

HEART-HEALTHY LIVING

Shannon Frink, MS, RD, LMNT
Grand Island Hy-Vee Dietitian

Managing Heart Risk

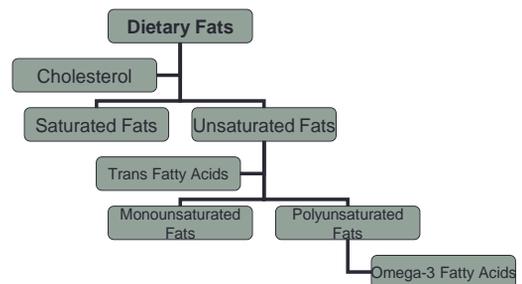
- Blood cholesterol and pressure levels are influenced by:
 - Foods you eat
 - Overweight
 - Limited physical activity
 - Strong history of heart disease
 - Age
- Change the risk factors that they **can** control!
 - Achieve and maintain a healthy weight
 - Become more physically active
 - Watch what you eat

Step One: Defining Fat

Recognizing and understanding these terms, makes it easier to explain labels and how to make good low-fat decisions in the grocery store!



Organization of Fats



Saturated Fats

- Found primarily in **animal** sources and are usually **solid** at room temperature.
- Responsible for raising cholesterol levels.
- Dietary sources:
 - Lard, meats, egg yolks, whole milk, sour cream, shortening, salad dressings, whipping cream, chocolate, cheeses, ice cream, mayonnaise, butter, margarine, and coconut and palm oils.

More on Coconut Oils....

- Promoted by the Paleo diet
- Theory is that the shorter chains of the saturated fatty acids do not increase heart disease risk
- Research is controversial at best.

More on Meats.....

- Bold study
 - Included a 3-4 oz portion of lean beef daily
 - Followed DASH diet (high whole grain, fruits, vegetables, olive oil/canola oil, low-sodium)
 - Found that LDL cholesterol were 10% decreased
 - promoted by Beef Checkoff
 - Roussel MA, Hill AM et. al. Beef in an Optimal Lean Diet study: effects on lipids, lipoproteins, and apolipoproteins. Am J Clin Nutr 2012; 95(1):09-16.
- Recent product studies indicate there is less than 1 gram fat and 0.5 gram saturated fat difference between a 4 oz skinless breast and a skinless thigh.

More on Eggs.....

- Chickens are raised on a better feed, decreasing the saturated fat in the egg
- Choline found in eggs improves cholesterol metabolism, decreases blood levels
- Specialty egg, such as Egglands Best – chickens are feed a diet high in Flax.
- One or two eggs, 1-2 times/week

Reducing Saturated Fat

- Choose lean cuts of meat – loin, round
- Remove visible fat & skin from your meat before cooking
- Choose fat-free dairy products in recipes (Greek yogurt, cream cheese, sour cream, ½ ½, evaporated milk, etc).
- Cook with olive oil or Canola oil
- Cut ½ the solid fat in many recipes. Or substitute ½ fat with prunes, applesauce, or mashed banana's.

Unsaturated Fats

- Usually *liquid* at room temperature and most likely come from *plant* sources.
- Two types of unsaturated fats
 - Monounsaturated
 - Polyunsaturated

Monounsaturated Fats

- Thought to **raise HDL** cholesterol and **lower LDL** cholesterol
- Best dietary sources:
 - Canola, olive and peanut oil
 - Nuts, such as almonds
 - Avocado
 - Flax, chia

Polyunsaturated Fats

- Recent research suggests that polyunsaturated fats lower both HDL and LDL cholesterol
- Best dietary sources:
 - Safflower, sunflower, corn, soybean, and cottonseed oils

Omega-3 Fatty Acids

- Research has shown that this type of fat prevents blood platelets from “clumping” together and sticking to the artery walls
- Strong anti-inflammatory

Top Sources of Omega-3 Fats

- Best dietary sources:
 - fatty fish – salmon, tuna, sardines, mackerel, herring
 - AHA – 3.5 oz of fatty fish 2 times/week
 - Flax or chia seeds
 - Soybeans & dried beans
 - Fortified in numerous food
 - Fish Oil

Fish Oil as an Alternative

- 1-2 g of EPA + DHA per day, under consultation of MD
 - 3-8 capsules/day
- Minimizing aftertaste
 - Keep cool
 - Take with small meal or snack
 - Do not lie down for 30-60 minutes after
 - Choose an enteric-coated Omega-3 supplement

Trans Fatty Acids

- Formed when hydrogen is added to an unsaturated fat.
 - Trans fat is more stable during processing and storing.
- Research has shown that trans fatty acids affect blood cholesterol much like saturated fats do.
- Sources: Restaurant food, processed foods, margarines & butter, Crisco

American Heart Association Guidelines

- Limit how much saturated fat, trans fat and cholesterol you eat.
 - Try to eat <300 mg cholesterol each day.
 - Use liquid vegetable oils and soft margarines.
 - Select fat-free, 1% fat and low-fat dairy products.
 - Choose lean cuts of meat and pork.
 - Remove all visible fat from meat and poultry before cooking.

Label Language for Fat

Phrase	What it means
Fat-free	Less than 0.5 g per serving
Trans fat-free	Less than 0.5 g per serving
Low Saturated fat	1 g or less per serving or 15% of less calories from saturated fat
Low-fat	3 g or less per serving
Reduced-fat	At least 25% less fat than the regular version
Light in fat	Half the fat compared to the regular version

Fat-Free v.s. Regular Calorie

Fat Free or Reduced Fat	Calories	Regular	Calories
RF Peanut butter, 2 T.	187	Peanut butter	191
RF Choc. Chip cookies, 3	118	Choc. Chip Cookies	142
FF fig cookie, 2	102	Fig cookies	111
FF Vanilla Frozen yogurt, ½ cup	100	Whole milk vanilla frozen yogurt	104
Light Vanilla Ice Cream, ½ cup	111	Vanilla Ice Cream	133
LF Granola Cereal, ½ c	213	Granola Cereal	138
LF Cereal Bar	130	Cereal Bar	140

The Butter v.s. Margarine Controversy!

- Butter contains both saturated fat and natural cholesterol.
- Margarines may contain trans fat, saturated fat (from palm oil). Many now have Omega-3's and/or monounsaturated fats added to them.
- The AHA recommends: soft margarine with less than 2 g saturated fat/tbsp and no trans fats.
- Key is Moderation!!

Step 2: Minimize the Salt

- Recommendations for Healthy patient is 2400 mg sodium
 - 1 teaspoon/day
- Cardiac patient may be considerably lower
- May be the hardest component of Cardiac diet
- Acquired taste

Where do we find it???

- **Fast & restaurant foods**
- Canned vegetables
- Canned tomato products
- Hot dogs & deli meat
- Frozen foods
- Ready to eat cereals and breads
- Prepared Mixes
- Soups
- Snack Foods
- Condiments
 - Ketchup, BBQ
 - Soy Sauce
 - Steak Sauce
 - Marinades
 - Salad dressings
 - Pickles

Cooking Low Sodium

- Avoid adding salt during cooking or at the table.
- Use herbs seasonings instead of salt
 - Mrs. Dash line of products
 - Lawry's no-salt 17 seasoning
- Spice up your foods with black pepper, hot pepper sauce, salsa

Cooking Low Sodium

- Focus on fresh, frozen or canned No Added Salt vegetables at the meal
- Utilize the MANY new lower-sodium products on the market
 - Pickles! Broth/bouillon! Ketchup!
 - Canned tomato products and vegetables
 - Canned beans
 - Canned tuna

Cooking Low Sodium

- Still approach with caution:
 - "Heart-Healthy" soups, "lower" sodium broths
 - Lower sodium soy sauce, Worcestershire sauce
 - Lower sodium lunch meats – still range from 200-480 mg for a 2 oz. portion
 - "Heart Smart" spaghetti sauce – 360 mg

Cooking Low Sodium

- The Challenges
 - Bread products
 - Ezekiel bread has a low sodium version
 - Cheese – salt added during fermentation process
 - Swiss tends to be lowest (120-240 mg/1 oz portion)
 - Cold Cereal – anywhere from 120 mg-360 mg per serving. What is a serving?

Cooking Low Sodium

- The Challenges
 - Salsa
 - BBQ

Balance convenience
foods with wholesome
foods.

Step Three: Consume Cholesterol-Lowering Foods

Top 5 cholesterol-lowering foods

1. Foods fortified with plant sterols or stanols
2. Oatmeal & soluble fiber
3. Flax seed
4. Salmon
5. Soy

Plant Sterols

- Believed to lower serum cholesterol by inhibiting the absorption of cholesterol in the small intestine.
- Found naturally: fruits, vegetables, seeds, nuts.
- Added to products:
 - Promise Activ, Benecol, Smart Balance, Minute Maid Heart Wise orange juice, Silk Soy Milk with DHA Omega 3, Kashi Heart to Heart Crackers, Centrum "Specialist" multi-vitamin, Smart Balance Omega 3 milk
 - Corowise

Plant Sterols

- Recommendations: 1.3 g plant sterol esters or 3.4 g plant stanol esters
 - Two servings/day of food fortified with plant sterols.

Oatmeal and Soluble Fiber

- Soluble fiber forms a gel in your digestive system
 - Binds cholesterol and removes it from the body without being absorbed
- Recommendations: 5 – 10 g soluble fiber per day; 20 – 35 g total daily fiber intake

Oatmeal and Soluble Fiber

- Sources of soluble fiber:
 - Grains: barley, oats, and rye
 - Beans, nuts, seeds, beans, lentils, soybeans and flaxseed
 - Fruits: oranges, blackberries, bananas, strawberries and apples
 - Vegetables: broccoli, carrots and peas

How to Consume Oats

- Use oats instead of bread crumbs in meatloaf and meatballs.
- Top yogurt or oatmeal with low-fat granola and nuts
- Eat muesli (uncooked oatmeal, yogurt, dried fruit and nuts)
- Sprinkle oats on top of muffins and quick breads before baking
- Use oats in fruit crisp toppings

Quick, Old Fashioned or Steel Cut?

- The same oat, just packaged differently.
 - Steel Cut – oat is just chopped into smaller pieces.
 - Old Fashioned – oat par-cooked and is rolled flat
 - Quick – oat is par-cooked, rolled flat and then cut into small pieces.
- Quick oats in individual packages are high in added sugar, salt

Add Soluble Fiber to Your Day

- Bake with whole grain flours (start with ½ of the flour in your recipe).
- Add beans, barley to soups, casseroles, and meats.
- Maintain intake of at least 5 servings of fruits and vegetables per day.

Flax Seed

- Sweet, nutty-flavored seed packed with omega-3 fatty acids and soluble fiber.
 - Nutrients work together to lower cholesterol
- 1 – 2 tablespoons daily
- May help protect against heart disease, stroke and certain cancers.
- Consume ground flax seed to get the most nutrition benefit.

Chia Seed

- Salvia Seed
- Packed with omega-3 fatty acids and soluble fiber.
 - Nutrients work together to lower cholesterol
- Mixes with beverages easier than Flax.
- 1 – 2 tablespoons daily
- May help protect against heart disease, stroke and certain cancers.

How to Consume Flax and Chia Seed

- Sprinkle on your oatmeal or bowl of cereal
- Toss on top of your salad
- Blend into your fruit smoothie
- Add to the crisp topping of a fruit crisp
- Use ground flax seed in breading for chicken and pork chops
- Serve pasta made with flax/chia seed
- Prepare sandwiches using flaxseed bread

Salmon and Omega-3 Fats

- Omega-3 fats are good fats!
- Salmon is richer in omega-3 fats than most other varieties of seafood
- Consume 1 – 2 servings (3.5 oz) per week to help lower triglycerides and total cholesterol

Soy

- Soyfoods have been linked to reducing heart disease and cholesterol.
 - Other benefits: menopause symptoms, osteoporosis, certain cancers, Alzheimer's
- Recommended to consume 25 g soy protein daily as part of a diet low in saturated fat and cholesterol.

How to Consume Soy

- Pour chilled soymilk over your favorite cereal.
- Spread soynut butter on a slice of toast.
- Heat up a mug of chocolate soy milk.
- Sprinkle edamame on top of salads.
- Blend silken tofu with frozen fruit.
- Enjoy soy yogurts.
- Snack on seasoned soynuts.

Let's Sample

- Grilled Salmon with Mixed Greens, Edamame, Almonds and Chia Vinaigrette
- Baked Apples with Walnuts, Flax & Oatmeal