



## **NEW Discovery - Four Bio-markers Will Reveal Time Of Death** **You don't want to know – unless you can extend the bio-markers. (Part 1 of 2)**

Glycoscience Lesson #12

by JC Spencer

Major blood discovery marks time of death years in advance. Finnish and Estonian researchers report that they have identified the four bio-markers of death. They discovered specific levels of four chemicals in the blood that offer reliable signals that death is near. Researchers used nuclear magnetic resonance (NMR) spectroscopy to establish the bio-markers. (published in the journal *PLOS Medicine* February 2014).

The knowledge of these four bio-markers move us a step closer to the ultimate Glycoscience diagnostic system.

For two decades, I have studied and contemplated the future of Glycoscience in medicine and healthcare. Now, with new research comes the ability for looking at four bio-markers that, unless extended, will result in high risk of death within five years even for people who appear healthy.

Early and accurate identification of people who appear healthy, but in fact have an underlying serious illness, would provide valuable opportunities for increasing glycosylation of the cells that may extend the four bio-markers.

Researchers, in two separate studies, were considering 106 possible bio-markers. They looked at blood samples from 17,345 people. The Estonian group consisted of 9,842 subjects who were between the age of 18 and 101. In a follow-up period of just over five years, 508 had died of various causes. Of the 106 established bio-markers, four bio-markers stood out as very high among the dead. Even when the researchers stripped out all participants who had diabetes, cancer, or cardiovascular disease, they discovered that these four bio-markers predicted death over the five-year period even for those who appeared in good health.

The research was repeated in a separate population of Finnish men and women. The total number of participants in this study was 7,503 between the age of 24 and 74 where 176 died during the five-year follow-up period. The stats verified the same evidence that the same four bio-markers establishes short-term risk of death beyond established risk factors. Each study revealed unacceptable readings found in plasma albumin, alpha-1-acid glycoprotein, very-low-density lipoprotein (VLDL) particle size, and citrate.

Obviously more research is needed to produce greater detail and accuracy. But, these findings bring us a step closer to the glycoscience diagnostics system, the future Gold Standard diagnostic system for measurement of the quantity and quality of glycoprotein receptor sites. It is the intent of The Endowment for Medical Research to conduct a series of six month Pilot Surveys using the four bio-markers of death. For qualified participants, the surveys will determine if we are able to extend the bio-markers and develop guidelines for improving the quality of life to cause these Four Horsemen of Apocalypse to pass by for now.

#### Source and References:

<http://www.plosmedicine.org/article/info%3Adoi%2F10.1371%2Fjournal.pmed.1001606>

[www.GlycoscienceNEWS.com](http://www.GlycoscienceNEWS.com) Introducing SMART SUGARS

[www.OneSmartSugar.com/video.html](http://www.OneSmartSugar.com/video.html)

Expand Your Mind - Improve Your Brain

<http://www.endowmentmed.org/ExpandYourMind/MindEbook3.html>

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

Glycoscience Lesson #12

<http://www.GlycoscienceNEWS.com/pdf/Lesson12.pdf>

[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)