Introduction to science-based weight loss

Hi, I'm Dr. Mima and we're talking today about the science of weight loss and longevity. As fall approaches, many of us are finding it harder to exercise and the natural response is to push harder at the gym.

But new evidence shows that may not be the safest or the most effective path to success.

Genetic factors and injury risk

Let's start first by talking about injury risk. In 2009, a study was done in osteoarthritis and cartilage, and they found that certain variants of the COL1A1 gene is linked to increased ligament injury in athletes.

Similarly, in 2013, there was a paper in Medicine and Science and Sports and Exercise that connected the COL5A2 variants to tendon injuries.

Hormones, metabolism, and stress response

So if you carry these variants, you may be more vulnerable to injury when you're training too hard. But it's not only about your joints, your hormones and your metabolism matter as well.

The DIO2 variant that's reported in the Journal of Clinical Endocrinology and Metabolism in 2017 shows that there's an impaired thyroid hormone conversion and slower metabolism in people with this variant.

Appetite genes and obesity risk

Also, the variants in NR3C1 glucocorticoid receptor gene show an increased cortisol sensitivity, which is essentially amplifying the stress effects in individuals with this mutation.

So when it comes to appetite, They've also shown that large genome-wide studies that were published in Nature Genetics, as well as the New England Journal of Medicine, found the FTO and the MC4R variants are amongst the strongest genetic risk factors for obesity.

So together, what does all this mean? It means that some people are genetically wired to burn slower, crave more, and recover less efficiently from exercise.

So what's the takeaway? Well, weight loss is not about punishing your workouts and making yourself work harder.

Smarter weight loss and closing remarks

It's about working smarter, aligning your lifestyle with your biology and protecting your long-term health. For patients, I often recommend medical-grade proteins and supportive adaptogens.

Both can be found in the Mimosa Longevity Newsletter. I'm Dr. Mima and it's been a delight to share with you the science on longevity-based weight loss.

To learn more information like this, please subscribe to this Mimosa Longevity channel and also join me live on Thursdays starting at 8 p.m. Pacific for live webinars that will be broadcast out of MIMOSA LONGEVITY and over Zoom for those of you who are able to join.