Using Soluble Fiber Supplements to Reduce LDL Cholesterol

Fiber is found only in foods that come from plants. This includes fruits, vegetables, whole grains, nuts, seeds, and beans. There are two types of fiber - soluble and insoluble. Both types are good for your health and provide different benefits.

**Insoluble fibers** are not changed during digestion. They draw water into the intestine and help to prevent constipation. They also support colon function and health. Good sources of insoluble fiber include:
- Wheat bran,
- Vegetables,
- Fruits (with skins),
- Legumes (dry beans and peas),
- Whole-grain foods.

**Soluble fibers** soak up water and become gel-like in the stomach and intestine. These fibers reduce the risk of heart disease by blocking the absorption of fats and cholesterol. This slows the absorption of sugars from the intestine and reduces LDL (“bad”) cholesterol and blood sugars. Foods that are high in soluble fiber (>4 grams per serving) include:
- Oats, oatmeal, oat bran and barley,
- High fiber multigrain clusters,
- Bran flakes or whole grain oats,
- Beans and lentils (e.g. Kidney beans),
- Some vegetables,
- Some fruits,
- Flax seeds, chia seeds
- Almonds, walnuts, and peanuts provide greater than 2 grams of soluble fiber per serving.

**Why should I take fiber supplements?**
Your health care provider may suggest that you increase your soluble fiber intake. It can be hard to get enough soluble fiber from food every day. Fiber supplements may help.

Taking three to four doses of soluble fiber supplements (for a total of 5-10 grams) daily can lower your LDL (“bad”) cholesterol by 5-10%. The chart on the next page shows you how to start with a low dose and slowly increase as tolerated.

**Types of Fiber Supplements**
- Psyllium fiber is known to reduce LDL cholesterol.
- Psyllium is the type of fiber found in Metamucil® or in the generic form of psyllium husk.
- Other types of fiber supplements do not reduce LDL cholesterol as much as psyllium. Products such as Benefiber, Citrucel, FiberChoice, Fibersure, and FiberCon do not contain psyllium and do not help to lower LDL cholesterol.

**Possible Side Effects**
Psyllium may cause bloating or gas. This should decrease as your body gets used to the fiber. Because fibers act as stool softeners, your stools may be larger, and you may have bowel movements more often.

Fiber supplements rarely cause serious side effects. Rare side effects may include an allergy or bowel obstruction.
To help prevent side effects, drink plenty of liquids (at least one cup with every dose of fiber). Fluid intake is important to help the fiber move through your body.

Follow our schedule to slowly increase your dose. Start low and go slow to decrease side effects.

**Metamucil® Supplements (psyllium fiber)**

<table>
<thead>
<tr>
<th>Week</th>
<th>Breakfast</th>
<th>Supper</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 dose in 8 oz liquid*</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1 dose in 8 oz liquid</td>
<td>1 dose in 8 oz liquid</td>
</tr>
<tr>
<td>3</td>
<td>2 doses in 16 oz liquid</td>
<td>2 doses in 16 oz liquid</td>
</tr>
<tr>
<td>4</td>
<td>Increase if recommended by your health care provider.</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Product</th>
<th>Dose</th>
<th>Calories per Dose</th>
<th>Dietary Fiber, gm</th>
<th>Soluble Fiber, gm</th>
<th>Total Carbohydrate, gm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metamucil® Orange smooth powder</td>
<td>1 rounded tbsp</td>
<td>45</td>
<td>3</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>Metamucil® sugar-free, smooth powder berry, orange or unflavored</td>
<td>1 rounded tsp</td>
<td>20</td>
<td>3</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Metamucil® capsules</td>
<td>5 capsules</td>
<td>10</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Metamucil® multigrain fiber wafers</td>
<td>2 wafers</td>
<td>100</td>
<td>5</td>
<td>3</td>
<td>16</td>
</tr>
<tr>
<td>Meta Health Bar Cinnamon Oatmeal Raisin or Cranberry lemon drizzle</td>
<td>1 bar</td>
<td>150</td>
<td>4</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>Metamucil-Free fiber supplement</td>
<td>1 rounded tsp</td>
<td>25</td>
<td>3</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>Yerba Prima Psyllium husk powder</td>
<td>1 rounded tsp</td>
<td>15</td>
<td>4.5</td>
<td>3.5</td>
<td>4.5</td>
</tr>
<tr>
<td>Yerba Prima Psyllium husk caps</td>
<td>4 capsules</td>
<td>8</td>
<td>0.4</td>
<td>1.8</td>
<td>2.2</td>
</tr>
</tbody>
</table>

**Teach Back**

What is the most important thing you learned from this handout?

What changes will you make in your diet/lifestyle, based on what you learned today?
Questions
If you are a UW Health patient and have more questions, please call UW Health at one of the phone numbers below. You can also visit our website at www.uwhealth.org/nutrition.

Nutrition clinics for UW Hospital and Clinics (UWHC) and American Family Children’s Hospital (AFCH) can be reached at (608) 890-5500. Nutrition clinics for UW Medical Foundation (UWMF) can be reached at (608) 287-2770.

If you are a patient receiving care at UnityPoint – Meriter, Swedish American or a health system outside of UW Health, please use the phone numbers provided in your discharge instructions for any questions or concerns.

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person’s health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 1/2019. University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#615.