INTRODUCTION TO
TruDiagnostic™

TruAge™ is an epigenetic test that starts with an at-home blood collection kit. Once your sample is sent back to our lab, we analyze patterns of DNA Methylation to identify your Biological Age.

But what does that mean, and **why does it matter?**

WHAT IT MEANS

DNA is essentially a recipe book for every cell and protein in your body. And a Gene is a tiny segment of DNA that explains a specific step in a larger recipe. Together, groups of genes work together to describe how a cell should be built, how proteins should be folded, and much more.

When a Gene is ON, being read and followed, that means it's being expressed. Many genes can have degrees of expression, like a dimmer switch slowly turning up a light's brightness, instead of just an on/off switch.

For instance, if a certain gene that controls how much fat your body stores is only expressing halfway, then your body will store fat less often - but if that same gene is turned on all the way, your body will try to store a lot of fat! (There's several different genes that work together to control your metabolism and fat deposits, this is just an example)

Epigenetics is the broad term for all the ways our body can add notes in the margins of our DNA recipe book, changing how our genes are expressed, without changing the DNA itself. Epigenetic Markers act like sticky notes, changing how each step of the recipe is read.

Epi-Genetic | Above-Genes

GENE

833.963.1700

METHYL
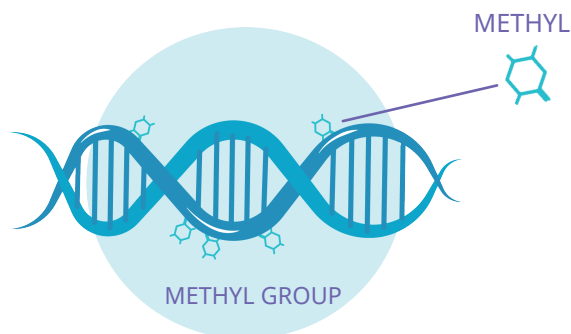
METHYL GROUP

Our lab looks at the Methylation on genes related to aging, checks how much they're being expressed, and with that we can find your *Biological Age*
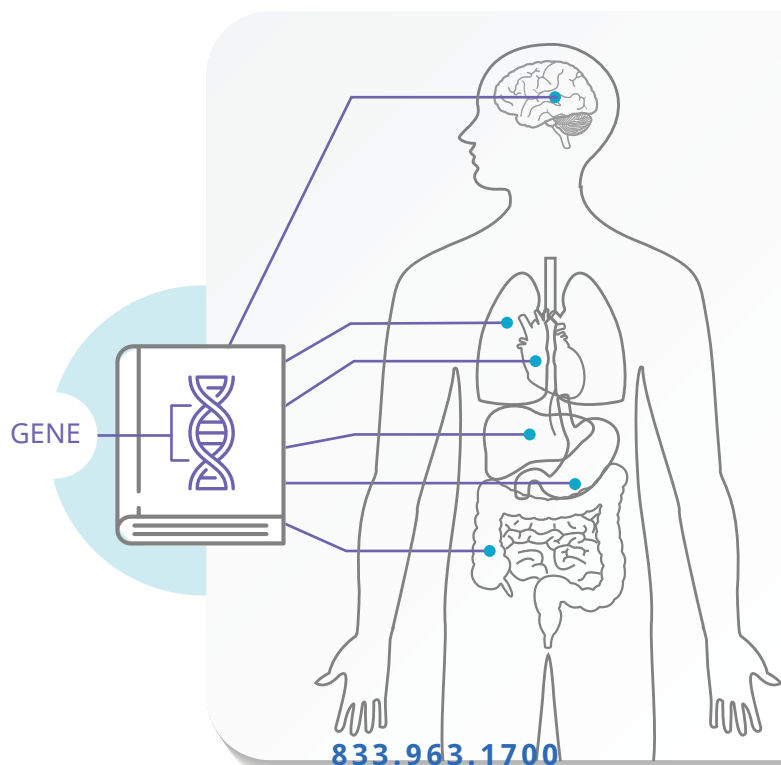
A **Methyl** is a little molecule. A clump of them, called a **Methyl Group,** can stick onto our DNA, changing how the gene in that spot is expressed. Sometimes they turn a gene on or off entirely, and sometimes they just turn the brightness up or down a little bit. *That process is called DNA Methylation.*

So, DNA Methylation is a type of Epigenetic marker, which changes which genes are being expressed, and how much they're being expressed. DNA Methylation happens in response to daily habits like diet, exercise, sleep, stress, and much much more.

About 40% of your DNA Methylation happens in response to the natural progression of time, or during key developmental stages in your gestation and childhood. However, that means the other *60% is Changeable* - you can control it with your choices!

WHY IT MATTERS

BIOLOGICAL AGE IS THE **#1 PREDICTOR** OF NEARLY ALL AGE-RELATED DISEASES.

Despite the name, Biological Age doesn't look at how many candles are on your birthday cake. It's not your *age*, it's your body's *aging* at a cellular level.

Cellular aging is the progress of cells dying or forgetting how to function. An easy example of this is skin wrinkles - skin cells lose their flexibility, and don't recover from damage as quickly, so when the skin creases it begins to hold those creases instead of bouncing back.

Many diseases occur at higher rates when you get older, because more and more of your cells aren't functioning the way they should. The genes that should control that type of cell aren't expressing like they used to.

A *higher* Biological Age is correlated with a *higher risk* of developing age-related diseases (like Alzheimer's Disease and Cancers). A **lower** Biological Age is correlated with reduced *risk of disease and a longer lifespan.*

YOU CAN SLOW DOWN YOUR AGING.

Although epigenetic changes can be passed on over 3 generations, you can still control most of your Biological Aging through your choices.

You can reduce your risk of developing age-related diseases. And you can actually see the Methylation patterns change in response to your lifestyle.

Biological Age is a great way to track how well interventions are working to extend lifespan and improve overall health. Biological Age can also be used to check your current level of disease risk.

Blood sugar can reveal a risk for Diabetes. Blood pressure can reveal a risk for Heart Attack. But Biological Age evaluates your risk for nearly every age-related disease in one easy metric.

TruDiagnostic.com

TruDiagnostic™
The Epigenetic Company

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