



Fat, Oh My!

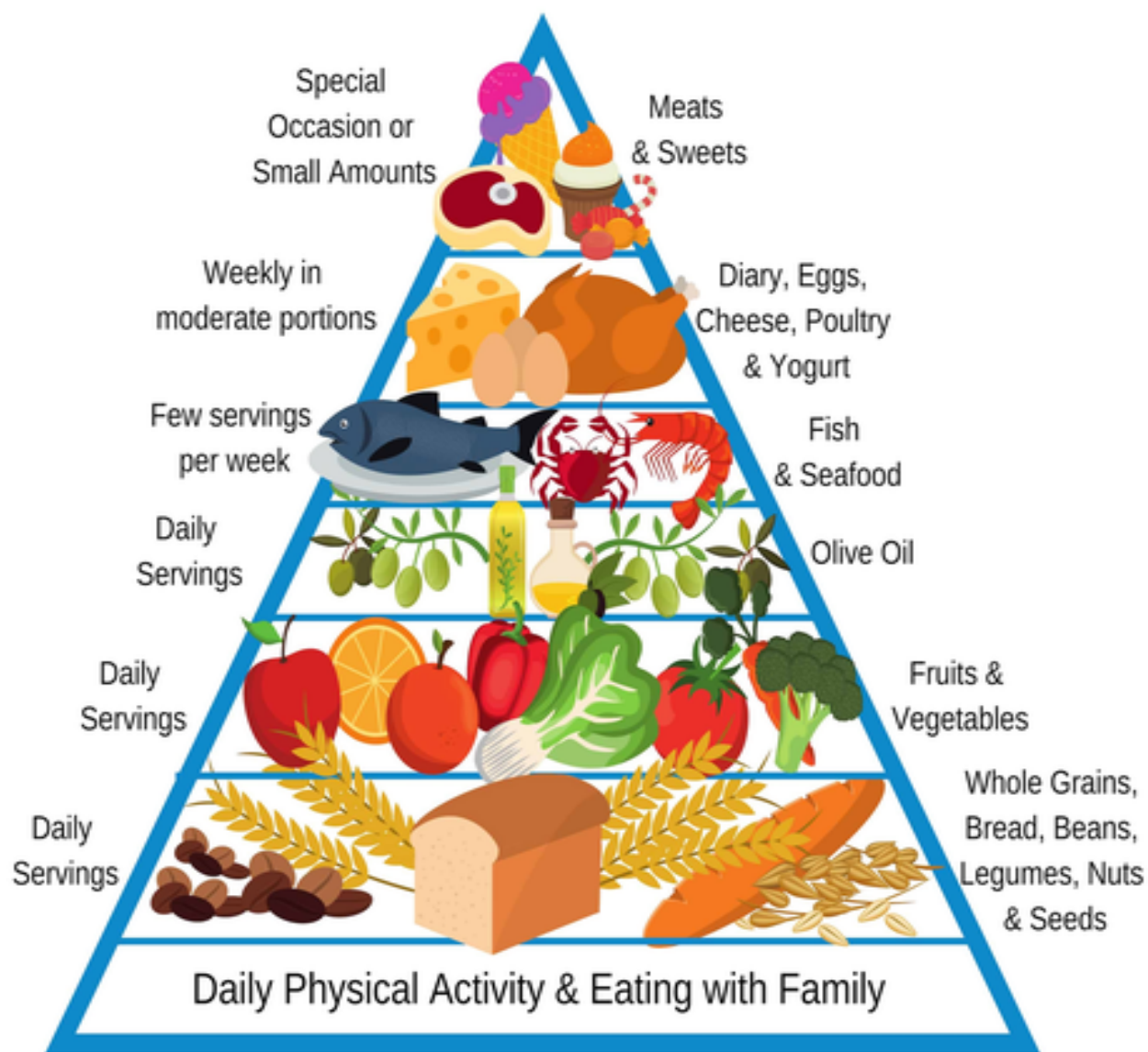


What Progress Did You Make on your 1%?

- Examples of how you decreased added sugar in your diet
- How did you increase your intake of plant foods?

Share Food Labels

Surprise foods – contained more sugar than you thought



MEDITERRANEAN DIET

The Progression of Heart Disease

1. VESSEL NARROWING

Changes in the vessel walls can cause the blood to press on the vessel walls with greater force.

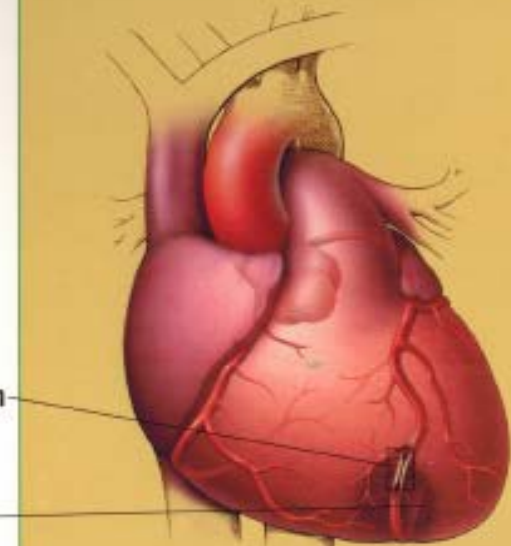
Increased blood pressure

Excess fat and cholesterol in coronary artery (atherosclerosis)

Blood flow obstruction can damage heart muscle (heart attack)

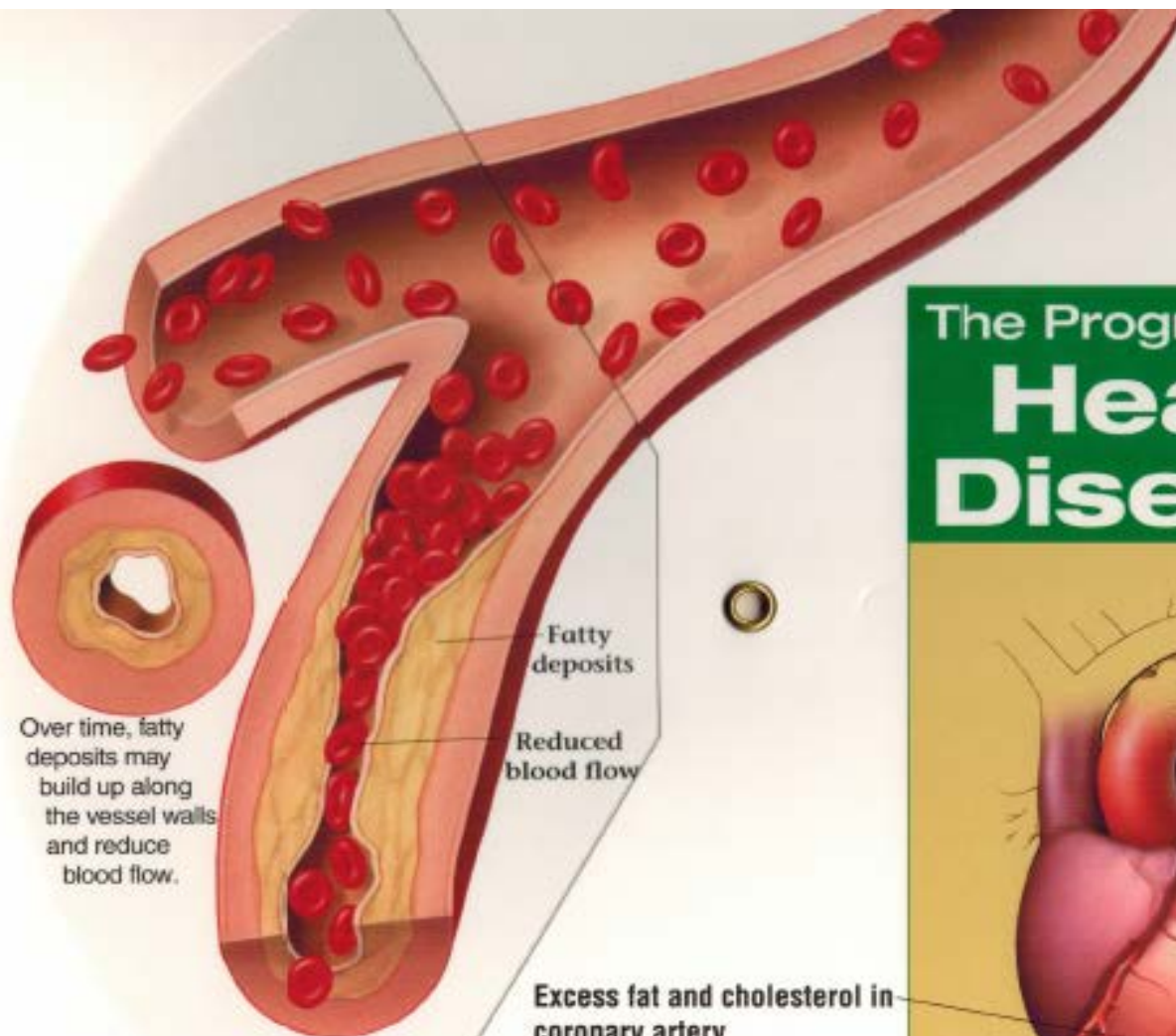
Turn the dial to view the progression of heart disease.

High blood pressure often occurs with type 2 diabetes, and both carry an increased risk of heart disease. Over time, high levels of fat and cholesterol in the blood vessels can gradually reduce or block blood flow to the heart.



The Progression of Heart Disease

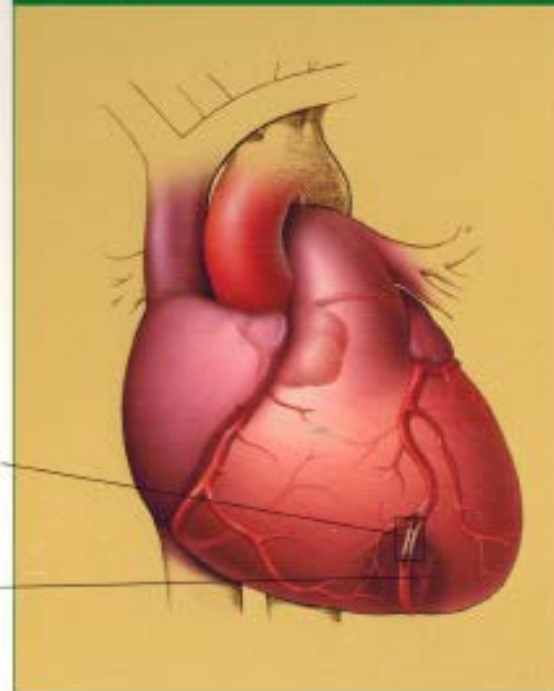
2. REDUCED BLOOD FLOW



Over time, fatty deposits may build up along the vessel walls and reduce blood flow.

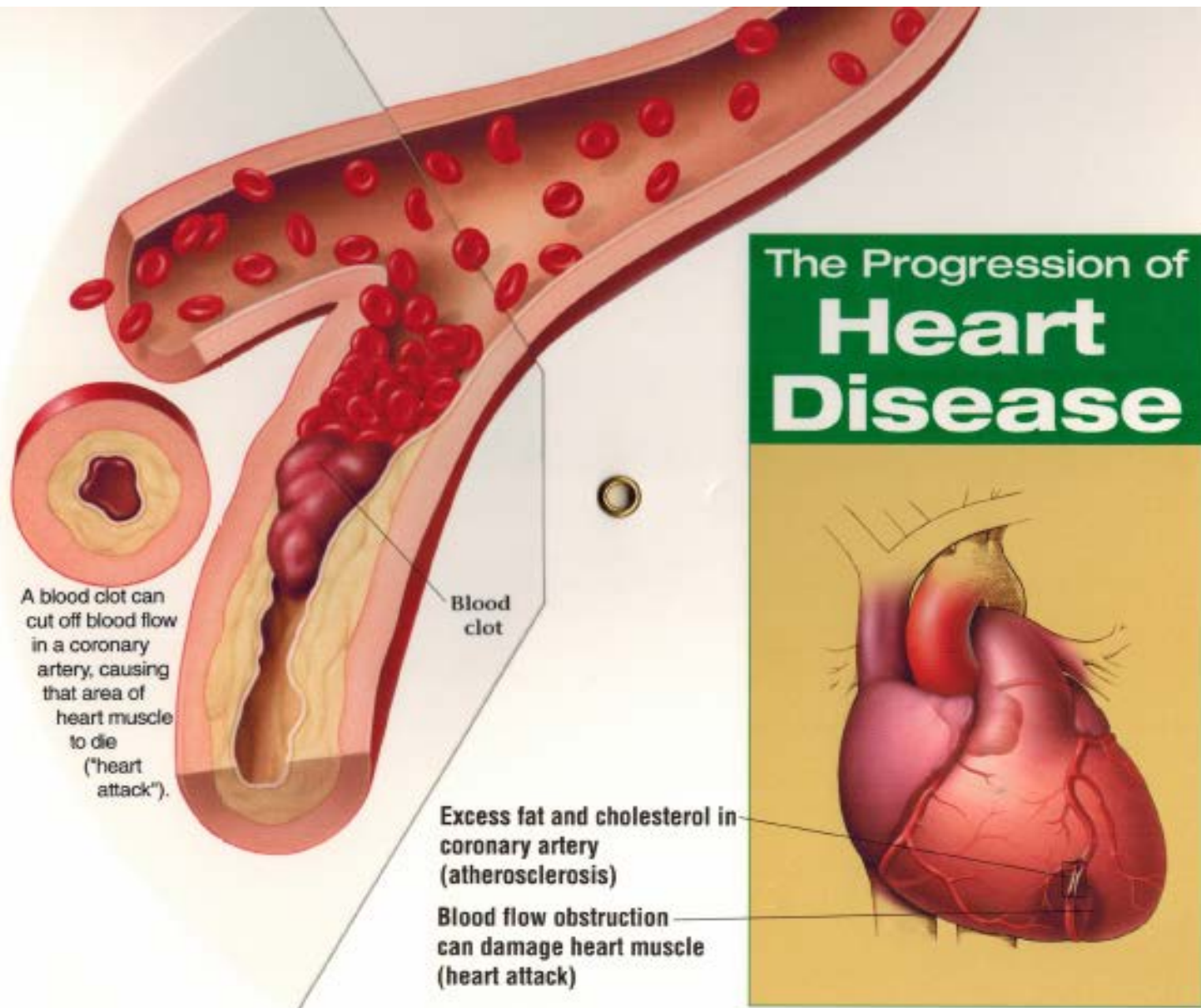
Excess fat and cholesterol in coronary artery (atherosclerosis)

Blood flow obstruction can damage heart muscle (heart attack)



Turn the dial to view the progression of heart disease.

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3. BLOCKAGE

Turn the dial to view the progression of heart disease.

High blood pressure often occurs with type 2 diabetes, and both carry an increased risk of heart disease. Over time, high levels of fat and cholesterol in the blood vessels can gradually reduce or block blood flow to the heart.

Which Has the Most Calories?



Fat has more Calories than
Alcohol, Sugar, or Protein

Everyone needs fat, just
not too much

Total Cholesterol

- Found in all animal foods (beef, pork, chicken, butter, milk, cheese, eggs, fish). Foods from plants don't contain cholesterol.
- Have only a modest effect on blood cholesterol
- What matters for heart health is what other foods you eat
- Target: < 200 mg/dl

Types of Cholesterol in Blood

- LDL (LOUSY)- Cholesterol: clogs arteries
- Increases risk for heart attack, stroke
- Target: less than 100 mg/dl
- HDL (HEALTHY)
- Removes harmful cholesterol from your blood
- Men, target: 40 mg/dl or higher
- Women, target: 50 mg/dl or higher

HDL-Cholesterol

- HDL (HEALTHY)-Cholesterol: removes harmful cholesterol from your blood
- Target:
 - 40 mg/dl or higher in men
 - 50 mg/dl or higher in women

Triglycerides

- Triglycerides: Fat in our food that changes to fat in our blood
- High sugar diet increases Triglycerides
- High levels increase risk for heart disease
- Target: Less than 150 mg/DL

Fat in Food

1. Unsaturated fat (polyunsaturated and monounsaturated)
2. Saturated fat
3. Trans fat

**Fats, oils: mix of saturated and unsaturated fats

Saturated Fat

- Increases LDL, but may not be as harmful to heart health as once thought – more research needed
- Causes insulin resistance
- Increases Inflammation

Saturated Fat: Hard at room Temperature

- Pizza, hard cheeses
- Sausage, bacon, burgers, hot dogs
- Fast Food and many restaurant foods
- Cookies, desserts, donuts, biscuits, ice cream

Saturated Fat found in

- Skin on poultry
- High fat meats (prime rib, ribeye steak, fatback, brisket, ground beef)
- Butter, cream cheese, cream, creamy salad dressing
- Coconut and palm oil

Put Saturated Fat in Context

Nutrition Facts	
12 servings per container	
Serving size	1 (49g)
Amount per serving	
Calories	190
% Daily Value*	
Total Fat 10g	13%
Saturated Fat 5g	27%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 100mg	4%
Total Carbohydrate 22g	8%
Dietary Fiber Less than 1g	2%
Total Sugars 10g	
Includes 9g Added Sugars	19%
Protein 3g	
Vitamin D 0mcg 0%	• Calcium 80mg 6%
Iron 0.9mg 4%	• Potassium 0mg 0%
*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.	
INGREDIENTS: DOUGHNUT (ENRICHED FLOUR (WHEAT FLOUR), MALT, REDUCED IRON, NIACIN MONONITRATE, RIBOFLAVIN, FOLIC ACID, WATER, PALM OIL, SOYBEAN OIL, UNRAFFINED SUGAR, YEAST, HYDROGENATED SOYBEAN OIL, SOY FLOUR, LEAVENING (CALCIUM CARBONATE AND/OR MONOCALCIUM PHOSPHATE AND/OR AMMONIUM BICARBONATE), SALT, MONOLACTYL GLYCERIDE, WHEAT GLUTEN, SOY LECITHIN, SKIM MILK, CELLULOSE GUM, ANICORBIN ACID, CALCIUM PROPIONATE (TO MAINTAIN FRESHNESS), EGGS, YEAST, ENZYMES, GLAZE (SUGAR, WATER, PALM OIL, ADAM, NATURAL AND ARTIFICIAL FLAVORS, GUAR GUM, LECITHIN (BEAN GUM)). CONTAINS: WHEAT, SOY, MILK, EGG.	

Our facilities produce products with peanuts, tree nuts, soy, milk, eggs, and wheat. While we take steps to minimize the risks of cross contamination, we cannot guarantee that any of our products are safe to consume for people with peanut, tree nut, soy, milk, egg, or wheat allergies.



Saturated Fat

- No need to eliminate
- How often
- How much

Jimmy Dean
Sausage Egg
& Cheese Biscuit

Check % DV

Nutrition Facts	
8 servings per container	
Serving size 1 sandwich (128g)	
Amount per serving	
Calories	410
% Daily Value*	
Total Fat 28g	36%
Saturated Fat 12g	60%
Trans Fat 0g	
Cholesterol 115mg	38%
Sodium 850mg	37%
Total Carbohydrate 27g	10%
Dietary Fiber 2g	7%
Total Sugars 4g	
Includes 2g Added Sugars	4%
Protein 12g	20%
Vitamin D 0mcg	
	0%
Calcium 200mg	15%
Iron 2.1mg	10%
Potassium 210mg	4%
*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.	

Unsaturated Fat

- **Replacing** food high in saturated fat with unsaturated fats
 - **Not** eating high amounts of saturated fat + unsaturated fat
-
- Lowers risk for stroke
 - Lowers risk for heart disease
 - Helps prevent insulin resistance
 - Decreases Inflammation
 - Lowers LDL

Unsaturated Fats – Eat These

- Corn, soybean, sunflower and flaxseed oil
- Walnuts & other nuts
- Peanut butter & nut butters
- Fish
- Oil-based salad dressing
- Olive, avocado, peanut canola oil
- Avocados
- Nuts: almonds, pecans, hazelnuts

In Place of These Saturated Fats

- Bacon, Sausage, burgers, hot dogs
 - Cream cheese, creamy salad dressings, butter, cream
 - High fat meats
 - Skin on chicken and turkey
 - Some fast foods, restaurant foods
 - Cakes, cookies, donuts, ice cream
-
- If eat saturated fats: focus on foods that have nutritional benefits

Unsaturated Fat - Omega-3 Fatty Acids

- May decrease inflammation
- May help decrease risk of getting Alzheimer's, dementia and other types of cognitive decline
- Lowers risk for heart disease

Eat More Omega-3's

Non-fried Fatty Fish

- Salmon
- Trout
- Anchovies
- Sardines
- Trout, freshwater
- Eat fish at least 2 x/week

Plants

- Starchy beans
- Canola, soybean oil
- Chia Seeds
- Edamame (soybeans)
- Flax seed, flax seed oil
- Walnuts

The Scoop on Seed Oils (corn, soybean, canola, peanut, sunflower, cotton seed)

- Numerous studies showed no relationship between inflammation and seed oils
- Claims about inflammation and seed oils are mostly based on research using mice and rats (they don't respond the same ways as humans do)
- Research doesn't support harmful claims about seed oils

Real Problem with Seed Oils: Heat, Oxygen, Light, Time

- Exposed to high temperatures for long periods of time: deep fat frying → produce harmful compounds (issue when eating out)
- Seed oils reheated and reused – commercial deep fat fryers- oils become inflammatory

Problems With Seed Oils

- Store in cool, dry place or frig if stated on food label
 - Can keep up to 6-12 months if stored properly
- Screw caps tightly once opened
- Can go rancid if:
 - Exposed to light and oxygen
 - Kept for a long time

Where's the Saturated Fat? What's Missing?



Trans Fat

- The Worst Fat you can eat!
- Increases LDL (lousy) Cholesterol and lowers HDL (healthy) cholesterol
- Has association: higher risk for Type 2 Diabetes
- Causes inflammation!
- Increases risk of atherosclerosis – buildup of fat and cholesterol in arteries
- Contributes to insulin resistance

If Trans Fats are so Bad, Why are they Used?

- Keep food fresh
- Extend shelf life
- Cost less

Trans-Free Foods

- Fruit
- Vegetables
- Starchy beans and peas
- Fresh beef, pork, poultry, fish
- Eggs, Peanut butter (check ingredients), nuts
- Pasta, rice, potatoes, bread – Check labels
- All oils

Another Name for Trans Fat :

Partially Hydrogenated Vegetable Oil

Foods that May Contain Trans Fat

- Fried, battered foods – trans fats develop during frying
- Baked goods, baking ingredients, desserts
- Breakfast foods
- Frozen foods

FDA Rules

- Remove Trans fat from foods
- Foods can still contain small amounts of Trans fat
- Small amounts add up – look at how many servings you eat

Nutrition Facts

8 servings per container

Serving size 2/3 cup (55g)

Amount per serving

Calories 230

% Daily Value*

Total Fat 8g 10%

Saturated Fat 1g 5%

Trans Fat 0g

Cholesterol 0mg 0%

Sodium 160mg 7%

Total Carbohydrate 37g 13%

Dietary Fiber 4g 14%

Total Sugars 12g

Includes 10g Added Sugars 20%

Protein 3g

Vitamin D 2mcg 10%

Calcium 260mg 20%

Iron 8mg 45%

Potassium 240mg 6%

* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

1

The serving size appears in large, bold font and some serving sizes were updated.

2

Calories are displayed in large, bold font.

3

Daily Values were updated.

4

Added sugars, vitamin D, and potassium are required on the label. Manufacturers must declare the amount in addition to percent Daily Value for vitamins and minerals.

From FDA<, The Nutrition Facts Label



Nutrition Facts

Serving Size: 5 Croutons (7g)
Servings Per Container: About 20

Amount Per Serving

Calories 30 **Calories from Fat** 15

% Daily Value*

Total Fat 1.5g **2%**

Saturated Fat 0g **0%**

Trans Fat 0g **0%**

Cholesterol 0mg **0%**

Sodium 115mg **4%**

Total Carbohydrate 4g **1%**

Dietary Fiber less than 1g **2%**

Sugars 1g

Protein 1g

Vitamin A 0% • Vitamin C 0%

Calcium 2% • Iron 2%

*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

Calories: 2,000 2,500

Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2400mg	2400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Calories per gram

Fat 9 • Carbohydrate 4 • Protein 4

INGREDIENTS: WHOLE WHEAT FLOUR, WATER, PARTIALLY HYDROGENATED SOYBEAN OIL, HIGH FRUCTOSE CORN SYRUP, WHEAT GLUTEN, YEAST. CONTAINS 2% OR LESS: SALT, MALTED BARLEY, CORN GRITS, WHEY, ROMANO AND PARMESAN CHEESE (PASTEURIZED MILK, PART SKIM MILK, CHEESE CULTURES, SALT, ENZYMES), BUTTERMILK, SOYBEAN OIL, DISODIUM PHOSPHATE, CITRIC ACID, SOY FLOUR, NATURAL FLAVORS, MALTODEXTRIN, GARLIC, PARSLEY, SPICES, PAPRIKA, DISODIUM INOSINATE AND GUANYLATE, CALCIUM SULFATE, ENZYMES, CALCIUM DIOXIDE, SOYLECITHIN. CONTAINS: WHEAT, MILK AND SOYBEANS.

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NO PRESERVATIVES
NO CHOLESTEROL
0g TRANS FAT

Enjoy Our Other
Marie Callender
Delectable Gourmet Crou

- Whole Grain Caesar
- Cheese & Garlic
- Garlic & Butter
- Ranch
- Fat Free Caesar
- Fat Free Herb Seasoned
- Multi-Grain Organic Se
- Classic Seasoned

Visit
mccroutons.com
for salad recipes
and more.





INGREDIENTS: UNBLEACHED ENRICHED FLOUR (WHEAT FLOUR, NIACIN, REDUCED IRON, THIAMINE MONONITRATE {VITAMIN B1}, RIBOFLAVIN {VITAMIN B2}, FOLIC ACID), SUGAR, PEANUT BUTTER (PEANUTS, CORN SYRUP SOLIDS, HYDROGENATED RAPESEED AND/OR COTTONSEED AND/OR SOYBEAN OILS, SALT, PEANUT OIL), SOYBEAN OIL, WHOLE GRAIN WHEAT FLOUR, HIGH FRUCTOSE CORN SYRUP, PALM OIL, PARTIALLY HYDROGENATED COTTONSEED OIL, SALT, LEAVENING (BAKING SODA, CALCIUM PHOSPHATE), CORNSTARCH, SOY LECITHIN, VANILLIN - AN ARTIFICIAL FLAVOR.

CONTAINS: WHEAT, PEANUT, SOY.

Serving size: 2 cookies

Deep fried foods like fries, fish:
Trans fats can develop during frying,
so no food label available



Bottom Line

- Replace foods high in saturated fat with unsaturated fats
 - Lowers risk for stroke
 - Lowers risk for heart disease
 - Helps prevent insulin resistance
 - Decreases Inflammation
 - Lowers LDL

Replace Saturated Fats with Unsaturated Fats

- Eat fish instead of high fat meats
- Take skin off chicken
- Coat chicken, fish with crushed Corn Flakes or Rice Chex – bake instead of frying
- Decrease meat and increase starchy beans in casseroles, chili

Replace Saturated Fats with Unsaturated Fats

- Try black beans and tomatoes in place of meat
- Add nuts, seeds to salad instead of cheese, croutons
- Spread peanut butter on bagels, toast vs. cream cheese & butter
- Use Italian, oil and vinegar salad dressings instead of Ranch, French, Blue Cheese

Avoid Trans Fats

- Processed convenience foods
- Fried foods, especially when eating out

How to Make This Meal More Heart Healthy?

- 2 Eggs fried in butter
- 2 sausage patties
- 2 slices white toast with butter
- 16 oz orange juice
- 2 cups coffee with cream

How to Make this Meal More Heart Healthy?

- BBQ chicken with skin
- Tossed salad with cheese, croutons, blue cheese dressing
- Macaroni and Cheese
- Biscuit with butter

Share Food Labels

Analyze the types of fat in your food

Homework:

- Write down everything you eat and drink for 2 days and bring to next class
- Include one week day, one weekend day