

RESEARCH THAT  
MATTERS



# The Calm Zone: 8 Ways to Support a Strong Immune System

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## What is Immunity

The immune system includes a set of body defense against foreign bodies and infectious agents. It is a complex system that can be by dividing it into two parts:

### Innate Immunity

- Present in all live beings, it is able to attack any external or “abnormal” agent. It represents the first barrier of the immune system because it reacts nearly immediately against a pathological threat and transmits information, which mobilizes the other compartment of the system.

### Adaptive Immunity

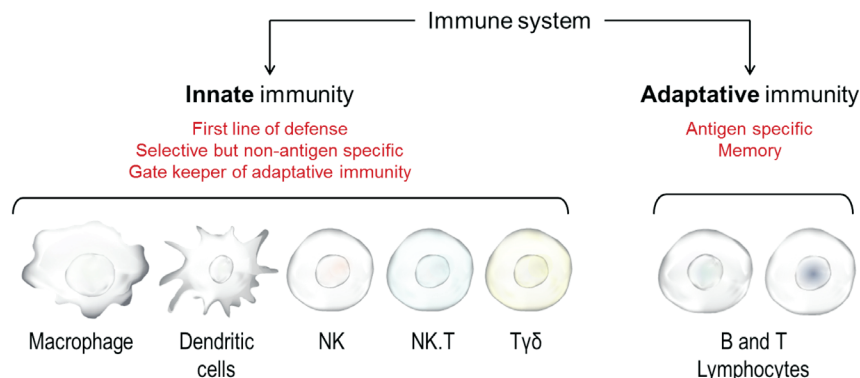
- Needs a few days to develop and is only present in vertebrates. It is more specifically directed against pathogens and it generates “memory.”

## What is “Innate Immunity?”

### Your In-Born Immunity

#### It's Your Body's Fast Acting Response Team

Innate immunity is the natural protection that we are born with and our first line of defense to combat infection. Upon detecting an infection, our innate response acts quickly to try and flush out the invader by producing extra mucus or cranking up the thermostat to blast it with a fever.







# 8 Ways to Support a Strong Immune System



# 1. Eating Better For Health



## **Science Says:**

Deficiencies of zinc, selenium, iron, copper, folic acid, and vitamins A, B6, C, and E alter immune responses.

## **Action Step:**

Keeping eating your fruits and vegetables.

## **Science Source:**

How to boost your immune system. Harvard Health 2018.



## 2. Get Enough Sleep



### Science Says:

Sleep is important for your immunological memory.

Sleep enhances immune defense by using the nervous system to communicate with the immune system.

Long lasting immunological memory comes from sleep initiating the adaptive responses. Immune activation is timed to resting periods.

Sleep allows your body to send energy rich fuels to the immune system.

Sleep cycles are impacted by body posture, physical activity, diet, temperature, and light.

Lack of sleep puts your body into an inflammatory state which has negative effects on immune system function.

### Action Step:

Even with the changes to your daily schedule, maintain a normal sleep cycle and prioritize your rest.

### Science Source:

The brain and immune system are constantly talking to one another and sleep helps regulate this process. Sleep and immune function. European Journal of Physiology. 2012.



### 3. Stay Calm, Don't Stress



#### **Science Says:**

Stress down regulates your immune system.

Chronic stress can activate latent viruses.

The immune system of older people isn't able to respond to stress as well as young people.

Calm can change your immune cells signaling.

Calm can decrease the likelihood of developing disease and reduce the systems of preexisting conditions.

#### **Action Step:**

Reduce your stress by meditating, reading, or using a mindfulness app such as Calm.

#### **Science Source:**

Interactions of innate and adaptive immunity in brain development and function. Current Opinions in Psychology 2015.

## 4. Here Comes The Sun



### **Science Says:**

Vitamin D synthesis is essential to keep your immune system strong. Sunlight helps maintain adequate Vitamin D production.

### **Action Step:**

You don't need a sunburn to get some vitamin D. Try to get 5-15 minutes of sunlight per day. It can help with Vitamin D production and has also been shown to reduce depression.

### **Science Source:**

Sunlight Effects on Immune System: Is There Something Else in addition to UV-Induced Immunosuppression? BioMed Research International 2016.



## 5. Alcohol Won't “Kill” The Virus



### **Science Says:**

Alcohol disrupts your immune system.

Your ability to defend against infections is reduced with alcohol.

Alcohol negativity impacts your innate and adaptive immunity. Microbes in your gut, which are critical for immunity, are damaged by alcohol.

### **Action Step:**

Just because you have time at home doesn't mean you should load up on booze. Monitor your alcohol intake to support your immune system.

### **Science Source:**

Alcohol and the Immune System.

## 6. Your Brain Controls it All



### **Science Says:**

Innate and adaptive immunity are coordinated by your brain and contribute to long term immune memory.

The immune and nervous systems are connected and can control each other.

Your brain and your central nervous system live in your skull and spine.

### **Action Step:**

Movement of your spine and whole body exercise are important to optimize the function of your brain and nervous system.

### **Science Source:**

Interactions of innate and adaptive immunity in brain development and function. Brain Research 2015.



## 7. Find Natural Ways to Reduce Any Aches and Pains



### **Science Says:**

Research shows that continued pain can affect negatively effect the function of your immune system.

The immune system can modulate the nervous system, and vice versa.

### **Action Step:**

If you have aches or pains, try natural methods to find relief. Medication, especially anti-inflammatories can often compromise your immune function!

### **Science Source:**

Immune system involvement in specific pain conditions. *Molecular Pain*. 2017.



## 8. Wash Your Hands



### **Science Says:**

Handwashing can prevent about 20% of respiratory infections.

Antibiotics often are prescribed unnecessarily for these health issues.

Reducing the number of these infections by washing hands frequently helps prevent the overuse of antibiotics the single most important factor leading to antibiotic resistance around the world. Handwashing can also prevent people from getting sick with germs that are already resistant to antibiotics and that can be difficult to treat.

### **Action Step:**

Wash your hands 10-20 times per day for 20 seconds, and don't forget the soap!

### **Science Source:**

Show Me the Science - Why Wash Your Hands? Centers for Disease Control. Brain Research 2015.

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## Do's



1. **Wash your hands like your life depends on it.** Because it does. Not only for Corona, but for the many germs you'll acquire from touching elevator buttons, doorknobs, or somebody else's hand. Or the dirtiest thing on earth: money: Everybody handles it, and nobody washes it. Except for the mob. And me, when I forget it in my pockets.
2. **Stay home if you're sick.** Same with your children.
3. **If you want to chill, go for it:** but practice social distancing and avoid activities that have large crowds. Even if it's your backyard or lanai.
4. **Don't touch your face or pick your nose.** It only contains what it always does, boogers. But if you must, at least wash your hands first. And after.
5. **Keep well hydrated with water or the fluid of your choice. Note:** Corona beer isn't named after the virus, isn't infused with it, and it won't give you the disease. Unless you share the bottle with somebody who's sick.
6. **Remember that, unless you're old and ill, you'll likely recover fully, even if you catch it.** Better odds than for bike crashes and bad investments.
7. **Rest, relax, and live healthily.** Stress, lack of sleep, poor nutrition, and poor hygiene will weaken your immune system. Get enough sleep, eat well, and wash your hands. Again.



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## Don't



1. **Don't eat drink or scratch your face** if you haven't just washed your hands really well with water, soap and enthusiasm. Wash them like the toilet paper was too thin.
2. **Don't go visit grandma in the nursing home if you have the sniffles.** Call her instead.
3. **Avoid the ER for spinal issues.** You'll spend a long time there, get loads of rotten looks, and be around a ton of germs.
4. **Don't call the ER to ask if they're busy.** They're busy. Even if they weren't, they wouldn't give medical advice by phone.
5. **Don't share an ice cream cone, water bottles, or cutlery.** Don't let people taste your food, and don't try theirs, no matter how good it looks.
7. **Don't believe all the stuff you read on social media.** Misinformation has become an infodemic.



Learn More About How Our Bodies  
Work and What We Can Do To  
Take The Best Care of Ourselves.

**Stay Calm and Stay Smart.**

**Let's Get Through This Together!**

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