OmegaCheck™

CPT Code 82542
Sample Type Whole Blood
Order Code C302
Tube Type Lavender Top

Description
Omega-3 and omega-6 fatty acids are polyunsaturated long chain fatty acids (PUFA) required by the body for proper functioning, normal growth and the formation of neural synapses and cellular membranes. Omega-3 and -6 fatty acids are considered "essential" and obtained primarily from dietary sources.

Three of the most important omega-3 fatty acids are eicosapentaenoic acid (EPA), docosapentaenoic acid (DPA) and docosahexaenoic acid (DHA). Omega-3 fatty acids are primarily obtained from food sources, such as oily fish. They have antioxidant1, anti-inflammatory2 and anti-thrombotic3 effects, and can help to reduce triglyceride levels4-6. Two of the most important omega-6 fatty acids are arachidonic acid (AA) and linoleic acid (LA). Omega-6 fatty acids are obtained from animal sources and plant oils, and have pro-inflammatory2,7 and pro-thrombotic7 properties at high levels.

Clinical Use
OmegaCheck™ may be performed on individuals with hypercholesterolemia, hypertriglyceridemia, hypertension, and/or those at high metabolic or cardiovascular risk.

Clinical Significance
- Consumption of omega-3 fatty acids reduces the occurrence of major acute cardiac events in healthy individuals or patients with cardiovascular risk factors or who have cardiovascular disease8-14.
- Consumption of omega-3 fatty acids leads to a reduction in triglycerides4-6 and non-HDL6, as well as Lp-PLA2 levels6.
- A high intake of omega-6 fatty acid precursors can interfere with the absorption of omega-3 fatty acids6.
- The mean omega-6:omega-3 ratio of the standard American diet is approximately 10:16. A diet with an omega-6:omega-3 fatty acid ratio of 4:1 or less may reduce total mortality up to 70% over 2 years11.

Testing Frequency
Testing frequency depends on the individual’s medical history. OmegaCheck™ may be run alongside a standard lipid panel or other cardiometabolic tests.

Sample Type
OmegaCheck™ should be performed on a whole blood sample. Fasting samples are preferred, but not required, and omega-3 supplementation should not be altered immediately prior to the blood draw.

Commercial Insurance or Medicare Coverage
Coverage guidelines, also known as NCD (National Coverage Determination) or LCD (Local Coverage Determination), have not been established or posted by CMS (Medicare & Medicaid). We have reviewed the larger Carriers (Aetna, United HealthCare, Cigna, Blues) and information has not been posted or is limited. Medical necessity and specificity of diagnosis should be provided when ordering this test.

Understanding Medical Necessity
The following ICD-10 codes for OmegaCheck™ are listed as a convenience for the ordering physician. The ordering physician should report the diagnosis code that best describes the reason for performing the test.

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Diagnosis Code</th>
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<tbody>
<tr>
<td>Type 2 Diabetes Mellitus with Hyperglycemia</td>
<td>E11.65</td>
</tr>
<tr>
<td>Type 2 Diabetes Mellitus without Complications</td>
<td>E11.9</td>
</tr>
<tr>
<td>Other Specified Diabetes Mellitus without Complications</td>
<td>E13.9</td>
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<tr>
<td>Pure Hypercholesterolemia</td>
<td>E78.0</td>
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<tr>
<td>Pure Hyperglyceridemia</td>
<td>E78.1</td>
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<tr>
<td>Mixed Hyperlipidemia</td>
<td>E78.2</td>
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<tr>
<td>Other Hyperlipidemia</td>
<td>E78.4</td>
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<td>Hyperlipidemia, Unspecified</td>
<td>E78.5</td>
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<tr>
<td>Metabolic Syndrome</td>
<td>E88.81</td>
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<tr>
<td>Essential (primary) Hypertension</td>
<td>I10</td>
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<tr>
<td>Atherosclerotic Heart Disease of Native Coronary Artery without Angina Pectoris</td>
<td>I25.10</td>
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<tr>
<td>Impaired Fasting Glucose</td>
<td>R73.01</td>
</tr>
<tr>
<td>Impaired Glucose Tolerance Test (oral)</td>
<td>R73.02</td>
</tr>
</tbody>
</table>

Low omega-3 fatty acid levels are associated with:
- Hypertriglyceridemia
- High blood pressure
- Increased risk of heart disease

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**References**

5. Musa-Veloso K et al. Long-chain omega-3 fatty acids eicosapentaenoic acid and docosahexaenoic acid dose-dependently reduce fasting serum triglycerides. Nutrition Reviews. 2010; 68: