

Lab ID
Patient ID P000060
Ext ID 26116-0003

Test Patient

Sex: Female • 56yrs • 01-Jan-70
123 Home Street, Test Suburb VIC 3125

RECEIVED
26-Apr-26

Specimen type - Blood-EDTA

Collected

15-Apr-26

TEST	RESULT	H/L		REFERENCE	UNITS
Total Saturated Fatty Acids	37.38			(29.89-42.10)	%
Total Monounsaturated Fatty Acids	18.57			(15.65-31.82)	%
Total Omega 3 Fatty Acids	7.00			(2.57-15.15)	%
Total Omega 6 Fatty Acids	36.36			(24.85-44.15)	%
Total Omega 9 Fatty Acids	2.30	L		(16.00-27.00)	%
Omega 6/Omega 3 Ratio	5.19			(1.90-14.60)	ratio
Eicosapentaenoic (EPA) 20:5n3	0.49			(0.14-6.92)	%
Docosahexaenoic (DHA) 22:6 n3	4.59			(1.00-6.50)	%
Omega 3 Index	5.12			(>4.00)	%
AA/EPA Ratio	28.92			(1.10-30.00)	ratio
Delta 6 Desaturase Activity (LA/DGLA)	7.95			(6.00-25.00)	ratio



Dr Test Doctor (Test Doctor) Test Clinic. 123 Test Street, Test Suburb Victoria 3125

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Red Cell Fatty Acids Comment

The Western diet has significantly altered the balance between omega-6 (n-6) and omega-3 (n-3) fatty acids, which historically maintained a near 1:1 ratio. Modern dietary shifts and advances in the food industry have led to a disproportionate increase in n-6 intake, with the ratio now estimated to exceed 20:1. This imbalance is associated with a higher prevalence of chronic diseases, including cardiovascular disease, cancer, metabolic syndrome, obesity, mood disorders, autoimmune conditions, and neurodegenerative diseases. To address this, dietary strategies emphasising omega-3 intake over omega-6 are recommended to restore a healthier balance and reduce disease risk.

OMEGA 3 INDEX:

The biomarker, Omega 3 Index, has been derived from the accepted principle that the RBC membranes reflect cardiac membrane omega 3 FA content.

As supplementation of omega 3 FAs (in particular EPA and DHA) is known to reduce the risk of CHD, the Omega 3 Index expresses the sum of the EPA and DHA as a percentage of the total identified fatty acids.

An Omega 3 Index greater than 8% is deemed to be desirable (Cardioprotective).

An Omega 3 Index between 4 and 8 % is deemed acceptable.

An Omega 3 Index less than 4% is deemed to be undesirable (High Risk).

INFLAMMATION INDEX COMMENT:

An AA/EPA ratio of 3.0 is deemed acceptable whilst an ideal/optimal ratio is 1.5.

The patient needs to be titrated using Omega 3 Essential Fatty Acids to bring the patient to an optimal ratio.

Supplementation Recommendations: The following dosages are suggestive guidelines as indicated in the literature:

AA/EPA Ratio	Interpretation
1.5	Ideal
3.0	Good
10	Moderate risk
>15	High risk

Treatment Suggestions	Omega-3 Per Day
Maintenance	2.5g
Improved CV function	5.0g
Chronic pain	7.5g
Neurological disease	10.0g

Methodology

Gas Chromatography-MS (GC/MS)