Health Benefits of Mono- and Poly-unsaturated Fats

Replacing dietary saturated fat and trans-fat is the best strategy for reducing risks of heart disease.

- The substitution of unsaturated fats for saturated ones lowers blood cholesterol.
- Olive oil contains phytochemicals which help protect the body against heart disease.

Health Benefits of Omega-3 Fats

Beneficial in helping to reduce risks from heart disease.

- Helps prevent blood clots
- Protects against irregular heartbeats
- Lowers blood pressure

Food sources include some vegetable oils, walnuts, flaxseeds, and fatty fish.

Health Benefits of Balanced Fat Intakes

Balance omega-6 and omega-3 intakes to realize health benefits:

- Eat more fish (2-3 servings/week) and less meat
- Bake, broil or grill the fish
- Functional foods will eventually assist

Recommended Intakes of Lipids

DRI and Dietary Guidelines recommend:

- 20-35% of total kCal for fat

FDA Daily Values:

- 30% of total kCal for fat
- 10% of total kCal for saturated fat

Daily Value for Cholesterol: 300 mg.

Dietary Guidelines for Fat

Choose a diet low in saturated fat and cholesterol and moderate in total fat.

- This is a change from previous dietary recommendations for a low-fat dietary intake.
- These recommendations recognize the benefits of unsaturated fats.

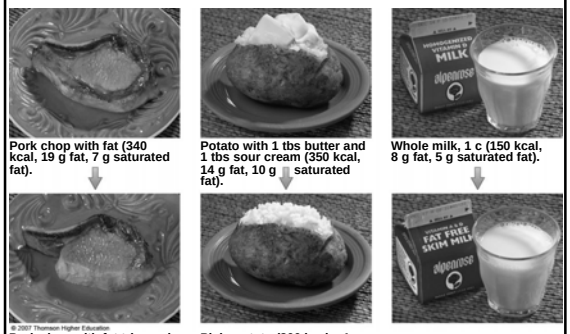
Guidelines to Groceries (1)

Meats and meat alternatives:

- Choose very-lean and lean meats
- Choose meat alternatives such as soy and legumes
- Eat more fish

Guidelines to Groceries (2)

- Use fat-free milk and milk products
- Emphasize vegetables, fruits, and grains
- Watch out for invisible fats



Pork chop with fat (340 kcal, 19 g fat, 7 g saturated fat).

Potato with 1 tbs butter and 1 tbs sour cream (350 kcal, 14 g fat, 10 g saturated fat).

Whole milk, 1 c (150 kcal, 8 g fat, 5 g saturated fat).

Pork chop with fat trimmed off (230 kcal, 9 g fat, 3 g saturated fat).

Plain potato (200 kcal, <1 g fat, 0 g saturated fat).

Fat-free milk, 1 c (90 kcal, <1 g fat, <1 g saturated fat).

Fig. 5-23, p. 162

Guidelines to Groceries (3)

Current guidelines recognize the desirability of consuming good fats:

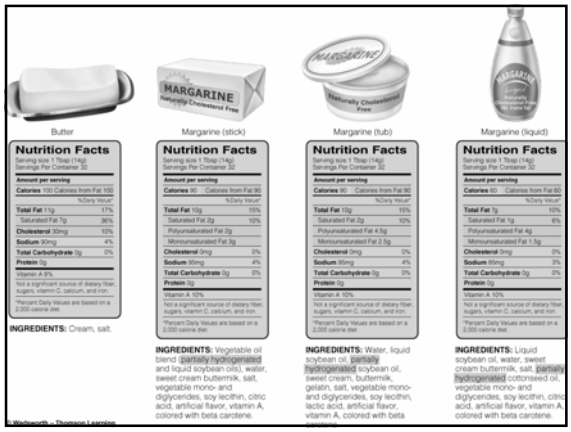
Guidelines to Groceries (4)

Limit foods with hydrogenated fats:

- Avoid trans fats – read food labels
- Watch convenience foods

Limit fatty meats, tropical oils, and whole milk products:

- Read food labels to determine those with less saturated fats and larger quantities of healthy fats such as omega-3



Desirable High-Fat Foods

Cook with olive oil

- But realize it's still 9 kCal./gram

Nibble on nuts

- Health benefits, but still high kCal food

Feast on fish

- But beware of mercury (pregnant and lactating women & young children)

High-Fat Foods

Beneficial effects from limiting fatty meats, milk products, and tropical oils:

1% increase in dietary saturated fatty acids[a]	→ 2% increase in LDL cholesterol[b]	→ 2% increase in heart disease risk[c]
1% decrease in dietary saturated fatty acids[a]	→ 2% decrease in LDL cholesterol[b]	→ 2% decrease in heart disease risk[c]

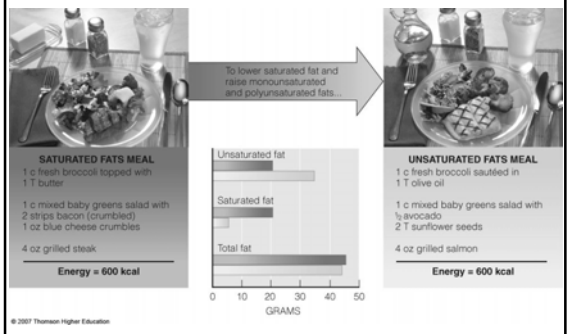


TABLE H5-1 Major Sources of Various Fatty Acids

Healthful Fatty Acids

Monounsaturated	Omega-6 Polyunsaturated
Avocado	Margarine (nonyhydrogenated)
Oils (canola, olive, peanut, sesame)	Oils (corn, cottonseed, safflower, soybean)
Nuts (almonds, cashews, filberts, hazelnuts, macadamia nuts, peanuts, pecans, pistachios)	Nuts (walnuts)
Olives	Mayonnaise
Peanut butter	Salad dressing
Seeds (sesame)	Seeds (pumpkin, sunflower)

Omega-3 Polyunsaturated
Fatty fish (herring, mackerel, salmon, tuna)
Flaxseed
Nuts

Harmful Fatty Acids

Saturated	*Trans*
Bacon	Fried foods (hydrogenated shortening)
Butter	Margarine (hydrogenated or partially hydrogenated)
Chocolate	Nondairy creamers
Coconut	Many fast foods
Cream cheese	Shortening
Cream, half-and-half	Commercial baked goods (including doughnuts, cakes, cookies)
Lard	Many snack foods (including microwave popcorn, chips, crackers)
Meat	
Milk and milk products (whole)	
Oils (coconut, palm, palm kernel)	
Shortening	
Sour cream	

NOTE: Keep in mind that foods contain a mixture of fatty acids.

TABLE H5-2 Replacing Saturated Fat with Unsaturated Fat

Examples of ways to replace saturated fats with unsaturated fats include sautéing foods in olive oil instead of butter, garnishing salads with sunflower seeds instead of bacon, snacking on mixed nuts instead of potato chips, using avocado instead of cheese on a sandwich, and eating salmon instead of steak. Portion sizes have been adjusted so that each of these foods provides approximately 100 kcalories. Notice that for a similar number of kcalories and grams of fat, the first choices offer less saturated fat and more unsaturated fat.

	Total Fat (g)	Saturated Fat (g)	Unsaturated Fat (g)
Olive oil vs. butter	11 vs. 11	2 vs. 7	9 vs. 4
Sunflower seeds vs. bacon	8 vs. 9	1 vs. 3	7 vs. 6
Mixed nuts vs. potato chips	9 vs. 7	1 vs. 2	8 vs. 5
Avocado vs. cheese	10 vs. 8	2 vs. 4	8 vs. 4
Salmon vs. steak	4 vs. 5	1 vs. 2	3 vs. 3
Totals	**42 vs. 40**	**7 vs. 18**	**35 vs. 22**

NOTE: Portion sizes that provide approximately 100 kcalories: 1 tbs olive oil, 1 tbs butter, 2 tbs dry roasted sunflower seeds, 2 slices cooked bacon, 2 tbs dry roasted mixed nuts, 10 potato chips, 6 slices avocado, 1 slice cheddar cheese, 2 oz salmon, and 1½ oz steak.