

# Your Guide to Fighting Chronic **STRESS**





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# Your Guide to Fighting Chronic Stress

The modern world is all go-go-go. Between work, family, friends and other obligations, it seems like we never have the time to stop and take care of our own needs. Unfortunately, that can be a recipe for disaster. Chronic stress is a silent health threat we all need to take seriously.





## What is Chronic Stress and the Role of Cortisol?

Stress is a normal part of life. In fact, we humans are built to react to a certain amount of it as a survival mechanism. It helped us escape natural predators in our earlier days and any number of unnatural threats in modern life.

With acute stress, a stressor triggers a cascade of reactions that ultimately lead to the release of the stress hormone known as cortisol. The hormone then influences many systems in the

body to help respond to the stressor; these systems' reactions are better known as the fight-or-flight response.

Once the stressor is removed, cortisol decreases and other hormones and systems kick in to restore balance. In most cases, you're no worse for wear. The real problem with stress arises when it's a continual threat.

While we're built to respond to short-term stresses, there are potential health repercussions to constant low-level stress—which can range from everyday irritants like morning traffic to

more significant ongoing problems like financial worries, or unhealthy relationship dynamics.

Since we're all unique, we all have a different response to chronic stress. Gender, age, genetics and personal habits all play a role.<sup>1</sup>

But for all of us, chronic stressors can fester on the surface and in our subconscious. In this case, cortisol levels may remain at higher than normal levels for long stretches.<sup>1,2</sup> In fact, there's even evidence that chronic stress can alter the structure of our brains.<sup>3</sup>



## Stress and the Circadian Rhythm

You may have heard of the circadian rhythm in reference to your sleep cycle. In fact, it is an ebb and flow of many physiological processes and it plays a major role in your overall health, influencing your blood pressure and metabolism.

Chronic stress may result in either excess cortisol levels in the evening or blunted levels in the morning.<sup>4</sup> These abnormal patterns may be responsible for the negative physical and mental health consequences of stress due to a disruption of your circadian rhythm.<sup>5</sup>

## Stress and Inflammation

Another important way chronic stress affects long-term health is uncontrolled inflammation. It can lead to a compromised immune system and reduced protection against serious health issues, such as diabetes, heart disease, autoimmune disorders and cancer.<sup>6,7</sup>

## Stress and the Microbiome

Trillions of microorganisms reside in your intestines. The microbiome plays an important role in digestion, immune health and so much more... including modulating your stress response. Conditions related to chronic stress have been shown to alter the composition of these vital micro-organisms in the gut.



## How to Manage Stress

You have the power to ensure that stress doesn't overwhelm your life. All it takes is a few adjustments to your lifestyle to be sure you make time for some important self-care.



## Meditation

Meditation keeps growing in popularity... probably because people are seeing results! It also doesn't hurt that there's science to back up its purported benefits.

A review of 45 studies found that meditation lowers cortisol output, blood pressure, heart rate, triglycerides and inflammatory marker levels, indicating its potential for protecting cardiovascular health.<sup>8</sup> All it takes is a few minutes a day to feel palpable results.

## Exercise

The benefits of exercise go well beyond weight management and building muscle. For instance, it appears to stimulate anti-inflammatory and anti-stress reactions in the body.<sup>9</sup> Exercise is also associated with better sleep and less anxiety and depression.<sup>10-12</sup> It's even been linked with better recovery from illness and surgery.<sup>13</sup>

## Dietary Choices

As the saying goes, you are what you eat. If you make the right food choices, that can make you less stressed! Here are a few of the ways you can tweak your diet to improve your psychological well-being:



**Work in more plant-based foods.** If you eat more plant-based food each day... you just might have a shinier disposition. In fact, there's some science to back up that glass-half-full outlook.

A study of young adults showed that increasing fruit and vegetable intake by two servings per day for two weeks resulted in enhanced vitality, motivation and a flourishing outlook.<sup>14</sup>

The Mediterranean diet is known not only for ample amounts of fish, but also olive oil, whole grains, fruits, vegetables, nuts and seeds. This way of eating may improve your stress response. It may also mitigate the effects of stress by reducing systemic inflammation and the risk of many chronic health problems.<sup>15-17</sup>

**Eat breakfast regularly.** If you're a busy body, or just don't have an appetite in the morning, skipping breakfast may feel like second nature. But if you make breakfast part of your morning routine, it may lead to lower levels of perceived stress and better cognitive function.<sup>18</sup>

**Minimize caffeine and alcohol intake.** Too much alcohol raises cortisol levels. And long-term use can disrupt normal stress response.<sup>19-21</sup> You might feel a temporary boost from your morning joe, but be aware that caffeine may also activate your body's stress response.<sup>22</sup>

This may sound like a non-starter to people who need a pick-me-up before work and a drink to wind down in the evening. If this sounds like you, don't despair! It's all about moderation.

### Adaptogenic Nutrients

Adaptogens are herbs that help support the body's ability to handle stressful conditions. They do so by regulating biological networks to support homeostasis. These herbs can relieve fatigue, improve cognitive function and mood and support the immune system.

**Magnolia and phellodendron** - This combination can reduce stress and stress-related weight gain.

**Ashwagandha** - This ancient medicinal herb has been shown to relieve stress, improve stress-related eating behaviors and promote weight loss.

**Schisandra** - It's been used for centuries to treat

depression, anxiety, insomnia and issues related to fatigue and weakness.<sup>23,24</sup>

### Fruit and Tea

**Lychee fruit with green tea polyphenols** - This combo has been shown to promote a healthy stress response and support already-healthy cortisol levels.<sup>25</sup>

**Theanine (amino acid from tea)** - There are a number of studies that show tea and theanine reduce perceived stress and physiologic markers of the stress response, including blood pressure, heart rate, cortisol levels and patterns of brain activity.<sup>26</sup>

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## Additional nutrients that fight stress:

B vitamins  
Fish oil  
Tryptophan  
Probiotics

Melatonin  
Saffron  
Lemon balm



### Have a health question?

We have the answers... You can speak with a Life Extension Wellness Specialist toll-free at 1-800-226-2370. This informational service is staffed by doctors, nurses and other health practitioners and is free.



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