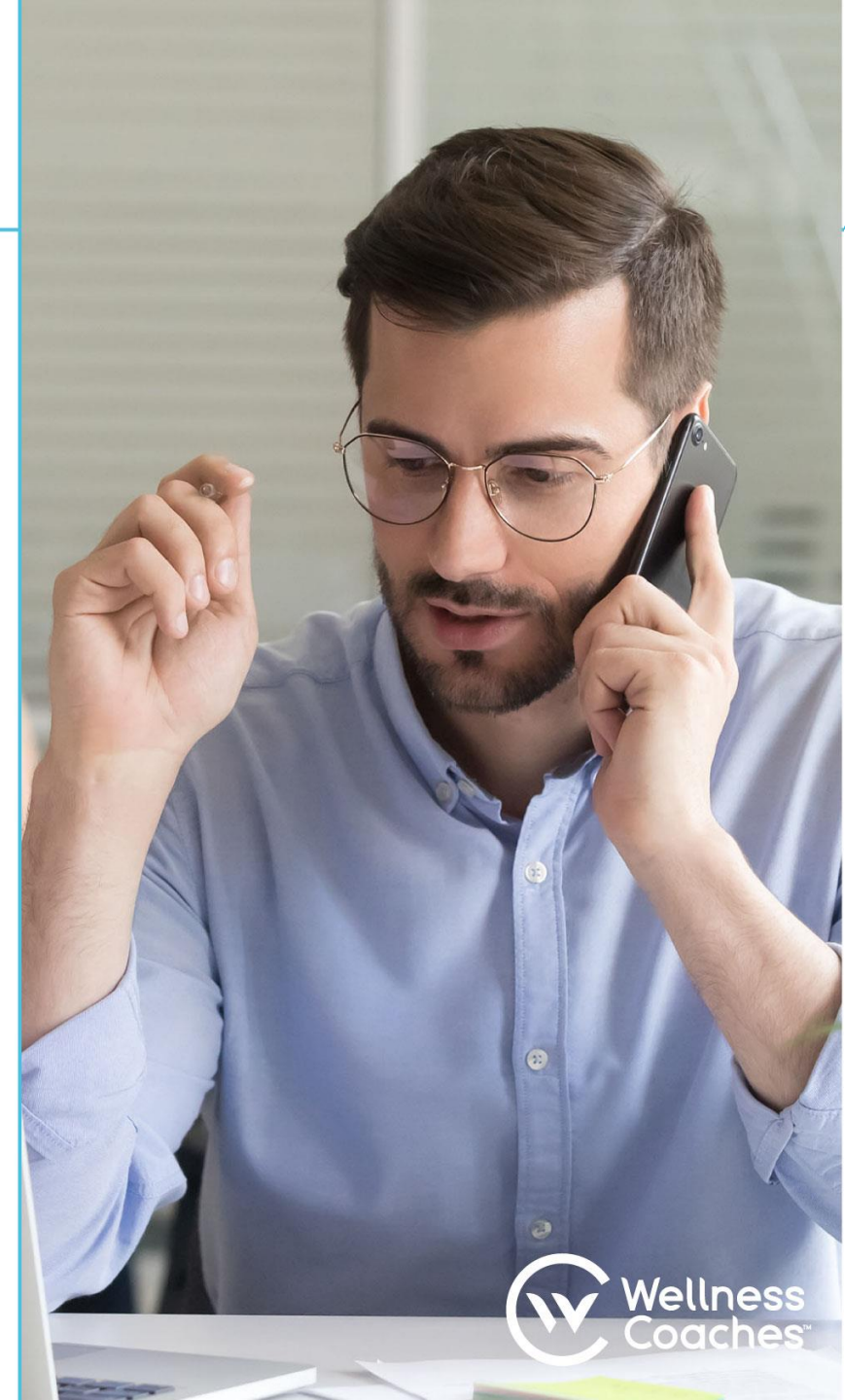
Your Full-Service Solution



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

