

Long COVID:  
**Understanding the  
Post-Pandemic  
Health Issues  
in America**



Presented by



# Introduction:

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Although the pandemic is officially over, there are still several post-pandemic factors affecting the health of Americans.

Long COVID is the name researchers have given the most prevalent of these factors. According to the Centers for Disease Control (CDC) Long COVID can include a wide range of ongoing health problems; these conditions can last weeks, months, or even years.<sup>[1]</sup>

At least 65 million individuals worldwide are estimated to have Long COVID, with cases increasing daily.<sup>[2]</sup>



# What is Long COVID?

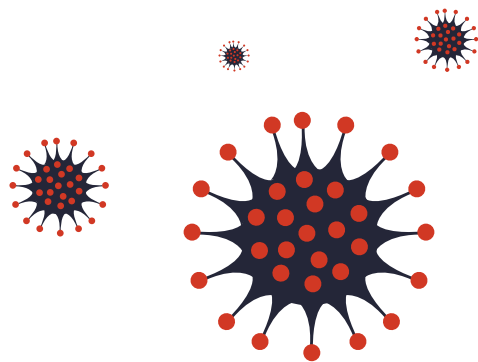
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Simply put, it's a variety of symptoms in any combination or individually, that linger after being exposed to the COVID virus. <sup>[3]</sup>

Patients with Long COVID report prolonged, multisystem involvement and significant disability. By seven months, many patients have not yet recovered and have not returned to previous levels of work. They continue to experience significant symptom burden. <sup>[4]</sup>

The strange thing is that you can get Long COVID even though you were not sick with the virus. In some cases, a person with Long COVID may not have tested positive for the virus, or even known they were exposed.

Some Long COVID sufferers only contact with the virus is from the vaccination. The National Institutes of Health (NIH) reports that getting vaccinated only lowers your chance of getting Long COVID by 15 percent. <sup>[5]</sup>



# Spike Protein & Long COVID

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The coronavirus has one very important component – a spike protein. It's the key player responsible for how the virus enters your body's cells.

The spike protein is like a tiny, spiky club on the surface of the virus. It attaches to receptors on your cells, like a lock and key. Once it's in, it tricks your cells into letting the virus inside, where it starts multiplying and causing all sorts of trouble.

Researchers believe that spike protein may be a major contributing factor in Long COVID. <sup>[5]</sup>

## How does this work?

When your immune system fights off the virus, it can leave behind fragments of the spike protein. These lingering bits can confuse your immune system, causing it to go haywire.

Your immune system might attack not only the spike protein but also your own healthy cells. This “friendly fire” can lead to inflammation, fatigue, and a host of other symptoms that define Long COVID.

It's like your body's soldiers going rogue, causing chaos long after the battle is over.

In a nutshell, the spike protein is the sneaky entry ticket for the coronavirus, and its remnants might be the culprits behind Long COVID's mysterious and long-lasting symptoms.

# Long COVID Symptoms

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The most troubling part of Long COVID is that there is a wide variety of possible symptoms. This makes it hard to diagnose. According to the CDC, Long COVID includes more than 200 symptoms that can impact multiple organ systems. <sup>[6]</sup>

## General symptoms

- Tiredness or fatigue that interferes with daily life
- Symptoms that get worse after physical or mental effort
- Fever

## Respiratory and heart symptoms

- Difficulty breathing or shortness of breath
- Cough
- Chest pain
- Fast-beating or pounding heart (also known as heart palpitations)

## Neurological symptoms

- Difficulty thinking or concentrating (sometimes referred to as “brain fog”)
- Headaches
- Sleep problems
- Dizziness when you stand up (lightheadedness)
- Pins-and-needles feelings
- Change in smell or taste
- Depression or anxiety

## Digestive symptoms

- Diarrhea
- Stomach pain

## Other symptoms

- Joint or muscle pain
- Rash
- Changes in menstrual cycles



# How Do You Know if You're Affected by Long COVID?

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Because the symptoms are like many other illnesses, Long COVID can be a puzzling and often debilitating condition. It can affect you long after you are exposed to the virus and have spike proteins introduced to your system. <sup>[7]</sup>

## **Here are some clues that you might have Long COVID:**

- 1. Persistence of Symptoms:** One of the primary indicators of Long COVID is the persistence of symptoms for weeks or even months after the initial exposure to the COVID-19 virus. Common symptoms include fatigue, shortness of breath, chest pain, joint pain, and cognitive issues. These symptoms can significantly impact one's daily life and should not be dismissed as mere post-viral fatigue.
- 2. Variety of Symptoms:** Long COVID is often characterized by a wide range of symptoms that can affect different systems in the body. These may include respiratory, cardiovascular, neurological, gastrointestinal, and psychological symptoms. The combination of symptoms can vary from person to person.
- 3. Diagnosis by Exclusion:** sometimes figuring this out takes a while and requires a process of elimination. If tests show no other underlying medical condition, and you've had exposure to the virus in some form, Long COVID becomes a more likely answer.

**4. Impact on Quality of Life:** Long COVID can have a profound impact on your quality of life, affecting your ability to work, exercise, socialize, and perform everyday tasks. If you notice that your life has been significantly disrupted by persistent symptoms, it's crucial to seek effective help.

If you suspect you have Long COVID, it's essential to consult a knowledgeable healthcare provider who is familiar with this condition and how to handle it.

They can help manage your symptoms, offer guidance on effective remedies, and provide support.

Research on Long COVID is ongoing, and healthcare professionals are continually learning more about its underlying mechanisms and potential solutions. Staying informed and seeking effective help is crucial if you think you have this condition.

# Natural Solutions for COVID Long-Haulers

## Know Your Options

Because Long COVID has so many different symptoms, and it can manifest differently for everyone, knowing what natural solutions to choose can be tricky.

## Nutrition and Diet

Since the pandemic, scientists, doctors, and even government officials have made it clear that nutrition is key to a healthy immune system. The Food is Medicine movement [8] is gaining support from many prestigious institutions, including the federal government.

What you eat is a core factor in addressing Long COVID. Nutrients such as vitamins (e.g., vitamin C, vitamin D), minerals (e.g., zinc, selenium), and antioxidants found in fruits and vegetables provide building blocks for the immune system. A well-balanced diet ensures that the immune system can effectively recognize and combat pathogens, including bacteria, viruses, and other invaders such as spike proteins.



On the flip side, a poor diet, high in sugar, processed foods, and unhealthy fats, can weaken the immune system's defenses, making the body more susceptible to infections.

Therefore, a nutritious diet that has the right components for your body's needs plays a crucial role in bolstering your natural defense mechanisms and promoting overall health and well-being.

## Natural Supplements

A study published in the Journal of Molecular Sciences [9] lists these supplements as useful for people with Long Covid:

Echinacea

Andrographis

Artemesia

Resveratrol

Turmeric with Black Pepper

Prebiotics and probiotics

## Personalized Nutrition Plans

Studies have shown conclusively that every person's body is unique and responds differently to food, vitamins, and minerals. [10] This is why fad diets don't work for everyone and taking random supplements is often not successful.

The most successful approach is to work with a Nutrition Response Testing® practitioner. They can test you to find out exactly which symptoms to target first, and what nutrients your body needs to help it heal.

Once they have the roadmap of the nutrients you need, they will put together a clinically- designed nutrition plan that addresses your specific situation. They also have access to specialized training and nutritional supplements to effectively address Long COVID.

# Conclusion

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Understanding the role of spike proteins in COVID-19 and their potential connection to Long COVID sheds light on the complexities of this post-pandemic syndrome. The spike protein serves as the gateway for the virus, highlighting its significance in both infection and vaccination.

As we navigate the challenges posed by Long COVID, promising natural solutions emerge. Prebiotics and probiotics show potential in restoring gut health, while certain supplements, like vitamin C and B and minerals, offer support for fatigue and cognitive symptoms.

It's imperative that we continue to research and harness the power of nature in our quest to alleviate the burdens of Long COVID, offering hope and relief to those affected by this puzzling condition.

However, instead of approaching your Long COVID symptoms with guesswork, work with a holistic practitioner who is knowledgeable about Long COVID. They can analyze your body to find out exactly which foods and supplements will help you heal. Contact your Nutrition Response Testing practitioner for help with your health challenges.

# References

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