The American Heart Association reports that coronary heart disease (CHD) is the number one killer of American men and women accounting for more than one of every five deaths in the United States. Of the 500,000 deaths from CHD in 2001, most were sudden death caused by cardiac arrest. Unfortunately, about 95% of sudden cardiac arrest victims die before reaching the hospital.

Researchers have now discovered that one of the best risk indicators for sudden cardiac death is the level of omega-3 fatty acids (EPA and DHA) found in red blood cell membranes. Now, there is a reliable and affordable blood test that lets physicians evaluate their patient's risk for sudden cardiac death.

This test, called the HS-Omega-3 Index®, was developed by two of the pioneers in omega-3 research, Drs. William Harris and Clemens von Schacky.

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#### **About Dr. Harris**



William Harris, PhD, is an internationally recognized expert in omega-3 and heart disease. He has been the recipient of three NIH grants for studies on the effects of omega-3 fatty acids (EPA and

DHA) on human lipoprotein metabolism. He has over 50 publications relating to omega-3 fatty acids in peer reviewed medical literature and was co-author of the AHA's scientific statement, "Fish Consumption, Fish Oil, Omega-3 Fatty Acids and Cardiovascular Disease" published in 2002 in *Circulation*.

Dr. Harris currently serves as the Director of the Cardiovascular Health Research Center at Sanford Research/USD in Sioux Falls, SD and is a Research Professor of Medicine at the Sanford School of Medicine at the University of South Dakota. In addition, Dr. Harris is the Chief Scientific Advisor to OmegaQuant Analytics.®

#### How to Order the HS-Omega-3 Index®

Contact OmegaQuant Analytics® at (800) 949-0632.



P.O. Box 1208 Sioux Falls, SD 57101-1208 (800) 949-0632 omegaquant.com

info@omegaquant.com

# The HS-Omega-3 Index®

Are Your Patients at Risk for Sudden Cardiac Death?



# **The HS-Omega-3 Index®**

#### The American Heart Association Recommends Increased Omega-3 Consumption

Evidence from population studies and randomized, controlled trials over the last 25 years have documented the cardioprotective effect of omega-3 oils.

In 2002, these findings led the American Heart Association (AHA) to recommend that all adults include at least two servings of fish per week (particularly fatty fish) in their diets. For patients with documented cardiovascular disease, the AHA recommended consumption of about 1 gram of omega-3 (EPA+DHA) per day, or even higher doses if prescribed as a component of the management of hypertriglyceridemia. To achieve this level of consumption, people were encouraged to consider high-quality omega-3 fatty acid supplements.

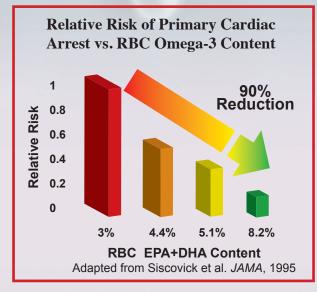
### **Other Medical Benefits**

Preliminary data indicates the potential benefit of omega-3 oils in a wide range of medical conditions. While optimal levels have not yet been defined for EPA and DHA in all circumstances, the HS-Omega-3 Index® may be used to monitor the omega-3 levels in patients who are encouraged to take fish oil supplements or add fish to their diets.



#### **The HS-Omega-3 Index®**

The HS-Omega-3 Index® test measures levels of Omega-3 fatty acids (EPA and DHA) in red blood cell (RBC) membranes. Research has shown an inverse correlation between the HS-Omega-3 Index® and relative risk of sudden cardiac death. At the highest omega-3 level, this risk is reduced by 90%.



An HS-Omega-3 Index® over 8% indicates the lowest relative risk for death from CHD, whereas an index below 4% indicates the highest.

## HS-Omega-3 Index® Target Zones Risk for Death from CHD

Undesirable	Intermediate	Desirable
0%	4%	8%
_		

Percent of EPA + DHA in RBC

### **Correcting Your Patient's HS-Omega-3 Index®**

Of all the known measurements of risk for CHD, the HS-Omega-3 Index® is perhaps the one most easily corrected. Dietary changes that include eating certain kinds of fish or taking fish oil supplements can quickly improve test results.

However, individual differences in metabolism, smoking habits, and other dietary factors will have variable effects on each person's HS-Omega-3 Index®. We recommend a baseline test for your patients and retesting 4-6 months later for those with levels in the Intermediate to Undesirable range. If appropriate, further modifications in diet or supplementation may be recommended.



#### **Affordable and Effective**

The HS-Omega-3 Index® test is inexpensive, costing approximately \$100 for sample drawing, transport, testing, and reporting. Physicians will receive both the test results and an interpretation to share with their patients. When your patients have achieved an HS-Omega-3 Index® greater than 8%, they can feel assured that they have a decreased risk of sudden cardiac death.