Genetic Lifehacks

Learn. Experiment. Optimize.

Hi everyone,

Allergies plague millions of people around the world, and food allergy rates have risen dramatically over the past couple of decades. Genetic variants increase a person's susceptibility to food allergies - along with environmental factors. Check out my latest article, below, on food allergy genes.

Reminder: Be sure to log in first to see your genetic data in every article. After you log in, you may need to reload the article page to see your genotype data in the genetic variants section.

Grateful for all of you,

Debbie

Genetics and Food Allergies

With 32 million Americans having food allergies, the prevalence of food allergies has risen 50% in just over a decade. Each year in the US alone, 200,000 people seek medical help for an allergic reaction to a food.[ref]

Food allergies are due to a combination of environmental factors and genetic susceptibility. This article covers the background science of allergies and the genetic variants linked to specific food allergies. It concludes with personalized ‘lifehacks’ for genetics and specific foods.

Read the full article...

Member's Only Article!

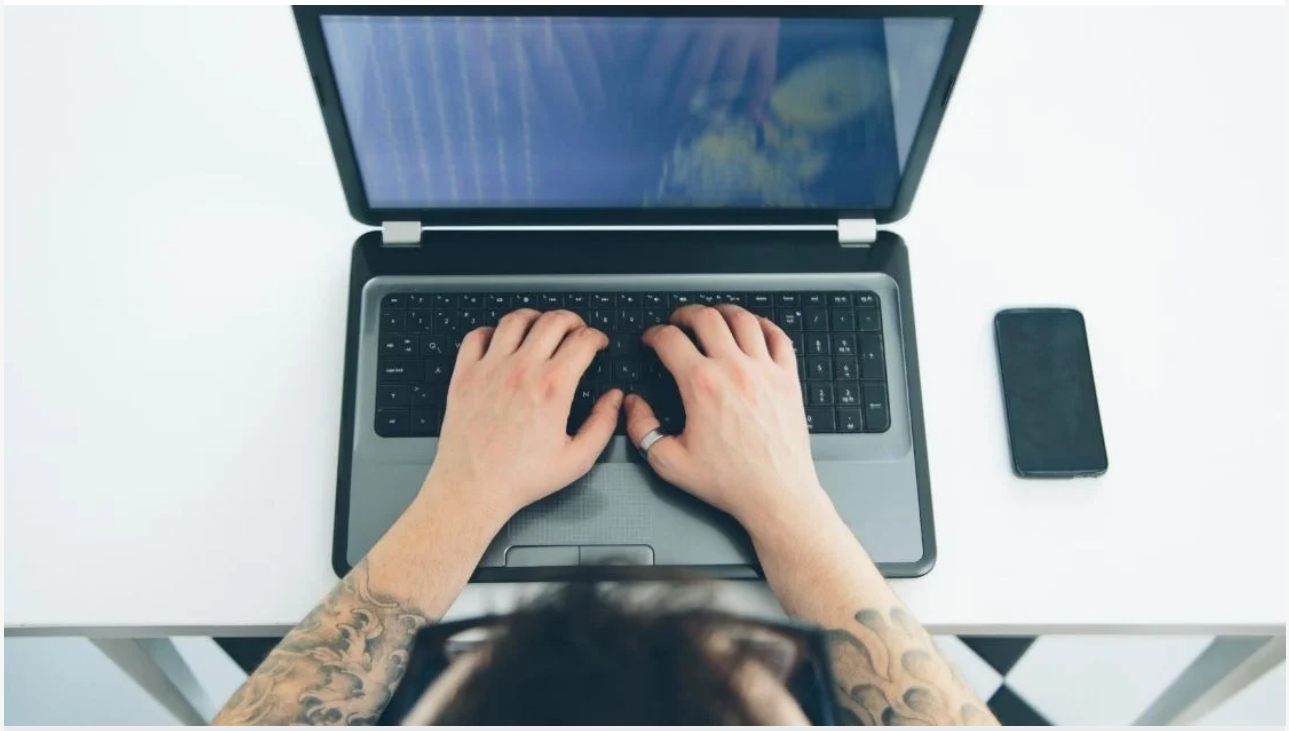
Are you allergic to grass pollen? It may be genetic.

Spring is in full force here! Time to dust off the lawnmower. As that smell of fresh-cut grass fills the air, many people also get watery eyes, runny noses, and itching everything.

This article explains the genes that increase your susceptibility to grass allergies or hay fever.

Speaking of smelling the grass... Did you know that some people can’t smell the odor of fresh-cut grass? There is actually a genetic variant (not covered by 23andMe data) that prevents some people from knowing that wonderful summertime smell.

Read the full article



More data = more answers?

Combining Data Files

Have you done genetic testing with more than one company? You've probably noticed that your data from either 23andMe or AncestryDNA doesn't cover everything on the website.

I've had several members contact me recently about combining 23andMe data with AncestryDNA data to use with the membership. I do have an article on how to combine the data files, for tech savvy users on a Mac or Linux.

If you need help, though, I can combine the files for you. This isn't something that I've offered openly in the past because it does involve transferring your genetic data to me. But I now have encrypted file transfer available via FortKnoxster, which makes me more comfortable about openly offering to combine your data files.

I may also be able to combine your data files from other companies, such as LivingDNA or MyHeritage, with either 23andMe or AncestryDNA data.

If you have questions or need me to combine files for you, just send me an email or contact me via the contact page.

~Debbie

What I've been reading:

1) **23andMe study on who loses their sense of smell with Covid-19**

23andMe recently announced results for their research study on loss of smell in COVID-19 patients. (*When you answer 'survey' questions on 23andMe, you have agreed to opt into a research study.)*

If you have a 23andMe login, you can read the press release here. The researchers have a pre-print of the study available for everyone.

While the press release and email blast were exciting (Headlines: "Scientists Find Genetic Link to Loss of Smell in COVID-19"), a deeper look at the results was a reminder of the difference between a statistically significant result and a result with a real impact. Sigh.

The 23andMe survey results found 60% of people with a reduced sense or complete loss of taste or smell (results grouped). Other studies have shown that 15% to 44% of people who test positive for COVID lose their sense of smell, at least temporarily, during their illness.

The genetic variant found via the 23andMe research study was linked to an 11% increase (OR=1.115) in the *relative risk* of losing your sense of smell with COVID-19.

The important point here is that the *relative risk* increases a little with the genetic variant.

A quick example of why 'relative' is important to understand...

Let's say that the absolute risk of losing your sense of smell with COVID is around 50% (somewhere between 15% - 60% lost olfactory function, depending on the study). If you carry the genetic variant that increases the relative risk of losing your sense of smell by 11% (OR=1.11), then your absolute risk of losing your sense of smell would increase from 50% to 55%.

The genetic research here is interesting from the point of view of discovering which genes could be involved in the loss of smell. Plus, it backs up the original research from last spring showing that the loss of smell is not due to COVID invading the brain. But carry the specific variant isn't predictive of whether you will lose your sense of smell or not. Thus, I won't be creating a "COVID loss of smell" report or writing exciting headlines about it.