Inflammatory Bowel Disease & Omega-3 Fatty Acids

What are omega-3 fatty acids?

Omega-3 fatty acids are healthy fats and are known to have many health benefits. For example, omega-3 fatty acids may have anti-inflammatory effects on the body. Therefore, they may play an important role in the treatment of disorders that involve inflammation, like Inflammatory Bowel Disease (IBD). The two most beneficial omega-3 fatty acids are docosahexanoic acid (DHA) and eicosapentaenoic acid (EPA). Alpha-linolenic acid (ALA) is also an omega-3 fatty acid; however its conversion to DHA and EPA is not efficient in our bodies.

Most Canadians tend to consume adequate amount of ALA in their diet, however the intakes of DHA and EPA tend to be low.

Can omega-3 fatty acids help in IBD?

Research trials show promising results that omega-3 fatty acids may help to decrease inflammation in the intestine which in turn may help to decrease the severity and frequency of IBD symptoms. Omega-3 fatty acids may also help to relieve IBD-related joint pain.

Incorporating omega-3 fatty acids into your diet is a safe and effective way to improve your overall health. The optimal amount of omega-3 fatty acids a person with IBD should consume in the diet has yet to be determined. The general public is advised to consume a minimum of 400-500 milligrams/day of DHA and EPA combined.

Asking for help:

The connection between IBD and omega-3 fatty acids is complex. Ask your dietitian if you have any questions or would like more information.
What foods contain omega-3 fatty acids?

Our body does not make omega-3 fatty acids; therefore we must obtain them from our diet. The typical North America diet is low in omega-3 fatty acids.

The best sources of omega-3 fatty acids are:

<table>
<thead>
<tr>
<th>Food</th>
<th>Total Amount of Omega-3 Fatty Acids per Serving [6,11]</th>
<th>DHA + EPA per serving [6,11]</th>
<th>ALA per serving [6,11]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salmon (75 g, 2 ½ oz)</td>
<td>1700 mg</td>
<td>1610 mg</td>
<td>90 mg</td>
</tr>
<tr>
<td>Anchovies (75 g, 2 ½ oz)</td>
<td>1550 mg</td>
<td>1540 mg</td>
<td>10 mg</td>
</tr>
<tr>
<td>Sardines (75 g, 2 ½ oz)</td>
<td>1100 mg</td>
<td>730 mg</td>
<td>370 mg</td>
</tr>
<tr>
<td>Mackerel (75 g, 2 ½ oz)</td>
<td>990 mg</td>
<td>900 mg</td>
<td>90 mg</td>
</tr>
<tr>
<td>Trout (75 g, 2 ½ oz)</td>
<td>850 mg</td>
<td>700 mg</td>
<td>150 mg</td>
</tr>
<tr>
<td>Tuna (packed in oil) (75 g, 2 ½ oz)</td>
<td>330 mg</td>
<td>180 mg</td>
<td>150 mg</td>
</tr>
<tr>
<td>Ground Flaxseed (75g, 2 ½ oz)</td>
<td>1600 mg</td>
<td>0 mg</td>
<td>1600 mg</td>
</tr>
<tr>
<td>Walnuts (60 mL, ¼ cup)</td>
<td>630 mg</td>
<td>0 mg</td>
<td>630 mg</td>
</tr>
<tr>
<td>Flaxseed Oil (15 mL, 1 tbsp)</td>
<td>7740 mg</td>
<td>0 mg</td>
<td>7740 mg</td>
</tr>
<tr>
<td>Canola Oil (15 mL, 1 tbsp)</td>
<td>1320 mg</td>
<td>0 mg</td>
<td>1320 mg</td>
</tr>
<tr>
<td>Soybean Oil (15 mL, 1 tbsp)</td>
<td>940 mg</td>
<td>0 mg</td>
<td>940 mg</td>
</tr>
<tr>
<td>Olive Oil (15 mL, 1 tbsp)</td>
<td>110 mg</td>
<td>0 mg</td>
<td>110 mg</td>
</tr>
<tr>
<td>Enriched Eggs (1 egg)</td>
<td>150 mg</td>
<td>50 mg</td>
<td>100 mg</td>
</tr>
<tr>
<td>Enriched Milk (250 mL, 1 cup)</td>
<td>20 mg</td>
<td>20 mg</td>
<td>0 mg</td>
</tr>
<tr>
<td>Enriched Yogurt (175 g, ¼ cup)</td>
<td>40 mg</td>
<td>40 mg</td>
<td>0 mg</td>
</tr>
</tbody>
</table>

Food Fact:

There are a growing number of products on the market that are enriched with omega-3 fatty acids (e.g. omega 3 eggs, yogurt, milk, ect.). The amount of omega-3 fatty acids may vary in these products. Be sure to read the label.
What about an omega-3 fatty acid supplement?

If your diet is low in omega-3 fatty acids, a supplement may be considered. There are a number of supplements on the market that contain omega-3 fatty acids.

For example, if you are aiming to consume 500 mg/day of EPA + DHA combined, you should look for a label like this:

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Each Capsule Contains:
Fish Oils
(Salmon, anchovy, sardine)…..1000 mg
Eicosapentaenoic Acid
(EPA)..............................300 mg
Docosahexanoic Acid
(DHA)..............................200 mg
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\[
\{ 300 \text{ mg EPA} + 200 \text{ mg DHA} = 500 \text{ mg} \}
\]

Making omega-3 fatty acids work for you:

- Eat two or more servings of fatty fish (75g per serving or 2 ½ oz) each week.
- Use flaxseed, canola, soybean, or olive oil when cooking or baking.
- Consider taking a daily omega-3 fatty acid supplement.
References


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