# The Holman Omega 3 Test Report

www.Omega3Test.com

Date: **8/4/11**
ID: **1227411**
Patient: **Ted E. Slanker**
Sample Date: **8/1/11**

## Select Key Omega 3 and Omega 6 Fatty Acids

| | Result (%) | Typical USA (Control) (%) | Percent of Control (%) | Optimal |
|---|---|---|---|---|
| **Total Omega 3 Score** | **11.8** | 4.8 | 246 | > 9% |
| **ALA (18:3ω3)** | **1.8** | 0.5 | 353 | >1% |
| **EPA (20:5ω3)** | **2.7** | 0.6 | 454 | >3% |
| **DPA (22:5ω3)** | **2.2** | 1.0 | 216 | >1% |
| **DHA (22:6ω3)** | **4.0** | 2.6 | 154 | >4% |
| **% Omega 3 in HUFA (The Lands' Test)** | **39** | 24 | 166 | > 50% |
| **Omega 3 Index (RBC EPA + DHA)** | **7.1** | 3.4 | 208 | > 8% |
| **Total Omega 6 Score** | **32.3** | 39.0 | 83 | <38% |
| **LA (18:2ω6)** | **17.9** | 25.1 | 71 | <21% |
| **DGLA (20:3ω6)** | **0.9** | 1.3 | 72 | <1.3% |
| **AA (20:4ω6)** | **11.9** | 10.8 | 110 | <9% |
| **% Omega 6 in HUFA** | **61** | 76 | 80 | < 50% |
| **Omega 6/Omega 3 Ratio** | **2.7** | 8.11 to 1 | 34 | < 5:1 |
| **AA/EPA Ratio** | **4.4** | 18.3 to 1 | 24 | <5:1 |

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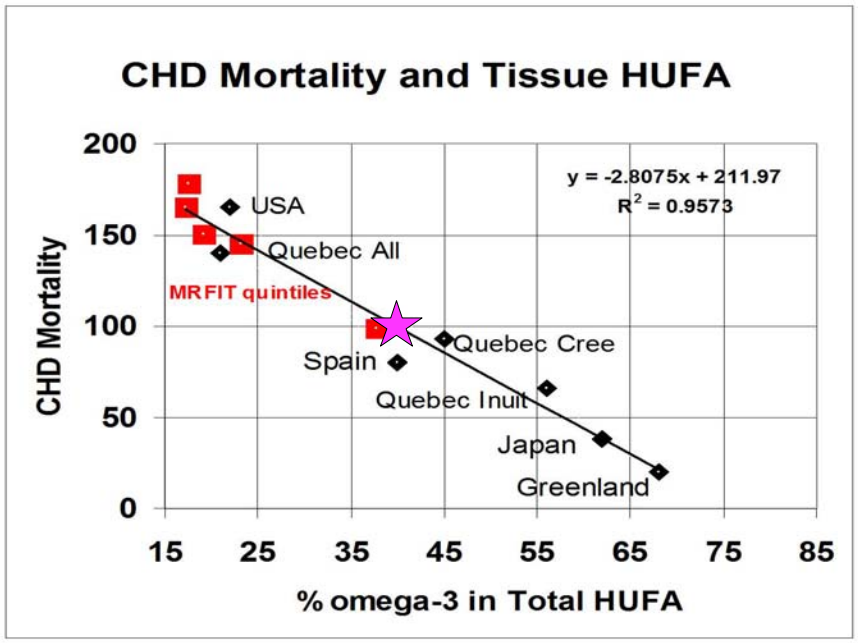
**Ted E. Slanker** 8/1/11

**Ted perfect score! You have GREAT numbers. Maintain your present dietary strategy.**

**Try to get at least 1000-2000mg of EPA and DHA and 4000mg of ALA per day with fish, fish oil and flax. Avoid omega 6 rich oils (soybean, corn, safflower) and foods made with them.**

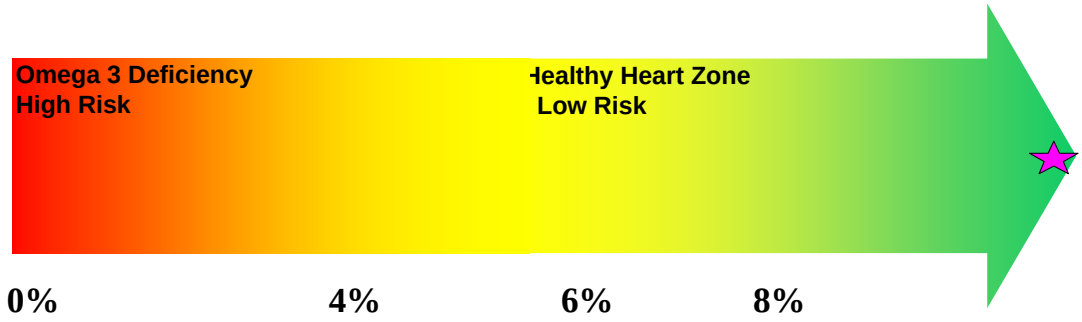
**Omega 3 in HUFA =** **39 %** US Average = 24%

**OPTIMAL > 50%** Your value indicated by the purple star on the graphic below.




**Total Omega 3 =** **11.8 %** **US Average 4.8%**

Desired >9%: correlates with a 90% risk reduction for sudden cardiac death (Albert et al)



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**Percent Composition of Blooc**
8/4/11

| | | | |
|---|---|---|---|
| | **Ted E. Slanker** | Supplements | |
| **Sample** | Blood Spot | Fish Meals/mos | |
| **SampleDate** | 8/1/11 | Avoid Omega 6? | |
| **Patient ID** | 1227411 | | |
| **Physician** | na | **Lab ID** | **1227411** |

| Patient | Ted E. Slanker | Typical USA | Common Names |
|---|---|---|---|
| **12:0** | 0.00 | **0.00** | **Lauric acid** |
| **14:0** | 0.00 | **0.64** | **Myristic** |
| **14:1** | 0.00 | **0.05** | **Myristoleic** |
| **15:0** | 0.00 | **0.21** | **Pentadecanoic** |
| **15:1** | 0.00 | **0.09** | |
| **16:0** | 21.47 | **21.05** | **Palmitic** |
| **16:1ω9** | 0.00 | **0.08** | |
| **16:1w7** | 1.90 | **1.11** | **Palmitoleic** |
| **17:0** | 0.00 | **0.21** | **Heptadecanoic** |
| **17:1** | 0.00 | **0.10** | |
| **18:0** | 12.09 | **11.92** | **Stearic** |
| **18:1ω9** | 18.99 | **17.79** | **Oleic** |
| **18:1ω7** | 0.00 | **0.00** | **Vaccenic** |
| **18:1ω5** | 0.00 | **0.00** | |
| **18:2ω6** | 17.85 | **25.10** | **Linoleic (LA)** |
| **18:3ω6** | 0.32 | **0.24** | **gamma-linolenic (GLA)** |
| **18:3ω3** | 1.77 | **0.52** | **alpha-linolenic (ALA)** |
| **18:4ω3** | 1.03 | **0.05** | **Steridonic acid (SDA)** |
| **20:0** | 0.23 | **0.18** | **Arachidic** |
| **20:1ω9** | 0.21 | **0.04** | |
| **20:1ω7** | 0.10 | **0.22** | **11-Eicoenoic** |
| **20:2ω6** | 0.25 | **0.34** | **Eicosadienoic** |
| **20:3ω9** | 0.10 | **0.06** | **Mead's acid** |
| **20:3ω6** | 0.94 | **1.31** | **Dihomogamma-linolenic acid (DGLA)** |
| **20:4ω6 (AA)** | 11.93 | **10.81** | **Arachidonic (AA)** |
| **20:3ω3** | 0.00 | **0.07** | **Eicosatrienoic acid-omega 3** |
| **20:4ω3** | 0.19 | **0.04** | **Eicosatetraenoic acid-omega 3** |
| **20:5ω3 (EPA)** | 2.68 | **0.59** | **Eicosapentaenoic (EPA)** |
| **22:0** | 0.70 | **0.21** | **Behenic** |
| **22:1ω9** | 0.03 | **0.03** | **Erucic** |
| **22:4ω6** | 1.01 | **0.76** | **Docosatetraenoic** |
| **22:5ω6** | 0.00 | **0.41** | **Docosapentaenoic -omega 6** |
| **22:5ω3 (DPA-ω3)** | 2.16 | **0.96** | **Docosapentaenoic -omega 3** |
| **24:0** | 0.00 | **0.21** | **Lignoceric** |
| **22:6ω3 (DHA)** | 4.00 | **2.59** | **Docosahexaenoic (DHA)** |
| **24:1** | 0.04 | **0.12** | **Nervonic** |
| **other** | 0.00 | **1.89** | |
| **sum** | 100.00 | **100.00** | |
| **Saturated** | 34.49 | **34.42** | **Total Saturated fatty acids** |
| **Monounsat** | 19.38 | **18.42** | **Total Monounsaturated fatty acids** |
| **PUFA** | 44.23 | **43.85** | **Total Polyunsaturated fatty acids** |
| **HUFA** | 23.00 | **17.60** | **Highly unsaturated fatty acids** |
| **T/T Ratio** | 0.01 | **0.006** | **Triene/Tetraene ratio** |
| **Total ω3** | 11.83 | **4.82** | **Total Omega 3** |
| **Total ω6** | 32.30 | **38.97** | **Total Omega 6** |
| **Total ω9** | 19.28 | **18.03** | **Total Omega 9** |
| **ω6/ω3** | 2.73 | **8.09** | **Omega 6 to Omega 3 Ratio** |
| **AA/EPA** | 4.45 | **18.32** | **AA (20:4ω6) to EPA (20:5ω3) ratio** |
| **% Omega 3 HUFA** | 39 | **24.15** | **Percent of Omega 3 in HUFA** |
| **% Omega 6 HUFA** | 61 | **75.85** | **Percent of Omega 6 in HUFA** |
| **WB EPA+DHA** | 6.68 | **3.18** | **Whole Blood EPA + DHA** |
| **RBC EPA+DHA** | 7.07 | **3.37** | **RBC EPA and DHA (Omega 3 Index)** |

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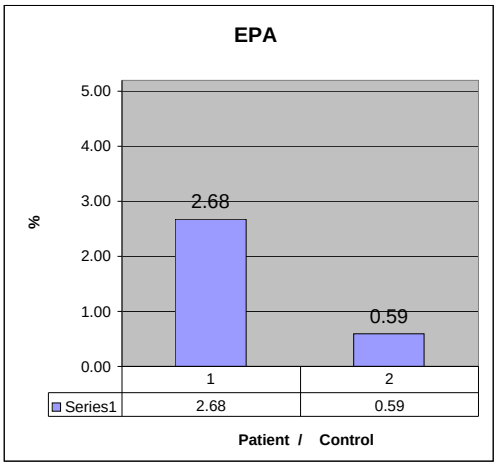


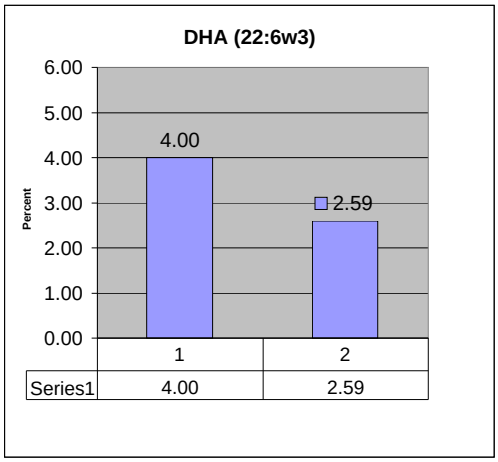


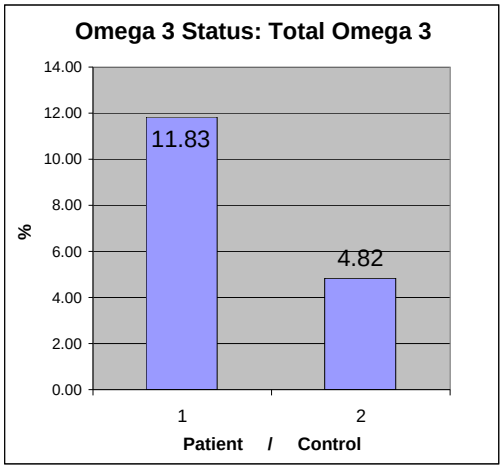


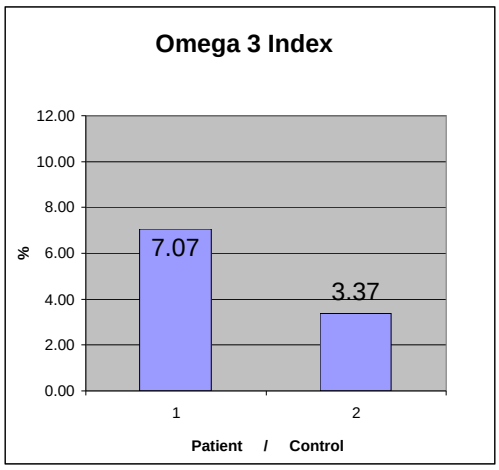


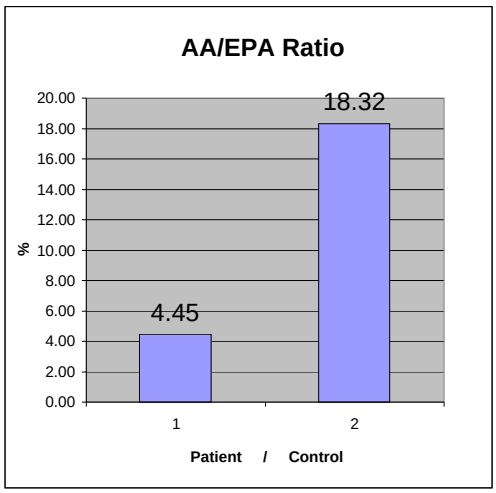


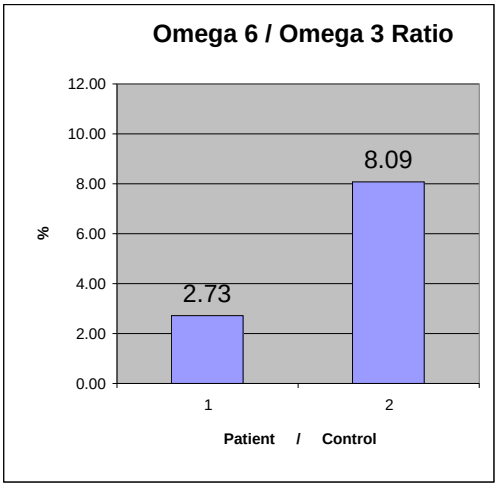

The Holman Omega 3 Test™

## Dr. Doug Bibus

Welcome to the Holman Omega 3 Test™, the quick and easy way to measure your omega 3 health. This report identifies your entire fatty acid profile but focuses on you omega 3 and omega 6 fatty acid levels. Your total omega 3 score is the total amount of omega 3 in your blood as a percentage. For example, if your omega 3 score is 5% then 5% of the fatty acids in your blood are made up of omega 3 fatty acids which includes several family members like EPA, DPA and DHA.

In populations like the Japanese who consume large amounts of marine based foods their total omega 3 score is often over 15%. Dr. Ralph T. Holman, the Grandfather of Omega 3, pioneer of this test and inventor of the term 'Omega 3', has a total omega 3 score of 25% that directly reflects his daily intake of fish, fish oil and avoidance of omega 6 rich oils.

This report also includes indicators of heart health. Two common tests describe our omega 3 levels as they relate to cardiovascular health. The first is the Lands' test, named after Dr. Bill Lands who invented this test and terminology. It is called the Omega 3 HUFA test. The term HUFA stands for 'highly unsaturated fatty acids'. These fatty acids generally form the basis for our inflammatory response. Armed with the knowledge that the inflammatory response produced from omega 6 fatty acids is quite powerful, and the same response from omega 3 HUFA is less potent (anti-inflammatory) it is thus desirable to have a lower Omega 6 HUFA score and a higher Omega 3 HUFA score. Dr. Land's has modeled several populations, their Omega 3 HUFA score and their death mortality rate from cardiovascular disease (displayed above in graphic form).

Typical Americans have a Omega 3 HUFA score of 20%, that correlates with a high incidence of mortality from heart disease. Increasing this score to 50% correlates with an approximate 50% reduction in mortality. Increasing the Omega 3 HUFA score to 70% nearly eliminates cardiovascular related mortality.

The final indicator of heart health as it relates to blood based omega 3 fatty acids is the Omega 3 Index. The Omega 3 Index is the combined value of two omega 3 fatty acids, EPA and DHA that are thought to exert the main physiological effects of omega 3 in the diet. The science behind the Omega 3 Index came from the work of Siscovick and Albert who examined omega 3 levels in populations and then assessed their risk of sudden death. From Albert's data, increasing omega 3 blood values from 3.58% to 6.76% was correlated with a 90% reduction in risk of sudden death (a type of heart attack). Data from Siscovick's work has illustrated similar outcomes. The Omega 3 Index was coined by an American and German scientist in 2004 as a blood based risk factor for cardiovascular disease. The recommended Omega 3 Index is 8% or greater or a combined percentage total of EPA and DHA greater than 8%.

If your Omega 3 numbers are low don't feel alone. The vast majority of Americans have low omega 3 levels. The good news is that you can easily improve your omega 3 score by increasing your dietary intake of oily omega 3 rich fish like salmon, omega 3 eggs and other omega 3 enriched foods. Another effective way of increasing your omega 3 levels is to consume a high quality omega 3 supplement. You should strive for a daily intake of at least 1000mg (~3-4 fish oil capsules) to 2000mg (~6-7 fish oil capsules) of EPA and DHA. Good luck on your quest for Omega 3 Health!

Albert, CM et al NEJM 2002:346 (15):1113-1118
Siscovick, DS et al JAMA 1995 (274): 1363-1367