

Genetic Lifehacks

Learn. Experiment. Optimize.

Hi there,

This week, I'm bringing you a roundup of fertility-related articles. According to the CDC, roughly 20% of couples are experiencing infertility, which is a marked increase from previous years.

New member features:

My goal is to continually increase the value you get from Genetic Lifehacks.

- There is a new summary report available on [fertility](#).
- For the past few weeks, I've been working on a new backend system for showing the SNP data. You'll notice that the [summary reports](#) are updated, and they now print much more compactly.
- You can now print by topic or a combined summary report covering all topics together.

Coming up next week: A new article on mercury detoxification and an article on using glycine to increase slow wave sleep.

Gratefully yours,

~ Debbie Moon



Genetic links to infertility for women

Some of the causes of infertility for women can be categorized as follows:

- hormonal issues: thyroid problems, PCOS, HPA axis dysregulation, reproductive hormone dysregulation
- structural issues: fibroids, blocked fallopian tubes, other structural abnormalities
- ovarian insufficiency or premature menopause
- recurrent miscarriages and more

This article highlights some of the common genetic variants that may play a role in infertility. It is just a starting point... My hope is that it gives you enough information to get started on figuring out the root cause of your problems conceiving.

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



Genetic Causes of Male Infertility

Many different genetic variants can increase the risk of infertility in men. These variants impact different aspects of sperm production – from hormones to oxidative stress to DNA damage repair. My goal here is to help you understand where you are more likely to have a genetic susceptibility to infertility. It can help you target the right lifestyle interventions and supplements.

Other articles you may enjoy...



Genetics, inflammatory cytokines, and recurrent miscarriage

This article focuses on the role of inflammation and how it impacts pregnancy. We will dive into several different inflammatory cytokines and look at the genetic variants that increase or decrease the risk of recurrent miscarriage.



Are you genetically more likely to have twins?

So what does genetics have to do with twinning? There are a couple of genetic variants that increase the probability of having fraternal twins. It seems few or no genetic factors are involved in having identical twins.

What I've been reading....

1) [Inhaled CO2 concentration while wearing face masks: a pilot study using capnography.](#)

This pre-print of a study in Italy explains that CO2 concentrations are higher than 'acceptable exposure threshold' recommendations for many people when wearing a surgical mask and for everyone when wearing a respirator-type mask.

Genetics connection to check: While the results aren't all that surprising, I found this interesting because a portion of the population carries genetic variants related to anxiety with higher CO2. The variant is in the ACCN2 gene that encodes a sensor in the brain that causes panic with high CO2 (and thus low oxygen). The variant is a [risk factor for panic attacks and anxiety disorders \(go check your data\)](#). People who carry the variants have a heightened reactivity to high CO2 levels.

2) More than 9 million deaths in 2019 were due to pollution.

For some reason, this headline shocked me.

A [new report out in *The Lancet*](#) details the impact that air and water pollution has on mortality rates around the world and estimated about 9 million deaths in 2019 were caused by pollution. Air pollution was responsible for almost 2/3 of that figure.

India and China topped the list for the total number of pollution-related deaths. The US came in with the 6th highest pollution death rate with a 2019 estimate of almost 150,000 people dying due to pollution. To put this in perspective, the number of people killed by pollution in the United States was roughly ten times higher than the number of people killed by firearms.

Genetic connection to check: Some of us are more likely to have adverse outcomes from exposure to toxicants. The best way to know what you are likely to be susceptible to is to view your [summary report on detoxification](#). Look at the Phase II detoxification pathways and the specific toxins sections. If you see a lot of highlights for an article, click on the article title for all the details.

Thanks for being a member!

If you enjoy Genetic Lifehacks, I would really appreciate you spreading the word to friends and family by posting articles that you enjoy to social media or by sharing the newsletter.

Genetic Lifehacks

Hasn't snowed in three days, MT

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