Omega-3 Fatty Acids

Overview

- Omega-3 fatty acids are polyunsaturated, meaning they have more than 1 double bond.
- They are called “omega-3” because the first double bond counting from the methyl end of the fatty acid is located at the third carbon.
- ALA is a fatty acid that is essential to the diet; however it cannot be synthesized by humans. It must be obtained from dietary sources.
- With the consumption of ALA from the diet, other longer chain omega-3 fatty acids can be synthesized by the body, such as EPA and DHA.

Types

Alpha-linolenic acid (ALA)
Eicosapentaenoic acid (EPA)
Docosahexaenoic acid (DHA)

Where are these fatty acids found?

Common Sources of α-linolenic acid:
Food sources of alpha-linolenic acid are: flaxseed oil, walnuts, canola oil, soybean and olive oils.

Common Sources for EPA and DHA
Cooked food sources of EPA and DHA are: cold water fish like herring and salmon, other fish such as trout and tuna, and seafood, such as oysters and shrimp.

Proposed Health Effects

Studies examining fish consumption and fish oil supplementation have found beneficial effects on the following:

- Coronary Heart Disease
- Sudden Cardiac Death
- Stroke
- Cancer
- Diabetes Mellitus
- Rheumatoid Arthritis
- Ulcerative Colitis
- Crohn's Disease
- Immunoglobulin A Nephropathy

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