



## How Smart Sugars Determine Brain Health Glycosylation holds the keys to cell, brain, and body health

Smart Sugars Lesson #95

by JC Spencer

Blood, oxygen, certain nutrients and multi-trace minerals navigate some 400 miles of blood vessel passageways through the human brain. The Blood-Brain Barrier (BBB) holds the key for you to survive, thrive, or die.

The health of the body may be determined by the health of the brain. The health of the brain is determined by the health of the cells. The health of the cells is determined by glycosylation of the cells. Glycosylation is determined by the Smart Sugars made available to coat each cell with some 800,000 glycoprotein receptor sites.

Care and feeding of this control center called the brain can determine how long you live and how healthy you will be tomorrow. The health of the cell wall and its ability to withstand stress plays a major role for the blood vessel passageway to continue providing quality service to your brain.

Many miles of passageways are single lane where only one blood cell can pass at a time. Twenty-five percent (25%) of the oxygen you breath goes toward operating your brain. Take a deep breath. It's good for you.

Glycosylation of red blood cells do more than provide health to the cell. The glycoprotein receptor sites on the surface of each cell serve as slick lubricant for the blood passage. The sites keep platelets from aggregating. The paradox of glycosylation is that these glycoproteins provide lubrication to keep the cells from sticking together too tightly and they also are the glue that holds life together.

In the area of the blood-brain barrier, the cells that make up the BBB lining are packed

together so tightly that they allow only little tiny things to cross over into brain. The receptor sites are teaming with activity as cells communicate with each other to decide which molecules to block and which ones to permit through the passageway.

Scientist have learned that some cells, that do not pass the size test, may still be permitted to pass through the barrier if they are certified needed by the brain at the time they knock on the portal. Because of this new understanding that nerves can control the caliber of the portal, scientists now call the BBB neurovascular.

Glycoscience presents us with how remarkably designed is our Operating System (OS) that controls and patrols every cell, every organ, every phase of our body. All the Smart Sugars provide the means, the building blocks, to this OS that is light years ahead of the most advanced computer man has even thought of constructing.

Source:  
[http://www.scientificamerican.com/article.cfm?id=messing-with-blood-brain-barrier-key-treating-host-diseases&WT.mc\\_id=SA\\_DD\\_20130612](http://www.scientificamerican.com/article.cfm?id=messing-with-blood-brain-barrier-key-treating-host-diseases&WT.mc_id=SA_DD_20130612)

[www.GlycoscienceNEWS.com](http://www.GlycoscienceNEWS.com)

Expand Your Mind - Improve Your Brain  
<http://www.endowmentmed.org/content/view/826/106/>

Change Your Sugar, Change Your Life  
<http://DiabeticHope.com>

Smart Sugars Lesson #95  
<http://www.endowmentmed.org/pdf/SmartLesson95>

[http://EzineArticles.com/?expert=JC\\_Spencer](http://EzineArticles.com/?expert=JC_Spencer)

© The Endowment for Medical Research, Inc.  
[www.endowmentmed.org](http://www.endowmentmed.org)