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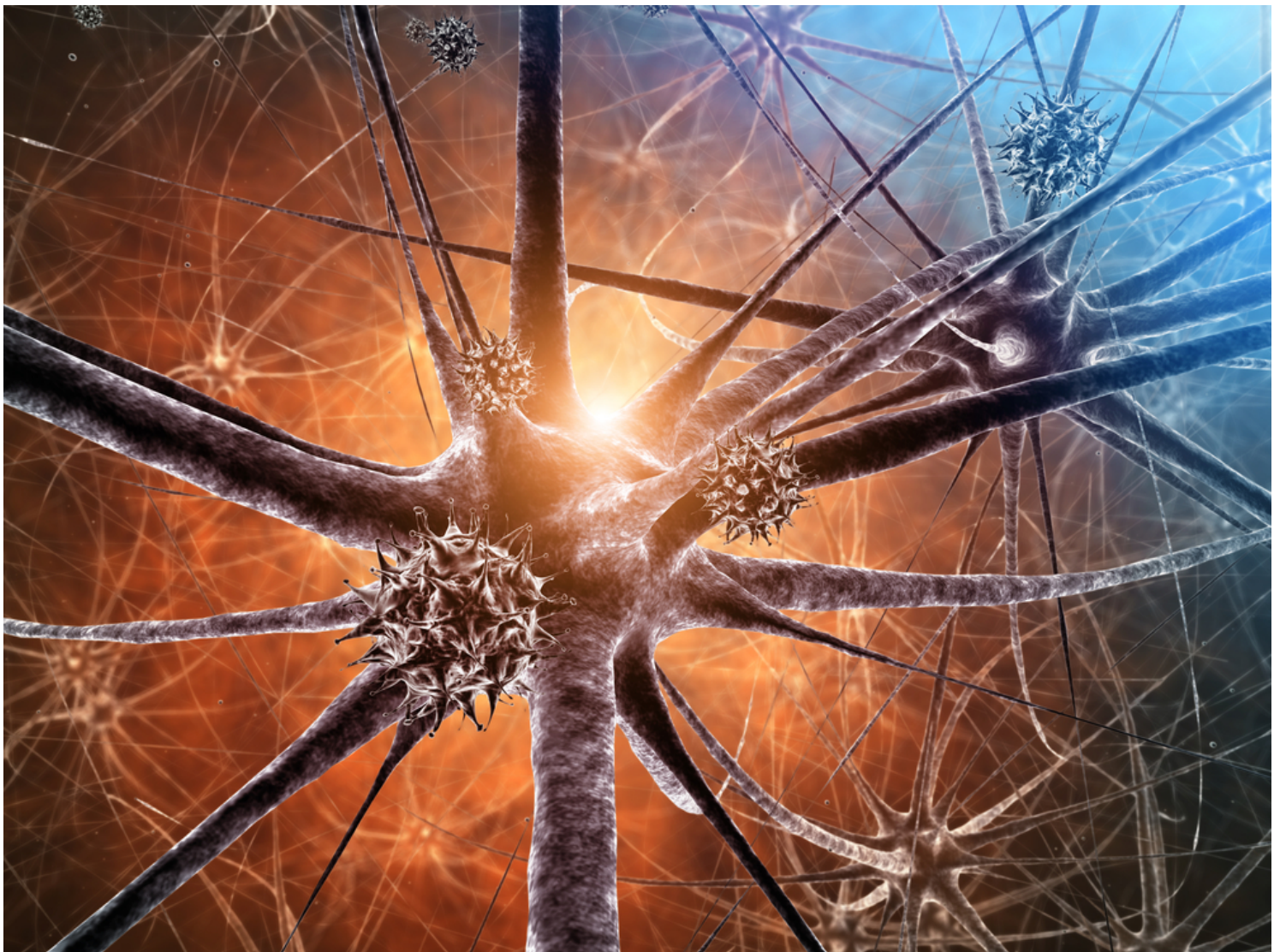
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10 Ways to Avoid A Cytokine Storm

These days, the importance of healthy immunity cannot be overstated. Don't know what a cytokine storm is? Learn what it is, and how to avoid it.

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It probably seems like a good idea to make your immune system as strong as possible (<https://www.dreliaz.org>) (<https://www.dreliaz.org/wellness/modified-citrus-pectin-guide-page/>). It makes sense that this would be the best way to ward off infections and disease. But the immune system can actually *overreact* and end up harming the body. One of the ways it can do this is with a cytokine storm. (1)

Cytokines are proteins that immune system cells secrete. They use them for intercellular communication. When they're working normally, cytokines have important roles to play in helping the immune system function well. (1)

But sometimes, the immune system can overreact and release too many cytokines into the blood at once. This is called a cytokine storm, and it can have severe effects on the health and wellbeing of the body. The intense inflammatory response caused by a cytokine storm can lead to organ damage, multiple organ failure, and even death. (1, 2)

So how can one stay healthy while warding off a cytokine storm? Read on to learn 10 ways to avoid a cytokine storm.

1. Don't "Boost" the Immune System (<https://www.dreliaz.org/wellness/modified-citrus-pectin-guide-page/>)

You've likely read about the importance of boosting the immune system more times than you can count. And at first glance, it does seem to make sense that a person would want to strengthen their immune system to avoid getting sick. But this practice can have unintended consequences. (3)

The immune system's job is to seek out and destroy invading pathogens that are trying to harm the body. But at times, the immune system may over-respond to a real or perceived threat with a cytokine storm, potentially causing long-term damage. This is why it's important not to boost the immune system. It may go into overdrive and accidentally cause a cytokine storm. (1, 3)

2. Instead, Balance the Immune System

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Instead of boosting the immune system, focus on keeping it balanced. A balanced immune system works in harmony with the rest of the body so that it doesn't over- or underreact to invading pathogens. (3, 4)

While balancing the immune system might at first seem like a scientific equation that you don't know the answer to, it actually just involves the same healthy lifestyle choices that prevent most major health issues. Balancing the immune system is all about preventing environmental assault factors so that it can focus on fighting pathogens. Check out tips 3 through 6 to learn how to balance the immune system with healthy lifestyle choices and avoid a cytokine storm. (4)

3. Lower Stress

Stress causes inflammation in the body and weakens the immune system, so it's important to keep stress in check in order to balance the immune system. While it's not possible to eliminate every stressor in your life, they often can be managed. (4)

The first step to managing stressors is being aware of what they are. Try journaling or going on a walk alone (leave the smartphone at home) to allow time to consider and recognize what is causing stress. It's difficult to manage a stressor if we don't know what it is, so this first step is key. (4)

Once the potential stressors have been identified, find healthy ways to deal with them. Try meditating or setting a timer on your phone a few times a day to pause and do deep breathing exercises. Practices like yoga and tai chi are productive and active ways to manage stressors. And talking to a trusted friend or to a therapist are great tools to effectively manage stressors long-term. (4)

4. Exercise Regularly

Another way to balance the immune system and avoid a cytokine storm is to exercise regularly. Adults should get at least 150 minutes of moderate exercise per week, which means for example, 25 minutes for six days a week or 30 minutes for five days a week. (4)

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Exercise can look like a wide variety of activities. If you enjoy playing games, try breaking out a soccer ball or badminton set with some friends or your kids. (<https://www.dreliaz.org>)



Gardening activities like weeding can also be considered moderate exercise. And walking, cycling, and swimming are all low-impact ways to move your body and contribute to a healthy immune system. (4)

5. Eat a Healthy Diet

Nourishing the body with a healthy diet is one of the best ways to keep a balanced immune system. Make sure to eat plenty of fruits and vegetables, cook meat properly, and don't consume too many fried foods. (4)

6. Get Enough Sleep

A tired body often means a tired immune system. Most adults need seven to nine hours of sleep per night in order to function well and allow the body to properly fight off disease. If you have trouble falling asleep, try winding down and shutting off screens at least half an hour before bedtime. Block out excess light with heavy curtains, and use a relaxation technique like a body scan to help you unwind before bed. (4)

7. Take Modified Citrus Pectin (<https://www.dreliaz.org/wellness/modified-citrus-pectin-guide-page/>)

Modified citrus pectin (<https://www.dreliaz.org/formulas/modified-citrus-pectin/>) is a supplement that may help to avoid a cytokine storm. Modified citrus pectin is able to bind galectin-3, a protein that has been shown to be involved in the hyperinflammatory response that causes cytokine storms. Galectin-3 also has a key role in the fibrosis that causes damage to organ tissues during cytokine storms. (5, 6)

When modified citrus pectin binds galectin-3, it keeps it from getting out of control. It also can control fibrosis of the liver and kidneys, keeping those organs from being damaged long-term. A specific formulation of modified citrus pectin

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(<https://www.dreliaz.org/formulas/modified-citrus-pectin/>) has been shown to be easily absorbed into the bloodstream so it can block both galectin-3 and cytokine storms. (5)

8. Avoid Foods that Boost the Immune System

When avoiding “boosting the immune system” to keep a cytokine storm from occurring, it’s important to pay attention to the foods you’re consuming. Some foods and herbs are known to boost the immune system and therefore should be avoided or not overly consumed: (3, 7)

- elderberry
- citrus
- red bell peppers
- broccoli
- papaya
- kiwi

9. Eat Anti-Inflammatory Foods and Herbs

On the other hand, some foods and herbs can help prevent inflammation in the body. Try eating these anti-inflammatory foods to help avoid a cytokine storm: (8)

- turmeric
- hot pepper
- thyme
- oregano
- seafood
- fish oil
- lemongrass
- rosemary
- sage
- pomegranate

10. Know the Symptoms of a Cytokine Storm

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In the event that a cytokine storm happens, it's important to know the symptoms.

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This will help with deciding if it's time to visit a doctor. The faster a patient is able to seek medical help for a cytokine storm, the less likely their body will sustain lasting damage. The symptoms of a cytokine storm include: (1, 2)

- high fever
- inflammation (redness and swelling)
- rash
- severe fatigue
- severe nausea
- altered mental status
- increased heart rate
- abnormally rapid breathing
- low blood pressure
- swollen lymph glands
- enlarged organs, especially the liver and spleen

Avoid a cytokine storm! Follow these tips and keep the immune system in balance, the way nature intended.

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