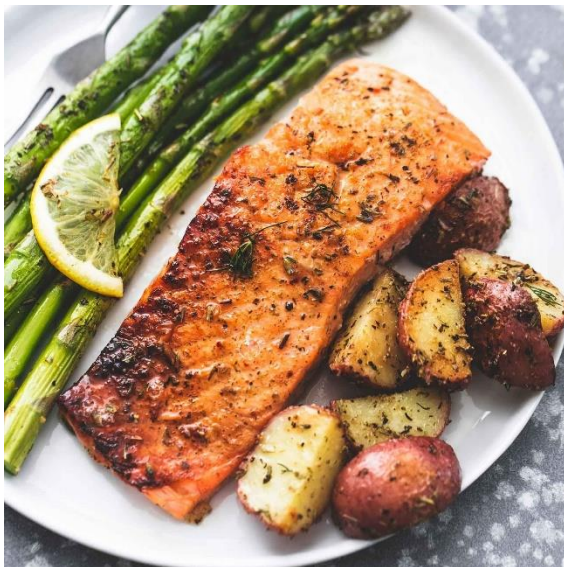


## Nutrition and Immunity (For Fall, 2021)

During flu season, people often seek special foods that are believed to be immunity boosters. Our immune system is designed to protect us from infection and is influenced by our diet among other factors. A balanced diet consists of a range of vitamins and nutrients, combined with a healthy lifestyle of adequate sleep, exercise and low stress. When healthy, you can more effectively fight off infection and maintain a healthy immune system.

Let's take a minute to look at what can depress our immune systems:

- Older age: As we age, our internal organs may become less efficient; immune-related organs produce less immune cells.
- Environmental toxins: Smoke and other particles contributing to air pollution can impair or suppress the normal activity of immune cells.
- Excess weight: Obesity is associated with low-grade inflammation, and this is not desirable.
- Poor diet: Malnutrition or a diet lacking in one or more nutrients can impair the production and activity of immune cells and antibodies.
- Chronic disease: autoimmune and immunodeficiency disorders attack and potentially disable immune cells.
- Chronic mental stress: Stress releases hormones like cortisol that suppress inflammation (inflammation is initially needed to activate immune cells).
- Lack of sleep and rest: Sleep is a time of restoration for the body.



So, what to eat for a healthy immune system? Think of purchasing your food from the outer perimeter of the grocery store for the best, wholesome nutrition: fresh fruits and vegetables, lean cuts of meat, seafood, dry beans, low fat dairy products and whole grains, such as: whole wheat bread, tortillas, and brown rice. Avoid the aisles that are loaded with processed foods. Also, you may want to start adding foods with probiotics and prebiotics. Probiotic foods contain live helpful bacteria and prebiotic foods contain fiber that maintain healthy colonies of bacteria in our gastrointestinal tracts. This area is a major site of immune activity.

- Probiotic foods: kefir, yogurt with live active cultures, fermented vegetables, sauerkraut, kombucha tea, kimchi and miso\*
- Prebiotic foods: garlic, onion, leeks, asparagus, bananas and seaweed.

Take away message for those with sickle cell: Along with drinking enough fluids, eat adequate amounts of lean meats and fish, vegetables, beans, fruits, low fat dairy and whole grains. Explore adding some probiotic and prebiotic foods into your diet.

\*Note: many of the probiotic foods listed are high in sodium, read labels and be aware.



Be well!

**References:**

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

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