

# Genetics 101:

## The Secrets Your DNA Holds

Thanks to new advances in technology, a simple saliva test today can measure 602,000 pieces of your DNA. This is an important development because **everyone has some level of genetic variation in their DNA**, even though it was once thought to be a rare occurrence. Because variants can impact your ability to make and use different nutrients critical for circulatory, immune and even emotional health, everyone is susceptible, in their own unique way, to potential health implications.

### Why do these variations occur?

Genes are passed from parent to child—one copy from the mother and one copy from the father—with each and every cell containing a set of genetic instructions. When an existing cell divides to make a new cell, it copies its set of genetic instructions. However, sometimes these instructions are copied incorrectly, like a typo, which leads to variations in the DNA sequence. This is called a single nucleotide polymorphism or SNP (pronounced “snip”). Most SNPs do not cause any observable differences. But the location and total number of SNPs a person has may influence their susceptibility to disease or impact how they react to certain drugs or even specific foods.

The practice of functional medicine is on the rise. You no longer have to treat symptom after symptom—now you can get to the root cause of illness through genetic saliva testing.

Understanding how DNA impacts human health is revolutionizing the future of nutrition. This practical, forward-looking approach of supporting genetic variants is based on scientific evidence. And this approach is helping people find answers to their health challenges like never before.

Ask your health advisor today about doing a simple saliva test to see if your DNA is hindering your health. For more information on genetic variations and how they impact your health, visit [www.GetToKnowYourDNA.com](http://www.GetToKnowYourDNA.com).

Information courtesy of  
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*These statements have not been evaluated by the Food and Drug Administration. The suggested educational information is not intended to diagnose, cure, mitigate, treat or prevent any disease.*



Your  
health issues  
might be  
related  
to a hiding  
gorilla  
and his  
unwelcome  
“friends.”

Get to know  
your DNA!™

## Functional Medicine... A New Approach to Wellness

With the advancement of DNA testing and measuring, a new approach to wellness is emerging. "Functional medicine" focuses on finding the root causes of illness rather than focusing on and treating symptoms.

By employing scientific studies, DNA researchers have discovered that **the root cause of most illness is the presence of free radicals and oxidative stress.\*** These free radicals are superoxide and peroxy-nitrite—basically the "gorilla" that's causing you problems. And there are other unwelcome friends too, including the damaging agents of glutamate and ammonia. Your body naturally produces all four of these agents, but genetic variations can cause you to have too much of them. When out of balance, these free radicals can cause cellular damage and inflammation, leading to slower rebuilding and repair of cells and ultimately faster aging and more optimal conditions for disease.

To compensate for these free radicals, your body makes **antioxidants**, such as superoxide dismutase, catalase and glutathione, and uses folate to rebuild

and repair damaged cells. ***But your inherited genetic issues may inhibit you from making enough antioxidants, cause you to produce too many oxidants, and suppress your ability to create enough folate for cell repair, which can negatively impact your health.***

Now through genetic saliva testing, we can measure your ability to make and use enzymes that are critical components of your health. Some of the more significant enzymes include:

**GLUTATHIONE** – detoxifies the body and controls inflammation

**SOD** – neutralizes the superoxide free radical

**BH4** – supports the neurotransmitters and helps the body detox ammonia

**NEUROTRANSMITTERS** – aids emotional health

**CHOLINE** – enhances liver health

**FOLATE** – stimulates cell and neurotransmitter health

**SAMe** – supports many bodily functions

**B12** – makes blood cells and supports a healthy nervous system

When in balance, these enzymes can control free radicals, keep your cells healthy, and rebuild new cells effectively. As a result, you may look and feel younger and remain healthy and vibrant as you age. **You're never too young or old to optimize your nutritional and antioxidant status.**

## Harnessing Your DNA for Optimal Health

If you've been searching for answers to your health issues without resolution, testing your DNA should be the next step. Doing so can allow you to identify your SNPs as well as the related nutritional weaknesses occurring in your body. People who understand health recognize genetic testing as the most advanced and effective method of determining exactly how you need to supplement.

Using the results of your genetic saliva test, your health advisor can identify your nutritional weaknesses and then create your custom nutritional protocol. This protocol will supplement your missing nutrients and antioxidants, or use nutrients and herbs to aid in the production of needed enzymes to ultimately reduce the damaging oxidants and support healthy cells.

This forward-looking approach is gaining momentum within the health care industry. In fact, supporting BH4 and glutathione production with a nutrient called NADH has been hailed by Harvard Medical as the first "anti-aging nutrient."

To fully understand how your DNA impacts your health, watch the introductory video at [www.GetToKnowYourDNA.com](http://www.GetToKnowYourDNA.com)

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### \*There are many diseases related to free radicals and oxidative stress, including:

- ADHD
- Depression
- Alzheimer's disease
- Diabetes
- Anxiety
- Fibromyalgia
- Arthritis
- Heart failure
- Atherosclerosis
- Learning disorders
- Cancer
- Multiple sclerosis
- Chronic fatigue
- Parkinson's disease
- Dementia
- Stroke