

# Genetic Lifehacks

Learn. Experiment. Optimize.

Hi there,

Nutrigenomics is the field of research that investigates how your genes impact your need for specific nutrients. We are all unique in how we look, think, act -- and in our need for specific nutrients. Figuring out how my genes drive which nutrients I need more (or less) of has really helped me dial in what I eat and which supplements I take.

Below is a new article on magnesium, inspired by a member's email. I do read every member email, and try my best to respond (some days are better than others for that!).

Take a look at the article, check out your genes, and read through the lifehacks section. Be sure to [log in](#) as a member first -- for newer articles, I'm trying to seamlessly blend in the Member's Only sections. So what you see when you're logged in as a member is way more than what non-members can read in the articles.

Wishing all of you well,

~ Debbie Moon



# Genes that Impact Magnesium Levels

Research shows that about 50% of us don't get enough magnesium on a daily basis. [\[ref\]](#) Some people genetically are more likely to be deficient than others, based on genetic variants that impact magnesium absorption. Understanding your genes can help you decide whether you may need more magnesium in your diet or via supplements.

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



## Thiamine: Genomics, cellular energy, and cognitive function

Thiamine (vitamin B1) is a water-soluble vitamin that serves as a cofactor in the metabolism of carbohydrates, branch chain amino acids, and fatty acids. It is *essential*, meaning you have to get it from food. Why is it essential? ATP production, used in every cell for energy, requires thiamine. An insufficient amount of thiamine can cause problems with cellular energy.



## Genetic Variants that Decrease Vitamin B6

Vitamin B6 is an important co-factor in hundreds of different enzymatic reactions. [\[ref\]](#) Low levels of B6 are linked to an increased risk of diabetes, cardiovascular disease, neurodegenerative diseases, and cancer. B6 is also important for reducing oxidative stress and inflammation.

Genetic variants — along with lifestyle factors — play a role in how much vitamin B6 you need to get each day.

1) [This printer is made of 600 strands of DNA that put themselves together](#)  
(*Interesting Engineering*)

This article explores how researchers are creating a DNA-based self-assembling printer. "The printer described in the paper is built from roughly 18,000 base pairs of DNA. The researchers didn't start with such an ambitious goal, though. Their earlier work focused on a linear motor that could be used to drive a hydraulic arm."

2) [Histamine Potentiates SARS-CoV-2 Spike Protein Entry Into Endothelial Cells](#)  
(*Frontiers In Pharmacology*)

This new research study shows how histamine potentiates the entry of the spike protein into the endothelial cells that line blood vessels. The study explains why famotidine, a histamine 2 receptor blocker, may help with COVID and long covid.

(More to come on this - I'm working on an article that explains further)

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Love to read and discuss new studies on genetics?

I've started a [Reddit community for Genetic Lifehacks](#) with the goal of creating a space where members can post and discuss interesting new research.

**Genetic Lifehacks**

It hasn't snowed in two days, MT

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