GMHC’S Nutrition & Wellness Program

High Cholesterol

Monitoring cholesterol levels is very important to maintain good heart health. It is especially important in HIV because high cholesterol is a common side-effect of medications used to fight the virus.

Types of Cholesterol

1. **LDL Cholesterol**: Just remember L stands for lousy. Your LDL cholesterol is a fat that circulates throughout in your blood around your body and causes your arteries to clog.

2. **HDL Cholesterol**: A low level of this cholesterol is a problem because it increases your risk of heart disease. HDL cholesterol gathers up harmful cholesterol in your blood and delivers it to the liver which excretes it.

3. **Total Cholesterol**: Is essentially your HDL and LDL levels added together. High HDL levels can cause your total cholesterol levels to be high, therefore, knowing your HDL and LDL levels help you understand the whole picture.

Causes of High Cholesterol

- HIV Medications
- High Saturated Fat Intake
- Overweight
- Physical Inactivity
- Older age

<table>
<thead>
<tr>
<th>Total Cholesterol</th>
<th>&lt;200</th>
<th>Good</th>
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<tbody>
<tr>
<td></td>
<td>200-239</td>
<td>High</td>
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<tr>
<td></td>
<td>&gt;240</td>
<td>Very High</td>
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<table>
<thead>
<tr>
<th>LDL Cholesterol</th>
<th>&lt;100</th>
<th>Good</th>
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<tbody>
<tr>
<td></td>
<td>100-129</td>
<td>Above Optimal</td>
</tr>
<tr>
<td></td>
<td>130-159</td>
<td>Borderline High</td>
</tr>
<tr>
<td></td>
<td>&gt;160</td>
<td>High</td>
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<table>
<thead>
<tr>
<th>HDL Cholesterol</th>
<th>&gt;40</th>
<th>Good</th>
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<tbody>
<tr>
<td></td>
<td>&lt;40</td>
<td>At Risk</td>
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Dietary Fat Affects Cholesterol Levels

- **Saturated Fat** is found in animal products such as high-fat meats and dairy (milk, cheese, butter) and palm and coconut oil (used in processed candy bars, cakes and cookies).
  - Raises LDL cholesterol

- **Trans Fat** is created by turning liquid vegetable oil into a solid, butter-like consistency. This is used in margarine and helps prolong the shelf-life of baked goods. Trans fat is commonly found in fried foods because this oil is reheated so many times that trans fat naturally forms. Any food with the word hydrogenated or partially hydrogenated in its ingredients contains trans fat.
  - Raises LDL cholesterol
  - Lowers HDL cholesterol

- **Monounsaturated Fat** is a good fat to include in your diet. It is found in canola oil, olive oil, almonds, avocado and peanuts.
  - Lowers LDL cholesterol
o May increase HDL

• **Polyunsaturated Fat** is another good type of fat to include. It is found in soybeans, nuts and seeds as well as the foods listed below.

  o **Lowers LDL cholesterol**

**Omega-3 fats** are types of polyunsaturated fats that are particularly effective in lowering LDL cholesterol.

There are two categories of Omega-3 Fats:

1. **EPA/DHA (Fish Oil):** tuna, salmon, mackerel, halibut
2. **ALA:** flaxseed and walnuts

**Other Foods May Help Lower Cholesterol**

• **Soluble Fiber**- found in the flesh of fruits, oatmeal and inside of beans. It traps cholesterol, keeping it from being absorbed.

• **Soy**- found in tofu, soy milk, soy beans and other soy based products.

**Meat**- Choose lean meats such as skinless chicken light meat turkey and fish instead of ground meat, bacon, hot dogs and sausage.

**Butter**- Choose trans fat-free margarine such as Smart Beat®, Smart Balance®, Take Control® or Benecol® instead of butter or lard.

**Cooking Oil**- Choose olive oil and canola oil because they have a better balance of polyunsaturated and monounsaturated fats.

**Milk Products**- Choose skim or 1% milk low fat cheese such as Alpine Lace®, Kraft made with 1-2% milk or part skim mozzarella.

**Eggs**- Choose egg whites over whole eggs. It is recommended to eat no more than three egg yolks a week.

**Mayonnaise & Sour Cream**- Choose low fat mayonnaise and sour cream.

Revised 9/06

**Helpful Hints**