OMEGA3 TEST
at home blood testing kit

The Holman Omega 3 Test Report
www.Omega3Test.com

	Result	(%)	Typical USA% Control	Percent of Control (%)	Target
Total Omega 3 Score	**4.9**		4.8	102	**> 9%**
% Omega 3 in HUFA	**37**		24	156	**> 50%**
% Omega 6 in HUFA	**63**		76	83	**< 50%**
Omega 6/Omega 3 Ratio	**5.4**		8.1 to 1	67	**< 5:1**
AA/EPA Ratio	**7.4**		18.3 to 1	40	**<5:1**
Omega 3 Family					
ALA (18:3ω3)	**1.5**		0.5	307	
EPA (20:5ω3)	**0.7**		0.6	115	**>3%**
DPA (22:5ω3)	**1.0**		1.0	96	**>1%**
DHA (22:6ω3)	**1.6**		2.6	61	**>4%**
Omega 6 Family					
Total Omega 6 Score	**26.4**		39.0	68	
LA (18:2ω6)	**19.5**		25.1	78	
DGLA (20:3ω6)	**0.2**		1.3	18	
AA (20:4ω6)	**5.0**		10.8	46	

Omega 3 Family
ALA = alpha Linolenic acid (Plant Omega 3)
EPA = Eicosapentaenoic Acid (Marine Omega 3)
DPA = Docosapentaenoic Acid (Marine Omega 3)
DHA = Docosahexaenoic Acid (Marine Omega 3)
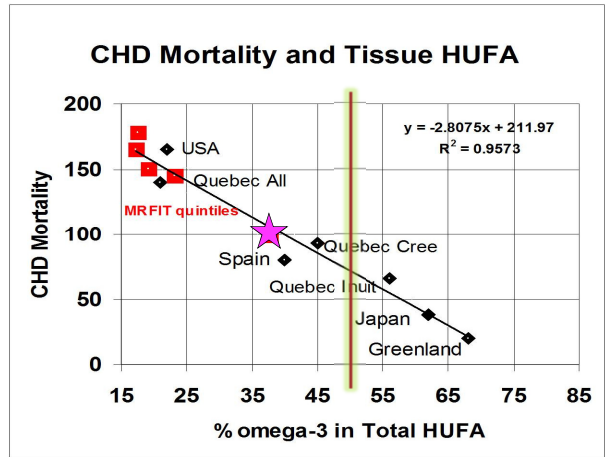Omega 3 Score = ALA, EPA, DPA, DHA

Omega 6 Family
LA = Linoleic Acid (Plant based omega 6 ; soybean oil, walnuts
DGLA = dihomo-gamma-linolenic Acid (Animal omega 6)
AA = Arachidonic Acid (Animal based Omega 6)

OMEGA3TEST
at home blood testing kit

Omega 3 in HUFA =	37 %

CHD Mortality and Tissue HUFA

$$y = -2.8075x + 211.97$$
$$R^2 = 0.9573$$

USA
Quebec All
MRFIT quintiles
Quebec Cree
Spain
Quebec Inuit
Japan
Greenland

CHD Mortality (y-axis: 0, 50, 100, 150, 200)
% omega-3 in Total HUFA (x-axis: 15, 25, 35, 45, 55, 65, 75, 85)

US Average = 24%   **Optimal > 50%**

LANDS' Figure: Coronary Heart Disease (CHD) Mortality versus % of omega 3 in HUFA. HUFA stands for Highly Unsaturated Fatty Acids. HUFA are the precursors of hormone like compounds call eicosanoids or prostaglandins that drive inflammation.

In the figure, as the % in omega 3 HUFA INCREASES there is a strong linear reduction in CHD mortality. This is based on studies done in various populations and based on research by Dr Bill Lands. The target score for this test is 50% (or higher) which represents a balance of omega 3 and omega 6 per Dr Lands.

Omega 6 HUFA are potent mediators of inflammation while Omega 3 HUFA are less so. Omega 3 HUFA compete with Omega 6 HUFA based on Dr Lands' research. Omega 3 HUFA are thus seen as anti-inflammatory.

Total Omega 3   4.9 %   US Average 4.8%
Desired >9%: correlates with a 90% risk reduction for sudden cardiac death (Albert et al)

Omega 3 Deficiency Risk

Healthy Heart Zone Reduced Risk

0%   4%   6%   8%
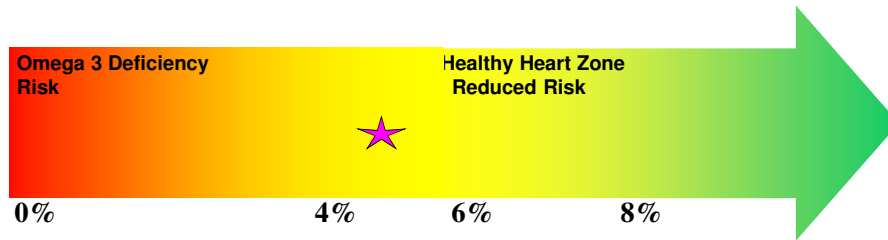
How Much Omega 3 should I try to get in my diet?

Experts recommend eating 1000mg to 2000mg of EPA and DHA per day and 2000mg of ALA per day with fish, fish oil and ground flax seed. Your provider may reccommend more or less. Green vegetables are also a good source of plant based omega 3. Vegetables typically have a balanced ratio of omega 3 and omega 6 and are also a rich source of antioxidants, fiber and nutrients. Experts also recommend avoiding omega 6 rich oils like soybean, corn, peanut and safflower that compete with omega 3 for metabolism.

EPA (20:5ω3)

	You	Control
Series1	0.68	0.59

You / Control

DHA (22:6ω3)

	You	Control
Series1	1.59	2.59

You / Control

Total Omega 3

	You	Control
Series1	4.89	4.82

You / Control

Omega 3 Index

	You	Control
Series1	3.16	4.42

You / Control

AA/EPA Ratio

	You	Control
Series1	7.35	18.32

You / Control

Omega 6 / Omega 3 Ratio

	You	Control
Series1	5.39	8.09

You / Control