

# Beginners Guide to Epigenetics

## [Parent Edition]

This is the future of D1 athletes...

So, if you want to give your child THE edge...

If you want them to excel BEYOND your expectations...

And if you want to give them the tools and opportunity you never had, then read through this entire post because...

**Mastering epigenetics will give your child the “unfair advantage” other parents will envy.**

*So, what really is this epigenetics thing?*

### **Brief Science Definition**

An epigenome is small molecular factors that surround DNA. It controls actions inside the human cell ABOVE the genetic code. The epigenome changes the hereditary function without changing the DNA code. So, epigenetics is the study on how nature (DNA) and nurture (environment) interact.

Look at it this way...

# DNA Is Kind of Like the Alphabet

In the English language, there are 26 letters (abcd...). In the DNA language, there are 4 letters that make up a gene sequence. Each letter represents a protein (ACGT).

It's like putting letters together to create a word.

And the same 4 letters in different order or a different "sequence" can completely change the message, the meaning.

Yada.... yada.... yada....

**Think of DNA as your body's language.** That's really all you need to know. Plus, I don't want to bore you with a science lesson. We don't need another boring Biology professor, we're over that.

## The Non- Science Definition Please...

*"Think of the genome as being a computer, the hardware. The epigenome would be the software that tells the computer when to work, how to work and how much it needs to work" - Randy Jirtle*

## Heredity is unchangeable.

Dr. Moshe Szyf, in the documentary "The Ghost in Our Genes" explains that only two things can change our DNA... a nuclear attack or millions of years through evolution.

We all have two parents and those parents provide us with DNA. We can't simply give genes we don't want back. There aren't genetic refunds... sorry.

**But that's not where the story ends.**

As a parent, you gave your child a deck of cards, but you didn't tell them how to use it. Epigenetics has given us massive hope in the field of science and medicine for the future...

With epigenetics, although we can't change the DNA itself, we can change how DNA is read.

Epigenetics can turn genes on and off... like a light switch. The trick is to use epigenetics to express - "turn on" - the genes that are most favorable to our future and our lives today.

## **And this is how you can turn on your child's "athletic" genes...**

See there are genes favorable to athletes. Genes that increase focus, cognition, speed, agility, strength, recovery, and much more...

It actually took 13 years and 2.7 billion dollars to identify thousands of genes present in humans today. This study was called the Human Genome Project, and although it ended in 2003, we are light years away from decoding everything discovered inside this world changing study...

### **The Human Genome Project has been call the "book of life". It's the epigenome that decides how it is read.**

Remember: DNA is a like a template, it's not a script. That's why brothers and sisters, even though they have the same two parents and heredity have completely different gene expressions.

Are you now beginning to understand how powerful the epigenome is to our future?

## **We are creators and controllers of our own future.**

Our gene's need the instructions of what to do, where, and when to fulfill their tasks. And the captain behind the ship is the epigenome.

## **Gene Expression Is Kind of Like Music**

In case you can't quite put your finger on it just yet...

The following clip is an evolution of the same song... Well, at least the same words.

Just stick with me here for a second and imagine if the words represent your DNA. The words (The song's DNA) are the same, but the beat and instruments (the song's epigenome) are expressed differently.

<https://www.youtube.com/watch?v=3r3BOZ6QQtU>

There's a big difference from the 1920's version to the 1960's. The words don't change, but the expression of the song gave it a new life.

## **How Will Epigenetics Change My Athlete's Future?**

Hoping for a D1 scholarship?

Searching for the starting position on the high school or travel team?

Praying to minimize injury and excel at your sport?

Working towards better grades?

With control of the epigenome through the right habits, command of the 3 most powerful variables, your athlete will have an unmatched advantage over every other player.

This advantage stems from their environment. Their environment, life experiences, and epigenome will script their future - whether it'll propel them into a starting position or skyrocketing mental focus to boost their classroom performance.

This is the advantage of the future D1 athletes.... and classroom scholars....

## **3 Variables That Control the Epigenome**

We are a product of our environment. Period.

Every interaction can change the way we express our genes.

Each experience is releasing hormones and signals to our body on which strands of DNA should be switched on and off. And right now, after the Human Genome Project...

.. we have discovered 3 variables that control how our genes are expressed:

### **1. Nutrition**

The type foods, nutrients we consume and ABSORB will change our genetic expression. Issues like food sensitivities, leaky gut, poor absorption and eating the wrong foods for the individual's genotype will drastically change physical and mental performance through activation of specific genes and hormones.

### **2. Mindset**

Our brain is the center for communication, how our cells, neurons, and hormones interact. That's why scientists have to shield their studies from something we call the "placebo effect" where beliefs alone can change the outcome of any situation.

### **3. Movement**

Movement affects breathing patterns, sweating, heart rate, muscular tension and millions of chemical reactions at the cellular level. Through this mechanism your athlete's genes are read differently.

And there's evidence to show that in history - even though we never understood WHY - nutrition, mindset, and movement habitually engineered the world's most successful leaders...

With this knowledge, I'm presenting you this secret will no longer be reserved by Hall-of-Famers and elite college athletes. Your son or daughter can use these habits to transform their future.

Change their HABITS, and their genes will follow. It's time to create the standard for the New Age Athlete.

## References

1. **Inheritance- How our genes change our lives, and our lives change our genes**
2. **Rapid changes in histone deacetylases and inflammatory gene expression in expert meditators**
3. **Acute Exercise Remodels Promoter Methylation in Human Skeletal Muscle**
4. **Why Some Like It Hot.**
5. **Time- Anxiety, Depression, and the American Teen.**