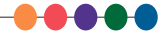


TEST NAME: Essential & Metabolic Fatty Acids Bloodspot

3540 Essential & Metabolic Fatty Acids Bloodspot

Methodology: GCMS



| Omega-3 Fatty Acids                       |                        | Omega-6 Fatty Acids                               |                        |
|---|------------------------|---|------------------------|
| Analyte                                   | Reference Range        | Analyte   | Reference Range        |
| <i>(cold water fish, flax, walnut)</i>    |                        | <i>(vegetable oil, grains, most meats, dairy)</i> |                        |
| α-Linolenic (ALA) 18:3 n3                 | 9.13<br>>= 0.28 wt %   | Linoleic (LA) 18:2 n6                             | 21.8<br>18.8-28.3 wt % |
| Eicosapentaenoic (EPA) 20:5 n3            | 0.24<br>>= 0.12 wt %   | γ-Linolenic (GLA) 18:3 n6                         | 0.32<br>0.15-0.54 wt % |
| Docosapentaenoic (DPA) 22:5 n3            | 0.79<br>>= 0.34 wt %   | Dihomo-γ-linolenic (DGLA) 20:3 n6                 | 4.77<br>>= 1.02 wt %   |
| Docosahexaenoic (DHA) 22:6 n3             | 1.2<br>>= 0.8 wt %     | Arachidonic (AA) 20:4 n6                          | 8<br>7-12 wt %         |
| % Omega-3s                                | 11.4<br>>= 1.6         | Docosatetraenoic (DTA) 22:4 n6                    | 0.68<br>0.45-1.25 wt % |
| Omega-9 Fatty Acids                       |                        | Monounsaturated Fatty Acids                       |                        |
| Analyte                                   | Reference Range        | Omega-7 Fatty Acids                               |                        |
| <i>(olive oil)</i>                        |                        | Reference Range                                   |                        |
| Oleic 18:1 n9                             | 17<br>14-21 wt %       | Palmitoleic 16:1 n7                               | 1.11<br>≤ 2.58 wt %    |
| Nervonic 24:1 n9                          | 1.6<br>1.1-1.8 wt %    | Vaccenic 18:1 n7                                  | 0.12<br>≤ 1.65 wt %    |
| % Omega-9s                                | 18.4<br>17.3-22.5      | Trans Fats  |                        |
| Saturated Fatty Acids                     |                        | Reference Range                                   |                        |
| Analyte                                   | Reference Range        | Elaidic 18:1 n9t                                  |                        |
| <i>(meat, dairy, coconuts, palm oils)</i> |                        | 0.24<br>≤ 0.59 wt %                               |                        |
| Palmitic C16:0                            | 21<br>19-27 wt %       | Delta-6-Desaturase Activity                       |                        |
| Stearic C18:0                             | 10<br>9-12 wt %        | Upregulated Functional Impaired                   |                        |
| Arachidic C20:0                           | 0.27<br>0.24-0.40 wt % | Linoleic / DGLA 18:2 n6 / 20:3 n6                 |                        |
| Behenic C22:0                             | 1.11<br>0.88-1.61 wt % | 4.6<br>12.6-31.5                                  |                        |
| Tricosanoic C23:0                         | 0.21<br>0.19-0.26 wt % | Cardiovascular Risk                               |                        |
| Lignoceric C24:0                          | 1.3<br>1.1-1.9 wt %    | Analyte   |                        |
| Pentadecanoic C15:0                       | 0.24<br>0.14-0.30 wt % | Omega-6s / Omega-3s                               |                        |
| Margaric C17:0                            | 0.29<br>0.24-0.45 wt % | 3.1<br>8.5-27.4                                   |                        |
| % Saturated Fats                          | 33.6<br>39.8-43.6      | AA / EPA 20:4 n6 / 20:5 n3                        |                        |
|   |                        | 32<br>10-86                                       |                        |
|   |                        | Omega-3 Index *                                   |                        |
|   |                        | 3.7<br>≥ 4.0                                      |                        |

The Essential Fatty Acid reference ranges are based on an adult population.

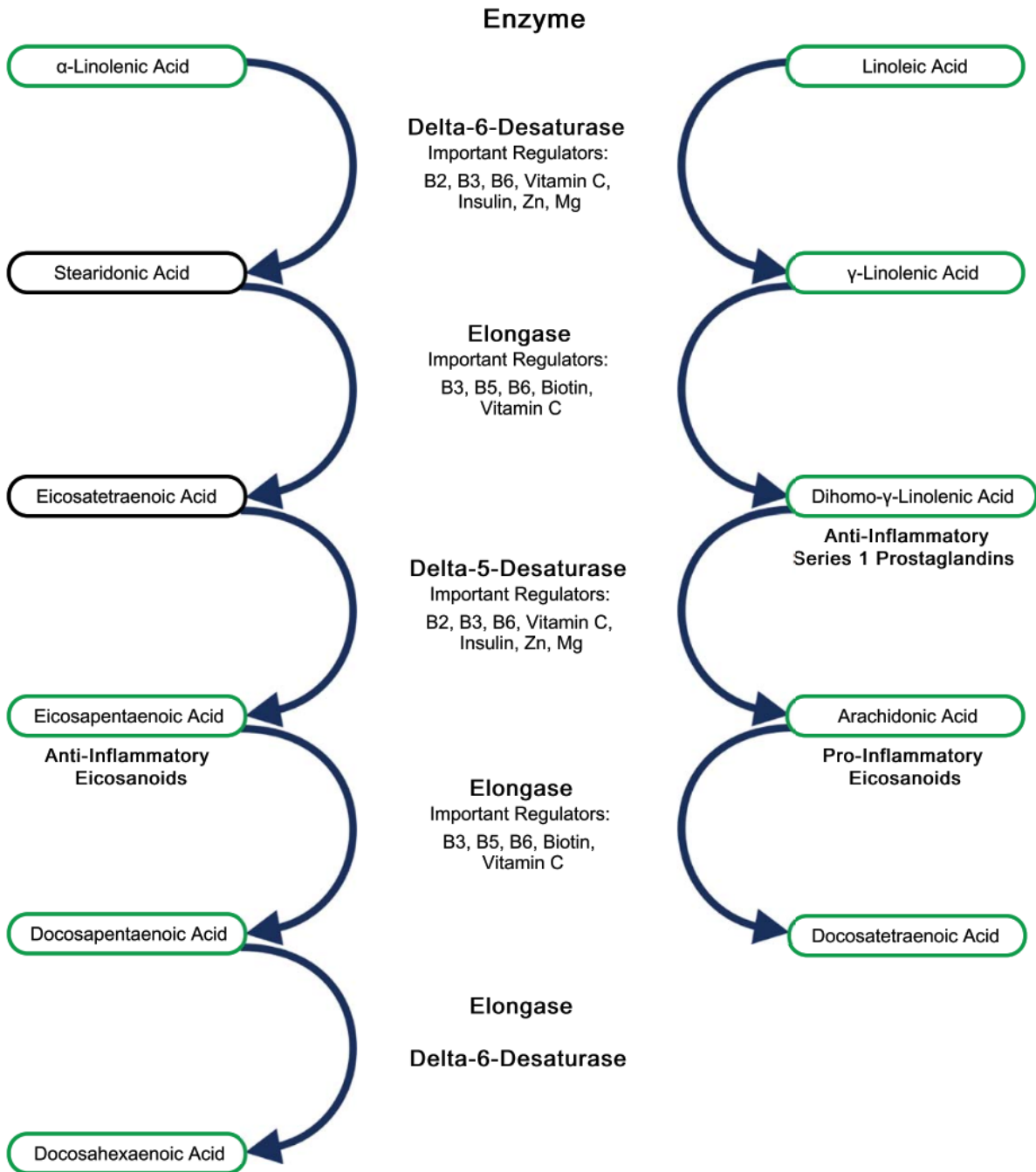
\* The patient results for the Omega 3 Index have been converted to red blood cell equivalence in order to maintain applicability to the literature-based reference ranges for this marker.

**TEST NAME: Essential & Metabolic Fatty Acids Bloodspot**

**Fatty Acid Metabolism**

**Omega-3 Metabolism**

**Omega-6 Metabolism**



**TEST NAME: Essential & Metabolic Fatty Acids Bloodspot**



**Commentary**

This test has been developed and its performance characteristics determined by Genova Diagnostics, Inc. It has not been cleared by the U.S. Food and Drug Administration.

The **Reference Range** is a statistical interval representing 95% or 2 Standard Deviations (2 S.D.) of the reference range population. One Standard Deviation (1 S.D.) is a statistical interval representing ~68% of the reference population. Values between 1 and 2 S.D. are not necessarily abnormal. Clinical Correlation is suggested.

