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Sugars

## Cell Glycosylation - Most Important Function Of The Human Body Smart Sugars were at work from the beginning.

Smart Sugars Lesson #88

by JC Spencer

Glycan signals were at work even before the sperm fertilized the egg. The intimate communication, the very first touch, begins the process to make a new human being. The DNA blueprint contributed from each parent will be read, translated, merged, and transcribed into every new cell. Instantly, the process starts that will continue, not only until birth but for life and for generations yet to be born.

The glycan (sugar coating) on the sperm and the egg forms the Operating System (OS). In the split second when the sperm hits the egg, the tiny antennae on the egg, signals to all other sperm, "I'm taken. Go away."

Glycosylation is how LIFE is given to the cell and to the human body. Remove the glycans, the glycoprotein receptor sites, from the cell and the cell is dead.

We have known and studied this science for two decades and now medical scientific community world-wide understands that this paramount discovery of glycobiology will change the world of healthcare. Measuring these life giving receptor sites is the ultimate frontier of the life sciences.

If you are a healthy individual, you probably have somewhere around 800,000 antennae on each of your some 70 trillion cells. When you get up close to these sugar chains, you begin to understand why glycomics is thousands of time more complex than the human genome project.

When we are able to analyze the health of these glycoproteins, we will be able to diagnose and know what the health of that individual will be months and even years down the road.

All scientific bodies world-wide agree this soon coming diagnostics will be the Holy Grail of medicine and all healthcare.

Glycobiology has provided me with the firsthand experience of witnessing the three phases of truth. Initially truth is denied. In the eighties and early nineties, the medical community scoffed at the possibilities of sugars doing anything but supplying energy to the body.

Secondly, truth is violently attacked if it is not understood. And, glycoscience was not understood. Thirdly, truth is accepted as self-evident.

Ajit Varki, head of Glycobiology Research at the University of California San Diego, said, "It's like we've just discovered the continent of North America. Now we have to send out scouting parties to find out how big it is..."

DNA may help us understand about 30% of the health propensity of a person. The glycans may help us understand about 70% of the health propensity of that same individual. The 30%/70% rule of nature and nurture seems to be right for the current health conditions of most people. Diagnosing both the genes and the glycoproteins will provide the ultimate to determine in advance what should be done to improve health.

This coming diagnostics is how we can address the important instead of waiting to address the urgent.

Glycan diagnostics can potentially save trillions of dollars in healthcare costs and allow the individual to be more in charge of his or her future health.

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