

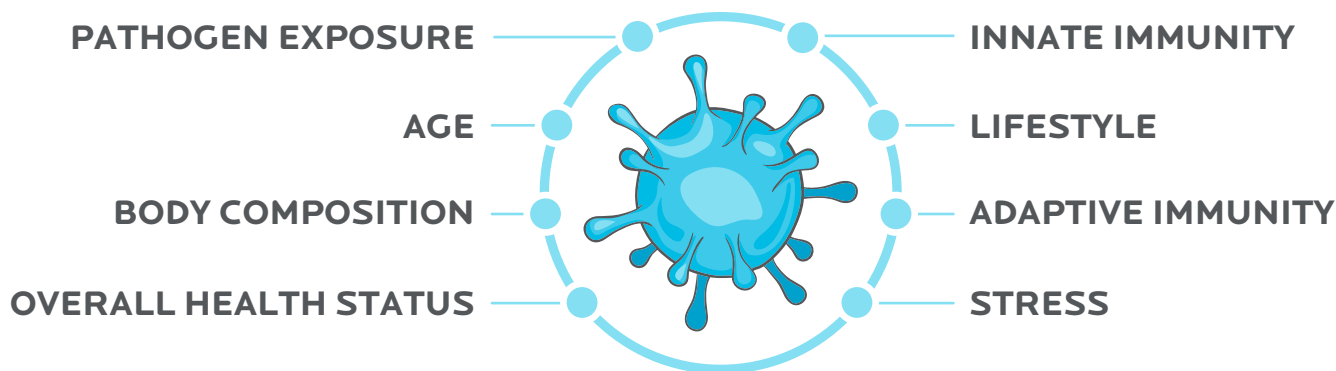
# 8 WAYS TO OPTIMIZE YOUR IMMUNITY AND PROTECT YOUR HEALTH

## PLUS PROVEN STRATEGIES FOR FOLLOWING THROUGH

Solid immune function relies on many factors, but fundamental health and fitness habits can help. Here's how to master them.

## WHAT ARE YOUR CHANCES OF GETTING SICK?

Risk of viral or bacterial infection depends on a host of interconnected factors. Individual factors include:



### PATHOGEN EXPOSURE

- **Transmission of a pathogen** through human contact, air droplets (coughing, sneezing), food, or contaminated surfaces.
- **Pathogenicity**, the ability of a given pathogen to cause disease.

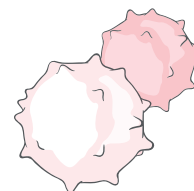


### INNATE IMMUNITY

- **Physical barriers**, like the mucous lining and cilia in nasal passages.
- **Chemical barriers**, like stomach acid.
- **Protective cells**, like white blood cells.

### ADAPTIVE IMMUNITY

- **Past infections and vaccinations**, which train white blood cells to fight a specific pathogen more effectively.



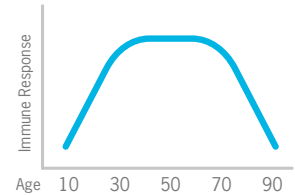


## STRESS

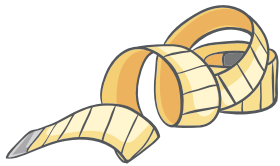
A **heavy allostatic (stress) load** and too much cortisol (a stress hormone) could make you more susceptible. Coping behaviors like overeating and drinking alcohol add to stress load.

## AGE

**Getting older** can mean more adaptive immunity. But around age 70, white blood cell function decreases, and fewer antibodies are produced.



## BODY COMPOSITION



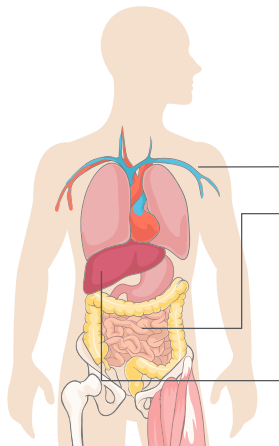
Having **too much or too little body fat** can interfere with certain compounds and sex hormones that affect immunity. And body composition related health conditions (heart disease, high blood pressure, type 2 diabetes) increase risk of infection and complications.

## LIFESTYLE

- **Nutrient deficiencies** may lower immune function by hindering white blood cell performance.
- **Exercise** has been shown to support immunity by increasing T-cells and natural killer cells.
- **Rest:** Lack of high-quality sleep can lower your body's defenses.
- **Environment:** Densely populated places increase exposure to germs (though it might mean you build up more resistance, too). Climates have variable effects on disease exposure and risk.



## OVERALL HEALTH STATUS



- **Health conditions:** Immunodeficiency disorders limit immune response. Chronic inflammation—the immune system in overdrive—may also weaken ability to fight infection.
- **Gut health:** The GI tract houses over 70% of our immunity. A healthy gut = better chances of warding off bugs.
- **Drugs:** Rx meds that treat autoimmune conditions work by suppressing immune response. Substance abuse can hinder immunity by damaging vital organs.

# 8 TIPS FOR CONSISTENTLY PRACTICING IMMUNE-SUPPORTING HABITS

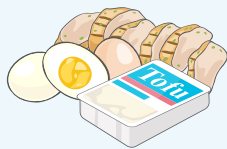
“Fundamental” doesn’t necessarily mean “easy.” Use these tips (and the resources that follow) to maintain your routine day after day, year after year.

## 1

### FOCUS ON WHOLE FOODS AND KEY NUTRIENTS

To avoid nutrient deficiencies, eat plenty of whole foods like fruits, vegetables, whole grains, beans, protein, and healthy fats. Batch-cook and freeze meals so nutritious food is always available.

**Certain nutrients strengthen white blood cells’ ability to fight infection.**



**Protein:** The building block of antibodies. People who are protein-deficient are more susceptible to infectious disease. Aim for a serving with every meal/snack.



**Vitamin C:** Needed to prevent and fight infections. Whole foods are the best sources. Aim for 1-2 servings per day.



**Vitamin D:** Helps protect against respiratory tract infections. If you don’t live near the equator, consider a liquid supplement with 600-4,000 IU/day.



**Zinc:** Supports T-cells. Whole food sources—like whole grains, oysters, and scallops—are best, but lozenges may help those already sick.



**Omega-3 fatty acids:** Reduce inflammation and help white blood cells do their job. Eat plant sources of ALA daily—such as chia seeds, walnuts, and flaxseeds—and oily fish for DHA/EPA 2-3 times a week (or consider a supplement if you don’t eat fish).

## 2

### ACHIEVE AND MAINTAIN A HEALTHY BODY FAT LEVEL

Try PN’s hand portions method. Start with:

- Protein: 1-2 palms per meal
- Vegetables: 1-2 fists per meal
- Carbs: 1-2 cupped handfuls per meal
- Fats: 1-2 thumbs per meal



PROTEIN



VEGGIES



CARBS



FAT

### 3

## SUPPORT GUT HEALTH

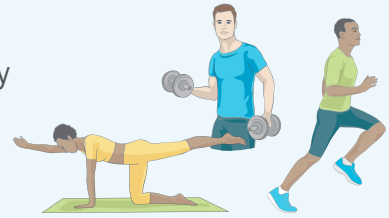


Eat foods with pre- and probiotics like bananas, yogurt, and sauerkraut, which can boost good gut bacteria. Struggling to resolve gut issues? Try an elimination diet to detect food intolerances and sensitivities.

### 4

## MOVE YOUR BODY

Exercise has long-term health-protective effects, and is a great way to reduce stress and enhance immunity. Arm yourself with a solid workout you can do at home (or anywhere else).



### 5

## MODERATE YOUR ALCOHOL INTAKE



It's not clear how alcohol affects immunity, but there's plenty of evidence that heavy drinking jeopardizes health. Keep your drinking light to moderate (at or under 7 drinks per week for women, 14 for men).

### 6

## SLEEP WELL

### Get 7 to 9 quality hours by:

- turning off electronics 30 min before bed
- clearing your mind with reading, meditation, or gentle movement
- sticking to a reasonable bedtime, ideally before 12 am
- making your room as dark as possible
- keeping your sleep area cool and clean



## 7

## BALANCE YOUR STRESS LOAD



Completely eliminate stress in your life? Unrealistic. Instead, find a middle ground. Prioritize downtime and parasympathetic activity, like meditation, a nature walk, or laughing with a friend.

## 8

## REMEMBER HYGIENE FUNDAMENTALS

You already know to wash your hands for 20 seconds and avoid touching your face, but here are some hygiene practices you might not be doing already.

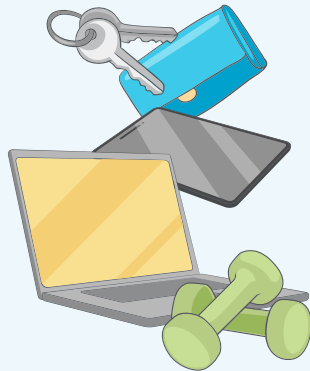
**Wash hands thoroughly.**

Don't forget to scrub wrists, nail beds, under nails, and between fingers.

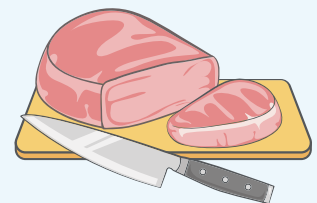
**Disinfect frequently-used objects and surfaces.**

Use soap and water, a diluted bleach solution, or household cleaning spray/wipes with at least 62% alcohol for hard surfaces, and the washing machine on high heat for fabrics. Avoid sponges, which are hard to keep bacteria-free. Don't forget:

- Phone, laptop, and keyboard
- Keys, ID badges, and transportation passes
- Door, fridge, cupboard, and drawer handles
- Railings
- Workout equipment (before and after)
- Dishrags and hand towels
- Gloves
- Shopping carts and baskets

**Practice food safety.**

- Regularly sanitize all food prep and eating surfaces.
- Use separate cutting boards and shopping bags for raw meat and fish.
- Cook foods to the proper internal temperature.
- Refrigerate perishable food within 2 hours of cooking.



# MORE RESOURCES FROM PRECISION NUTRITION

Like the tips above? Here's more info on how to put them into practice, even when you're short on time.

## 1 Take the guesswork out of whole-food eating.

Infographic: [How to fix a broken diet](https://www.precisionnutrition.com/fix-a-broken-diet-infographic)  
<https://www.precisionnutrition.com/fix-a-broken-diet-infographic>

Infographic: [3 steps to prepping \(and loving\) your vegetables](https://www.precisionnutrition.com/dont-like-vegetables-infographic)  
<https://www.precisionnutrition.com/dont-like-vegetables-infographic>

Infographic: [What should I eat?!](https://www.precisionnutrition.com/what-should-i-eat-infographic)  
<https://www.precisionnutrition.com/what-should-i-eat-infographic>

## 2 Figure out your ideal portions.

Infographic: [Portion control guide](https://www.precisionnutrition.com/calorie-control-guide-infographic)  
<https://www.precisionnutrition.com/calorie-control-guide-infographic>

Tool: [The Precision Nutrition Calculator](https://www.precisionnutrition.com/nutrition-calculator)  
<https://www.precisionnutrition.com/nutrition-calculator>

Infographic: [How to create the perfect meal](https://www.precisionnutrition.com/create-the-perfect-meal-infographic)  
<https://www.precisionnutrition.com/create-the-perfect-meal-infographic>

## 3 Sort out gut issues.

Infographic: [Elimination diet](https://www.precisionnutrition.com/food-sensitivities-health-infographic)  
<https://www.precisionnutrition.com/food-sensitivities-health-infographic>

## 4 Try exercising at home.

Infographic: [How to stay in shape when you're busy](https://www.precisionnutrition.com/how-to-stay-in-shape-when-youre-busy-infographic)  
<https://www.precisionnutrition.com/how-to-stay-in-shape-when-youre-busy-infographic>

Videos: [PN's 14-Day At-Home Workout Plan](https://www.precisionnutrition.com/wp-content/uploads/2020/04/14-day-at-home-workout-plan.pdf)  
<https://www.precisionnutrition.com/wp-content/uploads/2020/04/14-day-at-home-workout-plan.pdf>

## 5 Get a handle on booze habits.

Article: [Would I be healthier if I quit drinking?](https://www.precisionnutrition.com/quit-drinking)  
<https://www.precisionnutrition.com/quit-drinking>

## 6 Learn how to sleep better.

Infographic: [The power of sleep](https://www.precisionnutrition.com/power-of-sleep-infographic)  
<https://www.precisionnutrition.com/power-of-sleep-infographic>

## 7 Find your stress balance.

Infographic: [Good stress, bad stress](https://www.precisionnutrition.com/good-stress-bad-stress-infographic)  
<https://www.precisionnutrition.com/good-stress-bad-stress-infographic>

## 8 Stay up-to-date on recommended hygiene practices.

Centers for Disease Control and Prevention Resources:

[Prevent getting sick](https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/index.html)  
<https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/index.html>

[When and how to wash your hands](https://www.cdc.gov/handwashing/when-how-handwashing.html)  
<https://www.cdc.gov/handwashing/when-how-handwashing.html>

[Food safety](https://www.cdc.gov/foodsafety/)  
<https://www.cdc.gov/foodsafety/>

## IF YOU DO GET SICK...

Depending on your illness, you may be able to speed recovery by adjusting your diet and exercise routine.



### EXERCISE

Let your symptoms be your guide.



**Low or moderate-intensity exercise is OK if your symptoms are limited to:**

- Sore throat
- Runny nose
- Coughing
- Congested nose

**Signs you shouldn't exercise:**

- Fever
- Elevated heart rate
- Fatigue or weakness
- Nausea, vomiting, or diarrhea
- Achy muscles or joints
- Enlarged lymph nodes
- Worsening "above the neck" symptoms

# NUTRITION

Nourish yourself with healthy staples.



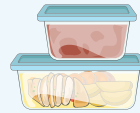
Drink lots of fluids. If you have respiratory symptoms, focus on hot drinks, which help break up mucus in lungs. Add lemon juice for a hit of vitamin C.



Consider a Super Shake if you're not up to making or consuming a full meal.

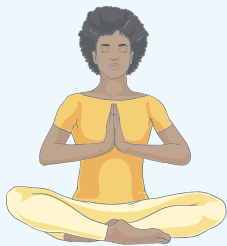


As your appetite allows, focus on immune-supporting whole foods, especially ones with protein, vitamin C, zinc, and omega-3s.



Rely on your frozen batch-cooked meals to optimize nutrition while you recover.

## IF YOU DO WORK OUT...



- ✓ Exercise at home to prevent spreading.
- ✓ Opt for lower-intensity activities like walking, jogging, and yoga.
- ✓ Keep sessions to an hour or less.

## FOCUS ON WHAT YOU CAN CONTROL

To prioritize your immunity (and sanity), it's smart to optimize how you spend your time and energy. Zero in on areas where you have control and can make a real impact.

