



## Staying Healthy Through the Foods You Eat: Foods for a Healthy Immune System

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### Introduction

The immune system is the main tool the body has to fight infection and prevent disease. It is made up of immune cells, tissues, and organs that work together to find, fight, and fix infection and injury. (Janeway, 2001) How well the immune system does its job depends on many things including what we choose to eat, how physically active we are, if we get enough sleep, and how we manage the stress in our lives.

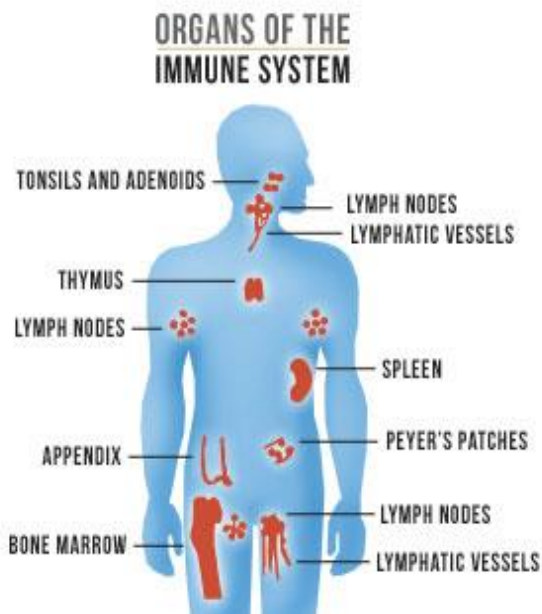


Image provided by the United States Department of Health and Human Services.

Although no one food is a superfood that can cure all ills, the foods we eat day-in and day-out can make a big difference. Knowing what foods to include regularly in our diet to boost the immune system is a valuable piece of information for everyone trying to live a healthy life. Here are some tips for foods to eat regularly for a healthy immune system.

### Eat lots of fruits and vegetables of all colors

Studies show that people who eat a lot of fruits and vegetables tend to be healthier and have fewer chronic diseases. One of the reasons is that fruits and vegetables are filled with immune boosting, inflammation fighting nutrients like vitamins C, E, and A, carotenoids, and phytochemicals. (Calder, 2013; Hosseini, 2018)



So, what is 'a lot' of fruits and vegetables? The recommendation is to eat 5 to 9 servings daily. This may seem like too much if you don't eat many fruits and vegetables now.

**Don't be discouraged!** Start by eating a little more of the fruits and vegetables you like. Include a fruit and/or vegetable as part of all three meals, and choose fruits for your in-between meal snacks. Then try some new ones. Not all fruits and vegetables have the same nutrients, it varies by kind, class, and color. We need to eat a variety to get the full health benefit. For more ideas on how to eat more fruits and vegetables, check out the USDA's [ChooseMyPlate](https://www.choosemyplate.gov) website.

## Eat foods rich in protein daily

Examples of foods that are good sources of protein include eggs, beef, pork, chicken, fish, nuts, beans and lentils. Protein plays an important role in the immune system. Zinc, iron, and selenium are other immune boosting nutrients found in these foods.



(Gombart, 2020) Try to include protein foods in at least two of your daily meals. Choose meats naturally lower in fat,

like chicken and fish more often. Legumes, like beans and lentils, are good sources of protein, and are low in fat and high in fiber. If you don't already eat legumes regularly, try including them 2 – 3 times a week.

## Choose foods with Vitamin D

We think of Vitamin D as something we need for strong bones. That is true, but it also plays an important role in moderating our immune system. (Gombart, 2020) Milk, milk alternatives like soy and almond milk, and 100% juices fortified with

Vitamin D are good foods to choose. Not all milk substitutes are fortified with Vitamin D, so



be sure to check the nutrition facts label. (Consumer Reports, 2016) Fatty fish like salmon, tuna, and mackerel, and whole eggs are other foods with Vitamin D. Try to have two to three servings of a foods with vitamin D daily.

Fermented foods and probiotics for a healthy intestinal tract

About 70% of the cells and tissue of the immune system are in the intestinal tract. A healthy intestinal tract has “good” bacteria living there, that keep intestinal cells healthy, prevent infection by harmful microbes, and maintain the immune system. (Vighi, 2008) By choosing foods that contain good bacteria, we improve the health of our intestinal tract. (Rezacc, 2018)

**Fermented foods** have undergone fermentation by a microorganism like bacteria or yeast. Many foods can be fermented including vegetables, milk, cereals, fruits, and tea. **Probiotics**, are the live microorganisms in foods that provide a health benefit. Some, but not all fermented foods contain probiotics. This is because some have been processed to kill or remove them. (Bell, 2018) Examples of common fermented foods with probiotics include yogurt, kefir, kombucha, sauerkraut, and kimchi.

Try to eat foods with probiotics daily. One of the easiest ways to start is to include low-fat yogurt,

either plain or with fruit to your daily diet. Check the label to make sure that the product indicates “live and active” cultures.

## Additional Resources

- USDA ChooseMyPlate  
<https://www.choosemyplate.gov/eathealthy/fruits>
- Have a Planet: Fruits and Veges for Better Health  
<https://fruitsandveggies.org/fruits-and-veggies/>
- National Dairy Council  
<https://www.nationaldairycouncil.org/>
- The Bean Institute  
<https://beaninstitute.com/>
- The Fermentation Association  
<https://fermentationassociation.org/news/>

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