

# Immune

FOUNDATIONS

## PATIENT HANDBOOK



# When was the last time you felt healthy?

Welcome to the Immune Foundations Patient Handbook. This guide was designed to help you better understand the factors affecting the health of your immune system, and in turn, your overall health and wellness. Chronic immune dysfunction affects a growing number of individuals each year; therefore, understanding the underlying factors these diseases share will reveal a manageable plan to improve symptoms and optimize your health.

The development of our immune system begins before we are born. The health of our mother, her diet and lifestyle habits, and infections during pregnancy can have dramatic effects on our immune system development. Starting the day we are born, the immune system must protect us from the myriad of viruses, bacteria and harmful substances in our environment. As we grow, the immune system becomes adept at identifying and responding to invasions by microbes or toxins.

However, the immune system can lose its swift and efficient abilities for a number of reasons. Poor diet, lack of exercise, poor digestion, chronic stress or impaired ability to detoxify harmful substances can all have significant consequences. Chronic immune dysfunction can show in a variety of ways, such as uncontrolled inflammation, increased susceptibility to colds and flus, allergies, and autoimmunity. Although these diseases and symptoms can vary dramatically, the major underlying factors of disease are surprisingly similar.

As the immune system adapts and changes over time, it is helpful to evaluate factors of diet, lifestyle, gastrointestinal health, stress and toxins to uncover the underlying causes for immune dysfunction. By understanding the factors contributing to immune dysfunction, the steps to recovering immune function and optimal health become clear. Working closely with your health care provider, you will develop a proactive plan to optimize immune defenses and build the reserves needed to support health.





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## Supporting the Immune System with Lifestyle Medicine

Lifestyle medicine works to understand the specific causes of dysfunction in a given individual, then uses simple steps to recuperate and thrive. With your health care provider, you will work to uncover the underlying causes of your symptoms and develop a plan to address the major factors contributing to disease. Many people experience marked improvements in longstanding symptoms and disease with simple changes to diet and lifestyle, gastrointestinal health, stress management, and environmental exposures. Your health care provider will help you decide the areas that are most important for your unique situation. Remember, while making changes in one area will produce positive effects, intervening on multiple levels is the best way to reach your peak immune potential.



**Diet &  
Lifestyle**



**Gastrointestinal  
Health**



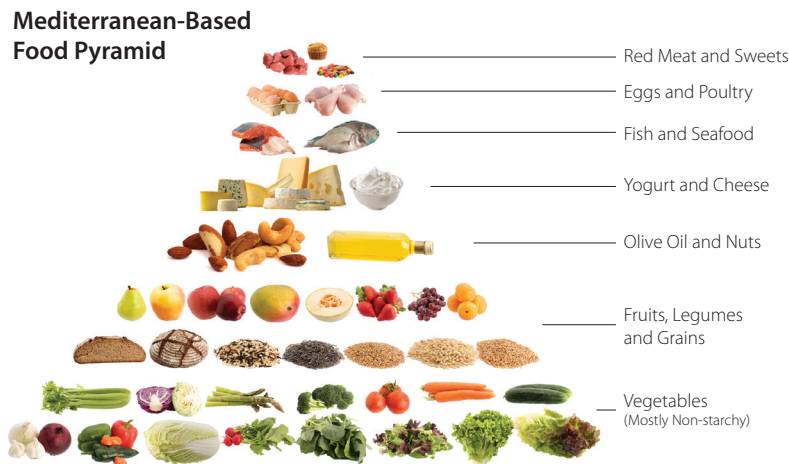
**Toxins &  
Environment**



**Stress  
Management**

## Building an Immune-Boosting Meal

One of the healthiest dietary patterns comes from the Mediterranean region. The Mediterranean diet consists of a high intake of olive oil, nuts, seeds, fish, plant proteins (legumes and lentils), fruits, vegetables, herbs and spices, moderate consumption of wine, and dairy (mostly in the form of yogurt and cheese). The Mediterranean diet does not emphasize meat consumption and is low in refined carbohydrates, sugars and processed foods. Following a Mediterranean dietary pattern is a simple way to make healthy choices and avoid harmful foods that can burden the immune system. This will also help ensure the foods you consume consist of the most beneficial macronutrients (fats, proteins, carbohydrates) and micronutrients (vitamins, minerals, antioxidants). Additional benefits of the Mediterranean lifestyle include eating meals in a relaxed, family-style atmosphere. Rather than rushing through meals or grabbing food on the go, mealtime is a time to slow down, laugh and reconnect.



## Elimination Diets

Your health care provider may have you test your tolerance for certain foods through an **elimination diet**. Various foods are known to trigger reactions in susceptible individuals. Reactions can range from immediate emergence of hives to delayed onset of headaches and joint pains. These reactions can wreak havoc on the immune system by heightening the reactivity of the immune system and promoting inflammation. Some of the most common foods to trigger reactions include wheat, dairy, corn, soy, and eggs. An elimination diet will remove suspected reactive foods for three or more weeks, then carefully reintroduce foods and monitor for any adverse reactions.





## Lifestyle Factors in Immune Health

Beyond diet, practicing healthy lifestyle behaviors is crucial to maintaining optimal immune function. Regular exercise and adequate sleep are key lifestyle factors for optimal health.

### Sleep

Restful sleep is critical to a healthy immune system. Our bodies use sleep as a restorative time when tissues are repaired and digestion is active. Many people do not achieve the recommended six to eight hours of sleep per night. Healthy sleep patterns can be reinforced with the following steps:

1. Create a bedtime ritual: Consider a warm bath with Epsom salts before bed, or simply a regular pattern of washing your face to prepare for bed. The body begins to remember these habits. Going to sleep and waking up at the same time each day also has a significant impact on developing restful sleep patterns.
2. Avoid caffeine after 3 p.m. and alcohol after dinner.
3. Minimize use of electronic devices for two hours before bed.
4. Sleep worry-free by making a list of relevant tasks to tackle the next day.
5. Keep the bedroom dark, cool and quiet.
6. Calcium and magnesium used before bed can be helpful to relax the body and promote release of melatonin for deeper sleep.

## Stress Management Tips

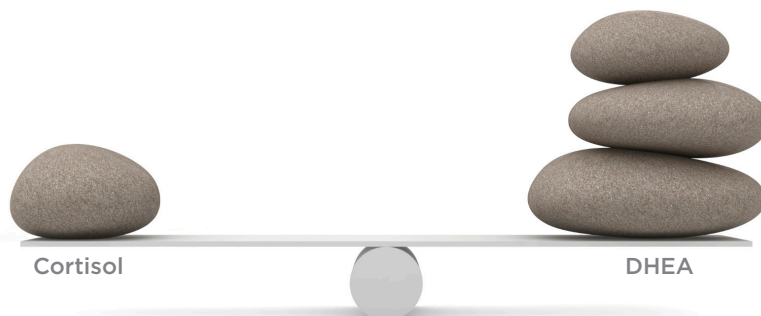
1. Identify stressors as well as steps you can take to change or eliminate these factors.
2. Keep a thought and gratitude journal. Reframe negative thoughts and focus on those things for which you are grateful.
3. Try yoga or Tai chi. These methodic movement and breathing practices have been utilized for centuries to calm and focus the mind.
4. Schedule adequate rest and down time.
5. Build relationships & avoid isolation when stress is high. Connecting with friends and family can offer emotional support.
5. Exercise regularly, ideally in nature. Aerobic exercise releases endorphins in the brain to improve mood. Getting exposure to fresh air and sunlight can also help elevate feelings of well-being.
6. Consider supplementing with magnesium, fish oil, vitamin D or botanicals such as Eleuthero or ashwagandha, which have been shown to support chronic stress, reduce inflammation, and buffer feelings of anxiety.
7. Most importantly, seek professional counseling if your stress level has become overwhelming or unmanageable.  
***Don't be afraid to ask for help.***



## Stress and Immune Function

Stress, in its most basic form, is a force, pressure or weight. Although our bodies are equipped to handle short-term stressors, chronic stress over long periods of time taxes the brain, body and health to a great degree. Excessive stress can significantly impede the body's ability to heal and regenerate. Recurring infections, slow wound healing, or becoming more susceptible to a cold or the flu can be a result of high stress levels that deplete immune reserves.

Your body responds to stress through its stress-response system, the hypothalamic-pituitary-adrenal (HPA) axis. The HPA axis produces specific hormones that help counteract the effects of short-term stress. Under normal conditions, cortisol is released in response to stress for a quick burst of energy, and to mobilize blood sugar and reduce inflammation. DHEA acts to counter-balance cortisol and binds receptors in the brain to promote relaxation and decreased pain. Prolonged stress can create an imbalance of cortisol and DHEA, and the long-term effects of cortisol can wreak havoc on the body.





## Cleaning Up Toxins and Allergens

Those suffering from allergies, asthma, autoimmunity or other chronic immune dysfunction should be diligent in avoiding toxins whenever possible.

1. **Clean Your Food.** Choose organic whenever possible. Refer to the Dirty Dozen™ on page 4 to prioritize fruits and vegetables to buy organic, but always wash fruits and vegetables thoroughly to remove pesticide residues (soaking produce in a bowl of water with ½ cup vinegar helps cleanse the skins). Rely on organic, wild or pastured meats, poultry, eggs, and fish as well.
2. **Clean Your Air.** Use a HEPA air filter, especially in the bedroom, to filter air of dust, dander, and allergens. Avoid using synthetic fragrances such as those in spray air fresheners and candles as these can act as respiratory irritants. Natural fragrances, such as essential oils, can be diffused for a pleasant fresh scent.
3. **Clean Your Home.** Avoid harsh household cleaners and detergents. Those with severe allergies may consider limiting use of carpet and upholstery in the home, as dander, dust and dust mites can settle in cloth. If your house has a history of water damage, be sure to have the house fully inspected for mold.
4. **Clean Your Skin.** Skin and personal care products are often laden with undesirable chemicals and synthetic fragrances. Especially in those with sensitive skin, avoid synthetic fragrances in laundry products, shampoos, body washes and lotions.
5. **Clean Your Body.** Since we all must live, breathe, work and play in our environment, maintaining the ability to detoxify and remove harmful substances is essential. A nutrient dense diet, ample water intake, and regular exercise are vital steps in detoxing. Infrared sauna may also be considered to amplify detox capacity.





# Lifestyle Matrix

RESOURCE CENTER

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These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure, or prevent any disease.