Genetic Lifehacks

Learn. Experiment. Optimize.

Hi Everyone,

I hope this finds all of you well! This week's featured article is on blood glucose levels. In it, I dig into why it is important to keep your blood glucose levels at a normal level, as well as ways to target higher blood sugar levels in ways that are personal to your genetic susceptibility. I've included lots of images in this one. The feedback system of blood glucose rising, insulin release, cells taking in the glucose, and then glycogen suppression - well, it gets a bit complicated to explain without drawing it out on a napkin. But understanding where this system could get out of whack is important for long-term health.

Grateful for all of you,

Debbie

Blood glucose levels: how your genes impact blood sugar regulation

One of the biggest players in overall health and longevity is good blood glucose control. High blood glucose levels, whether after a meal or all the time, can

increase oxidative stress in the body, leading to long-term chronic health problems.

Genetics plays a big role in your blood glucose regulation. Some people may be able to get by with eating some junk food and not exercising as much, but for others, our genetic susceptibility combines with poor choices to cause elevated blood glucose levels.

View your genes...

What I've been reading:

1) Human Trial Suggests Clearing Plaques Slows Mental Decline

A quick article explaining the latest clinical trial on an Alzheimer's drug. The trial on an anti-amyloid antibody showed that it was able to remove amyloid plaque and slow the progression of cognitive decline. While not able to reverse Alzheimer's, it is one of the first trials showing a solid result.

You can check your APOE (Alzheimer's risk) genotype here, if you want to know your genetic risk.

2) 'Zombie' genes? Research shows some genes come to life in the brain after death

Death doesn't actually happen to all cells at the same time. Some cells keep on with their cellular functions for a while after death, and now researchers have found that glial cells in the brain actually increase their function for up to 12 hours after death.

3) Excessive exercise training causes mitochondrial functional impairment and decreases glucose tolerance in healthy volunteers

This study published in *Cell Metabolism* explains the link between excessive exercise and a negative impact on mitochondrial function and a decrease in glucose tolerance. Like most things in life, there is an upper limit on the benefits of exercise.

4) Researchers have figured out the genetic mutation that causes these rabbits to walk on their hands.

Genetic Lifehacks

Bozeman, MT