



Boost Your Immune System with Food

Your immune system is made up of various cells, enzymes, and chemical messengers, using various organs and tissues. There is immune activity in the lymph nodes, bone marrow, spleen, and thymus, as well as the liver, gastrointestinal tract, skin, tonsils, and adenoids.

The first line of defense begins with your skin, cilia (hairs in nose, ears, and lungs), mucous membranes, stomach acid, mucus, tears, and saliva that attempt to keep pathogens from entering your body. Once invaders get past these points white blood cells (T-cells, B-cells, NK or natural killer cells), macrophages, and chemical messengers respond to the crisis at hand. We have much to learn about this complex system but we do know food plays an important role.

A balance of nutritious foods helps keep you and your immune system strong. Foods contain vitamins, minerals, and powerful plant compounds called phytonutrients that fight everything from pesky bacteria to viruses and cancer cells. You also need protein and essential fats your body cannot make without the help of food. Don't forget high-fiber grains that feed the "good bacteria" in your gut, provide energy, keep blood sugar steady, and keep things moving through your body.

Immune-boosting Basics:

- **Stay hydrated.**

Every cell in your body needs water to work well.

- **Keep your blood sugar steady.**

Imbalances can cause swings in mood, energy levels and hormones that affect your immune system.

- **Eat a variety of plant foods with vitamins, minerals and phytonutrients that support and strengthen your immune system.**

Think bright colored and strong flavored fruits and veggies, nuts, seeds, whole grains, beans and legumes.

- **Eat enough protein.**

Immune cells are made from protein (with the help of other nutrients) but excess protein does not mean more immunity.

- **Focus on “good fats” – olive oil, fish, nuts, seeds (including flax), and avocados.**

Limit animal fat and the trans fats found in many processed foods.

- **Maintain a healthy gut with probiotics or “good bacteria” from yogurt and other cultured or fermented foods (also in supplements).**

The gut is a key organ for immunity. Also feed those “good bugs” with high fiber grains, beans, legumes, fruits and veggies.

Immune-boosting recipe:

Miso Mirin Glazed Salmon

Salmon is one of the best sources of essential fatty acids (EFAs) as well as a good source of vitamins A and B6 and the minerals iron and selenium. EFAs (a.k.a. omega 3s) protect heart, eyes, breast, colon, and help with depression. Miso is a flavorful, salty paste made with fermented soybeans.

This is one of the easiest recipes with many possibilities for variation. Serve the salmon hot or chilled over grains or greens.

Glaze:

Mix equal parts Mirin Japanese cooking wine, miso (light or dark) and fresh squeezed orange (with pulp) or orange juice concentrate (not mixed with water). Add: fresh pressed or minced garlic, fresh grated or ground ginger to taste, and for a spicy kick a bit of Thai Garlic Chili Sauce (this is hot & spicy so add an amount according to your taste for heat and spice). Mix and make a smooth somewhat thick glaze.

Salmon:

Pour over each piece of salmon and place on a pan under the broiler or grill it. Broil or grill salmon until desired doneness (3-5 minutes per side depending upon thickness of fillet).