



How to Develop Immunity

Expert
Reviewed

Three Methods: [Eating to Boost the Immune System](#) [Taking Supplements](#) [Boosting Your Lifestyle](#)

Your body is an incredibly smart machine, well designed to keep you healthy and defend against infection. White blood cells, including natural killer cells and T cells, and others are always at work to keep you safe, but there are things you can do to augment this system.^[1]

Method
1

Eating to Boost the Immune System

- 1 Enjoy your citrus.** Vitamin C is an antioxidant all-star. It is thought to boost your white blood cells, antibodies, and interferon, all to prevent viruses from taking hold.^[2] However, more research is required to verify these claims.^[3]
 - You don't have to buy an expensive juicer. Just eat your citrus fruits and sometimes try to zest the peel for extra vitamin C.
 - Try to get 200 milligrams of vitamin C a day, easily acquired by meeting your daily requirement of at least 6 fruits and vegetables. You can also find vitamin C in broccoli, spinach, bell peppers, strawberries and raspberries, and more.^[4]
 - Spread your vitamin C intake over the day or excess consumed in one go might be excreted into your urine.
- 2 Eat beta carotene.** Beta carotene is an antioxidant precursor to vitamin A found in fruits and vegetables that boosts your natural killer and fighter cells, strengthening immunity and possibly preventing and killing off cancer cells (via increase in the body's natural tumour necrosis factor).^[5]
 - Beta carotene and other carotenoids are found in richly colored orange and yellow fruits and vegetables such as cantaloupe, sweet potato, pumpkin, and carrots. Surprisingly though, it's also in spinach. Eat at least five servings a day of fruits and vegetables to get a suggested minimum of 6 milligrams of beta carotene.^[6]
 - Be moderate about your vitamin intake. Pure vitamin A can be toxic in high doses, but when derived from foods containing beta carotene, the body will only convert as much to vitamin A as it needs.^[7]
- 3 Go for the garlic.** The chemical allicin and sulphur-containing compounds in garlic seem to be the key components to support your health. Garlic boosts white cells, antibodies, and killer cells. The more raw or cooked garlic you eat, the better – research shows that there was a 30% reduction in risk of colon cancer for people who ate raw or cooked vs. garlic supplements.^[8]
 - There is no recommended amount of garlic to eat and you cannot get garlic toxicity. Your breath may suffer, however!
 - Garlic is also an antioxidant and gets rid of those free radicals that promote aging.
- 4 Add some zinc to your diet.** Zinc is a mineral that has immunity boosting properties because it increases the production and strength of your white blood cells and killer cells.^[9]
 - Zinc can be found in foods such as zinc-fortified cereals, beans, beef, dairy, dark meat-turkey, oysters, and crab meat.
 - Too much zinc, over 75 milligrams a day, can actually weaken your immune system. Getting 15-25 milligrams a day is enough.
- 5 Get your selenium.** Selenium is a mineral found in many foods that increases your killer cells and boosts your immune system. Selenium is an even more potent antioxidant when combined with vitamin E.^[10]
 - Fish and seafood, plants, whole grains, brown rice, garlic, and many more foods contain selenium. About 55

micrograms a day is all the selenium you need. Taking too much selenium can actually increase your risk of diabetes and selenium supplements are therefore not advised.^[11]

6 Ensure you get your omega-3 fatty acids. Fatty fish such as salmon and tuna, algae and krill, some plants, and some nut oils are great sources of the omega-3 fatty acids that promote white blood cell activity, heart health, brain functioning, gastrointestinal health, and more.^[12]

- Omega-3 fatty acids are comprised of EPA, DHA, and ALA – three types of acids. EPA and DHA come from fish, krill, and algae, whereas ALA comes from some plants, such as flaxseed, soybeans and pumpkin seeds, and some nuts, such as walnuts. EPA and DHA sources are more readily used in the body, whereas ALA needs to be converted in the body to EPA and DHA and this conversion does not happen easily.^[13]
- Adults are generally recommended to have two servings of fish a week to get their necessary omega-3s. Your doctor may advise you to take more if you have high blood pressure or cholesterol but a general rule is no more than three grams per day. If you get your omega-3 via oils or in supplements, take additional vitamin E to supplement it.^[14]

7 Avoid processed food. Eating natural food has so many advantages, and boosting your immunity is one of them. Avoid nutrient-poor foods such as processed, refined, and fried food full of excess sugar, fat, and salt.^[15]

- Eating natural, non-processed (or minimally processed) foods also increases your bioflavonoids which help the immune system by blocking environmental toxins from parking on your cells. Getting your nine servings of fruits and vegetables a day ensures you get a healthy dose of bioflavonoids.^[16]

8 Breastfeed your baby. Give your baby the best start with immunity passed on directly from you. Called "passive maternal natural immunity," your baby receives a dose of your antibodies, immune factors, and white blood cells every time you breastfeed.^[17]

- Breastfeeding also supports the growth of healthy gut bacteria, also essential in a strong immune system.
- The immunity you pass on to your baby supports the building blocks of lifelong immunity.^[18]

Method
2

Taking Supplements

1 Try to get as many nutrients as possible through your diet. The best way to get **nutrients** is through a **well-balanced** diet. If, however, you are on a restricted diet that prevents you from getting the necessary nutrients, you should talk to your doctor about which supplements may be right for you.

2 Have a multivitamin. Sometimes, you get almost enough of your micronutrients through your diet but need only a little top up. The body is incredibly savvy and will pull what it needs from a multivitamin and excrete the rest as waste.^[19]

- Vitamins A, B2, and B6 might also have roles in supporting the immune system.
- More isn't necessarily better and your body excretes extras, so instead of high doses of many individual vitamins, a multivitamin is often a smart choice.

3 Get your vitamin E. Vitamin E is an antioxidant that stimulates and enhances your immune cells. It also may reverse some of the aging damage done by weakened immune systems.^[20]

- It can be hard to get enough vitamin E through diet (mainly in avocados, seeds, vegetable oils, and grains) and your multivitamin might not have as much as is recommended so take up to 400 milligrams a day in a supplement.

4 Take spirulina. Spirulina is a blue-green algae and one of the world's best superfoods. It comes packed with protein, vitamins, minerals, and nutrients such as B vitamins, beta carotene, vitamin E, iron, zinc, and selenium. As a result, spirulina may promote cell regeneration, fortify your immune system, protect against allergies, and help iron-deficient anemia.^[21]

- Spirulina usually comes in a dried flaked or powdered form that is easy to add to smoothies. Although there is no specific science to recommend a standard dosage, two grams a day is generally suggested.^[22]
- Buy spirulina from a trusted brand, as the algae, if not sourced wisely, could be contaminated with heavy metals and toxins.^[23]

5 Try echinacea. The science verdict is still out on the effectiveness of echinacea. This plant in the aster family is available in supplement format and is often taken to boost the immune system and fight off colds.^[24]

- Exercise caution when taking echinacea. Children under 12 may develop rashes. People who have allergies or take blood thinners or ibuprofen/naproxen may have serious side effects.
- Do not take echinacea on an ongoing daily basis. Take 300 milligrams of powdered extract (or an equivalent tincture or tea) three times a day, only for the first few days of a cold.^[25]

6 Take probiotics. There are hundreds of healthy bacteria naturally living in your gut. Probiotics, such as lactobacillus acidophilus, have been shown to increase immune cells and correct deficiencies.^[26]

- The research on exactly how probiotics help you is still evolving but one theory suggests that, as probiotics help break down food in the intestine, they make the environment unsuitable for “bad” bacteria.^[27]
- Scientists agree that you're doing good for your gut by choosing yogurt and other food products fortified with probiotics.^[28]
- Depending on the source of the probiotics, whether you take a supplement or get them through fortified dairy products, one to 15 billion culture forming units (or CFUs) are suggested to maintain digestive health.^[29]

7 Be careful with DHEA. Some people advocate taking DHEA, which comes from a hormone naturally made in the brain's adrenal gland. Lower levels of DHEA have been found in people with altered immune function but little research has been conducted on the effects of taking DHEA regularly to promote immunity in healthy people.^[30]

- No more than 50 milligrams of DHEA a day is advised.

8 Stay away from silver. Some people advocate the use of colloidal silver, tiny particles of silver – the same kind in your jewellery – floating in a liquid that you drink, inject, or apply to your skin. There is no scientific evidence to support using silver to boost your immune system.^[31]

- Silver is not an essential mineral. There is no need for silver in your body.
- Silver builds up in your body, since your body has no use for it, and can lead to kidney damage and seizures.

Method
3

Boosting Your Lifestyle

1 Get vaccinated. Vaccines help you develop immunity by creating a mock infection in your body, thereby activating antibodies to develop in response. These antibodies then know to recognize similar attacks from real invaders and work to protect you from infections and illnesses in the future.^[32]

- A schedule of vaccination, starting at birth, is comprised of protection against chickenpox, diphtheria, influenza, hepatitis A and B, haemophilus influenzae (or Hib, which causes meningitis), measles, meningococcal diseases, mumps, polio, rotavirus, rubella, tetanus, and whooping cough. Some vaccination schedules now also include human papillomavirus (or HPV).^[33]
- Vaccines that are made from weakened or killed germs do not give you the illness; they only cause a symptom reaction such as redness where you received the shot or a slight fever.
- Vaccines are very safe, do not cause autism, and only rarely cause severe allergic reactions, if you are allergic to eggs for example. The diseases you can get are worse than being vaccinated.^[34]

2 Allow some exposure to germs. Natural exposure to illnesses creates antibody development and these antibodies then act to fight off infection from future exposure to the same illness.^[35]

- Don't over do the hand sanitizer. Antibacterial products actually foster the development of resistant bacteria which can then be able to live despite antibiotic treatment, so antibiotics can't do their job when you really

need them. Wash your hands with regular (non-antibacterial) soap and water.

- Allow your kids to get dirty, pet a friendly dog, or play with a toy that has fallen on the floor. Just wash their hands with regular soap.
- Surprisingly, research has shown that children who had higher levels of exposure to infections had less heart disease later in life.^[36]
- Do not take your children to “chickenpox parties” or similar means of introducing natural immunity. Chickenpox can be very serious and is best prevented via vaccination.^[37]
- Be smart with your immunities. Some people aim to boost their immunity to certain foods, plants, and even snake venom through repeated and increased exposure. This method to acquiring immunity is not safe and can even result in lethal consequences.^[38]

3 **Reduce your stress.** Chronic stress leads to increased blood cortisol levels which depresses your immune system.^[39]

- Learn [how to deal with stress](#) by altering your physical and mental habits, such as meditating, doing sports, eating a balanced diet, or journaling.
- Cognitive behavioural therapy is one of the most effective ways of dealing with stress. Therapists assist by helping you learn to reframe and solve problems, tolerate uncertainty, and increase exposure to anxiety triggers.^[40]
- Studies have shown that putting your feelings into words by journaling helps you deal with your emotions by halting negative feelings and providing an emotional release.^[41]

4 **Laugh.** Laughing alleviates a stressful situation, releases endorphins to invigorate your mind and body, and improves your immune system.^[42]

- Laughter is the best medicine for stress.^[43] Try some laughter therapy yourself. Watch a funny movie that you love or try [laughter yoga](#).

5 **Get in the sun.** There is mounting evidence that Vitamin D not only builds strong bones by helping your body absorb calcium but also builds your immune system.^[44]

- Get 10-15 minutes of smart exposure to sunshine three times a week. Take the necessary precautions to avoid burning in the sun, such as sunblock, hydration, and wearing a hat. The benefits of the vitamin D will still shine through.^[45]
- If you choose to take supplements, 15 micrograms a day is sufficient for adults.^[46]

6 **Get enough sleep.** Your body rests and regenerates at night while you sleep. During sleep, your immune system releases proteins called cytokines. You need these protective proteins when you're stressed or ill so if you're not getting enough sleep, you're not producing enough cytokines, which in turn weakens your strength to fight infections.^[47]

- Most adults need seven to eight hours of sleep a night.

7 **Avoid colon cleansing.** Some people propose that colon cleansing, with water, coffee, or other substances, can lead to a heightened immune system by flushing out toxins. There is no scientific evidence to support this and colon cleansing can in fact be dangerous and unhealthy.^[48]

8 **Receive medical treatment.** If you have a diagnosed immunodeficiency illness, your doctor will recommend IV or injection therapy.^[49]

- Immunoglobulin therapy involves the direct injection or intravenous delivery of antibody proteins to help fight infection. This is usually done in the hospital as an outpatient.
- Stem cell transplantation is a potential permanent cure for life-threatening immunodeficiency diseases. The stem cell donor and recipient must be a close match; even so, the treatment is not a guaranteed success.
- Healthy people simply looking to boost their immune systems do not need medical immunotherapy.

Tips

- Researchers are still trying to understand the very complex workings of the immune system and how various drugs, herbs, and supplements affect its processes. Healthy living is still your best defense.^[50]

Sources and Citations

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