



Ketogenic Dietary Therapies
Information Training Research Support

ESSENTIAL FATTY ACIDS

Essential Fatty Acids (EFAs) are fats that cannot be made by the body and therefore must be consumed in the diet.

Omega 6 polyunsaturated fatty acids (Linoleic Acid) and **Omega 3** polyunsaturated fatty acids (Alpha-Linolenic Acid) are **EFAs**. **Docosahexaenoic acid (DHA) and eicosapentaenoic acid (EPA) are type of Omega 3 fatty acids that are necessary for optimal brain functioning.** An ideal amount of DHA is required in our diet to support brain function.

Some DHA and EPA can be made by our body, but in small amounts that are not adequate to support health. Therefore, EPA and DHA must be attained from our diet. While plant based foods such as flaxseed, canola oil, and walnuts contain Omega 3 fatty acids, they do not contain EPA or DHA in the required amounts to meet recommendations. Intake of DHA and EPA in North America is often below recommendations, since the primary source of these nutrients are fish and fish oils.

Foods that contain a significant amount of Omega 3 (but not EPA and DHA specifically):

- Flaxseed oil
- Chia seeds
- Walnuts
- Flaxseeds, ground
- Walnut oil
- Canola oil
- Soybean oil
- Mustard oil
- Tofu, firm

Omega 6 intake is typically adequate, as foods that contain Omega 6 fatty acids are plentiful in North America (animal meats, and vegetable oils).

Foods that contain a significant amount of Omega 6:

- Safflower oil
- Sunflower oil/seeds
- Pine nuts
- Sunflower oil
- Corn oil
- Soybean oil
- Brazil nuts
- Pecan oil/nuts
- Sesame oil



CANADA

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Dietary Reference Intakes (DRIs) for Essential Fatty Acids:

Life Stage Groups	Linoleic Acid/Omega 6 (g/day)	Alpha-Linolenic Acid/Omega 3 (g/day)
0 to 6 months	4.4	0.5
6 to 12 months	4.6	0.5
1 to 3 years	7.0	0.7
4 to 8 years	10.0	0.9
9 to 13 years	Males	12
	Females	10
14 to 18 years	Males	16
	Females	11

Currently there are no DRIs for EPA and DHA in Canada, however, various health authorities recommend that **two servings of fatty fish per week should be consumed in order to attain adequate Omega 3**. If fish consumption is not possible, requirements can be met with a combination of functional foods containing EPA and DHA, as well as supplements. The European Food Safety Authority recommends an adequate intake for EPA plus DHA of 250 mg/day.

Foods that contain a significant amount of EPA and DHA:

- Herring, Pacific
- Salmon, chinook
- Sardines, Pacific
- Salmon, Atlantic
- Oysters, Pacific
- Salmon, sockeye
- Trout, rainbow
- Tuna, canned, white
- Crab

Current ketogenic formulas and medium chain triglyceride oil do not contain a sufficient amount of EFAs to meet the recommended amounts, therefore it may be necessary to take EFA supplements.

When buying a supplement in Canada, look for a Natural Product Number (NPN) to ensure the supplement has been tested for safety and quality.





If you have any questions please connect with your ketogenic diet team or Matthew's Friends Canada. Other publications are available to support you. Feel free to contact us:

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