

October 10, 2015 - Cincinnati, OH

## Trial and Answer for Your Health

We are alive today because our ancestors survived. That seems like stating the obvious, but think about it for a minute. They ate whatever gave them fuel to stay alive and didn't kill them. It was trial and error, and I'm guessing many died from eating the wrong things. They experienced times of feast and times of famine. They ate what was available whether it was meat, roots, berries, greens, or whatever. They learned to grow food, both plants and animals. Their diets ranged from high-fat and protein like the <a href="Inuit">Inuit</a> to the plant-based diets of tropical areas where meat is scarce. Those diets helped define their genome. We are the progeny of the survivors.

The research on the differences in the genetic areas between the Inuit and other cultures gives us something to examine more closely. We know that when a Western diet is introduced to the Inuit culture, they develop heart disease and diabetes just like we do. Is it the highly refined food alone? Is it the volume of food? Do their activity patterns change, thereby changing their caloric needs? Gene expression means whether the genes get turned on or stay off; while genes don't change, the expression of those genes changes. What do different foods do to the gene expression? Does the same apply to us if we change our diet to a high-fat diet or a plant-based diet? Will it change gene expression?



We've had many changes in our foods. Highly refined. Highly processed. We used to work hard physically all day long, but we now work cerebrally and mostly sitting. We don't use enough calories for what we eat. Yet we're still living with the genes our ancestors left us. It will be years if not decades before we have answers to these complicated questions. And it will probably centuries if not millennia before our genes adapt to our refined-carb diet—so don't plan on a genetic shift saving you from the consequences of what you eat.

What do we do? Trial and error. We don't know what dormant genes we have that could help us reduce our body weight or our risk for diseases. To complicate things, changing a variable to affect one set of genes could have interactions with other genes; that doesn't mean we shouldn't try.

I've done well eating more high-quality protein and good fats. Maybe you want to add nuts and beans. Whatever dietary approach you use, it won't change your genes but as I said, it can turn some on and others off: the genes that are impacted by the nutrients in the foods you've added. The critical factor is that you have to stick with it long enough for the body to learn that this is your new way of eating. Four weeks seem about right, but it could be longer; maybe you have stubborn genes, who knows? If what you're trying to do is lower your blood pressure by lowering sodium intake, it could take several months. The key is to give it more than a couple of weeks before you decide it's not working for you.

Approach everything in a step-wise manner, keep track of what works and doesn't work, and in time, you'll end up with the right approach to maximize your genes to get healthy and fit. Trial and error becomes trial and answer. We don't know what every gene does and we don't know how the changes we make will affect our genes, but if we make reasonable changes and observe how they affect us, we can decide whether they're beneficial for us. We keep what works and try a different approach for what did not. It takes time and it takes effort.

Or you could just follow the latest guru or try the next fad and a year from now end up right where you are today or worse. Your body. Your choice.

What are you prepared to do today?



## WGVU Straight Talk on Health

Hear Dr. Chet's take on the latest health news and research—listen to Straight Talk on Health Sunday at 7:30 a.m. and 6 p.m. in the Eastern Time Zone on WGVU-FM 88.5 or 95.3, or listen live via the Internet by going to www.wgvu.org/wgvunews and clicking on "Listen Live" at the top.

The health information in this message is designed for educational purposes only. It's not a substitute for medical advice from your healthcare provider, and you should not use it to diagnose or treat a health problem or disease. It's designed to motivate you to work toward better health, and that includes seeing your healthcare professional regularly. If what you've read raises any questions or concerns about health problems or possible diseases, talk to your healthcare

Subscribe to the Message from Dr. Chet at DrChet.com — © Chet Zelasko PhD LLC