

# Genetic Lifehacks

Learn. Experiment. Optimize.

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Hi there,

At the beginning of the summer, I posted a survey to see what members were most interested in reading about. Long Covid and spike protein were at the top of the list.

The US GAO estimates ~8 - 23 million people in the US have long Covid. That was a startling statistic to see.[\[ref\]](#)

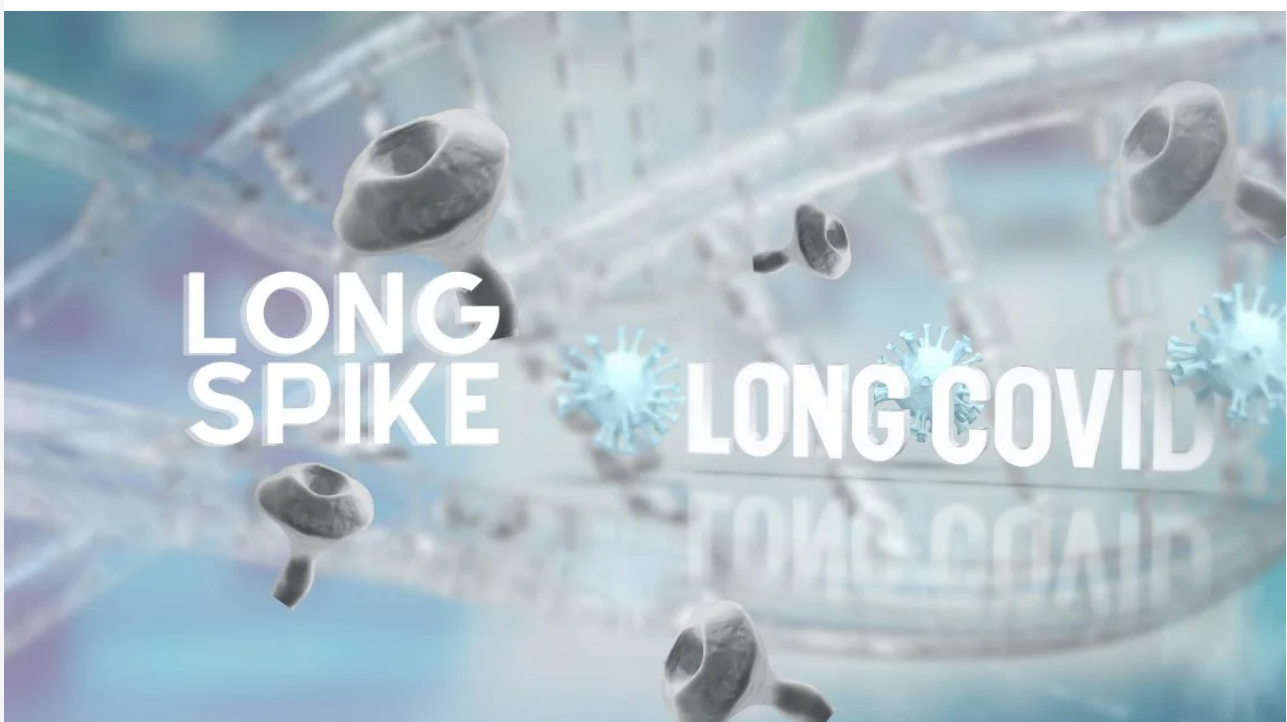
This week's article is an in-depth dive into the research studies on long Covid and issues from the spike protein.

If you know of someone still dealing with the lingering effects of Covid or the spike protein, I would encourage you to share the article with them. I doubt the article will get much traction via search results or social media.

Finally, I wanted to give everyone a 'heads up' that I'm going to be raising my membership prices next week. This will NOT affect any current members - you are locked in at the price when you sign up. If you have friends or family who have been thinking about joining, you may want to give them the inside scoop that the time to join is now.

Gratefully yours,

~ Debbie Moon



New article!

# Long Spike

I recently surveyed Genetic Lifehacks members to see what they were most interested in learning about. A top answer was long Covid and vaccine-related issues. In combing through the research on both topics, there is a lot of overlap in symptoms and possible mechanisms of action. Thus, I've combined the two topics into one article.

Writing this article reminded me repeatedly that research seems to happen in a silo. The specialists seem to look only at how their specialty applies. For example:

- Immunologists point to immune system abnormalities.
- Mast cell researchers claim that MCAS explains everything.
- Coagulation experts point to clotting dysregulation as the problem.
- Imaging specialists point to changes in fMRI pictures of the brain.
- And gut microbiome docs find that everything is due to the gut.

My goal is to present the research and then give you genetic links to why you may be more susceptible to certain outcomes. While many of the research silos seem separate, your genetic susceptibility may hold the key to determining what is causing the root of your health problems.

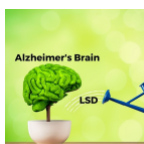
Heads up: This is an in-depth article, which is a nice way of saying it turned out to be, well, kinda long. Bookmark it, email it to yourself – you may want to read this one in pieces.

[Read the article, check your genes...](#)

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## Articles that no one is reading...

...but they should be. Don't miss out on these interesting and important articles.



### **Serotonin 2A Receptor**

This article digs into current research on the



### **Ashwagandha**

Research and clinical trials -- the specific

serotonin 2A receptor  
and psychedelics  
response – with a focus  
on Alzheimer's.

benefits of  
ashwagandha.



### **Building Up Iron**

Everyone needs to check  
to see if they carry a  
hemochromatosis  
mutation.



### **Chronic inflammation**

Chronic inflammation is  
at the heart of so many  
of the conditions that  
plague us.

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### **What I've been reading:**

#### 1) [PFOS, the "forever chemical", linked to liver cancer.](#)

In a large study with over 200,000 participants in LA and Hawaii, the researchers found that high levels of PFOS in blood samples were linked to a much greater risk of getting liver cancer. People who were in the top 10% of PFOS levels were at a 4.5-fold greater risk of liver cancer.

Importantly, the researchers were also able to determine that PFOS causes damage to the liver by disrupting glucose metabolism, bile acid metabolism, and branched chain amino acid metabolism. These disrupted pathways then lead to fatty liver disease and eventually liver cancer.

Related Genetic Lifehacks article: [Fatty Liver Disease Genes](#)

#### 2) [Histamine and Gut Microbiome](#)

This study investigated how the gut microbiome of IBS patients impacted histamine levels. The researchers transferred the gut microbes into germ-free mice and found that high levels of histamine were produced. This resulted in pain and mast cell activation for the recipients.

Related Genetic Lifehacks article: [Histamine intolerance](#)

### **Genetic Lifehacks**

Perfect sunny days, MT

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