Giving Good Dietary Advice to Cardiovascular Patients

Carmine D'Amico, D.O.

Overview

- Learning objectives
- Introduction
- Basic principles
- Grocery shopping
- Cooking
- Eating out
- Snacking
- Staying active
- Summary

Dietary Advice for Cardiovascular Patients

Learning Objectives

- Distinguish dietary myths from truths
- Compare and contrast the various types of dietary fats
- Interpret “Nutrition Facts” listed on packaged foods
- Apply basic nutritional principles to everyday life

Dietary Advice for Cardiovascular Patients

Introduction

- Cardiovascular disease is the leading cause of death in this country
- Most of the risk factors for cardiovascular disease are modifiable
- Several of the risk factors for cardiovascular disease are strongly influenced by diet
- Almost everyone can lower their cardiovascular risk by improving their diet

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Introduction (cont.)

Coronary artery disease risk factors

- Advanced age
- Male gender
- Family history of premature coronary artery disease
- Cigarette smoking
- Dyslipidemia
- Hypertension
- Diabetes mellitus
- Obesity
- Physical inactivity

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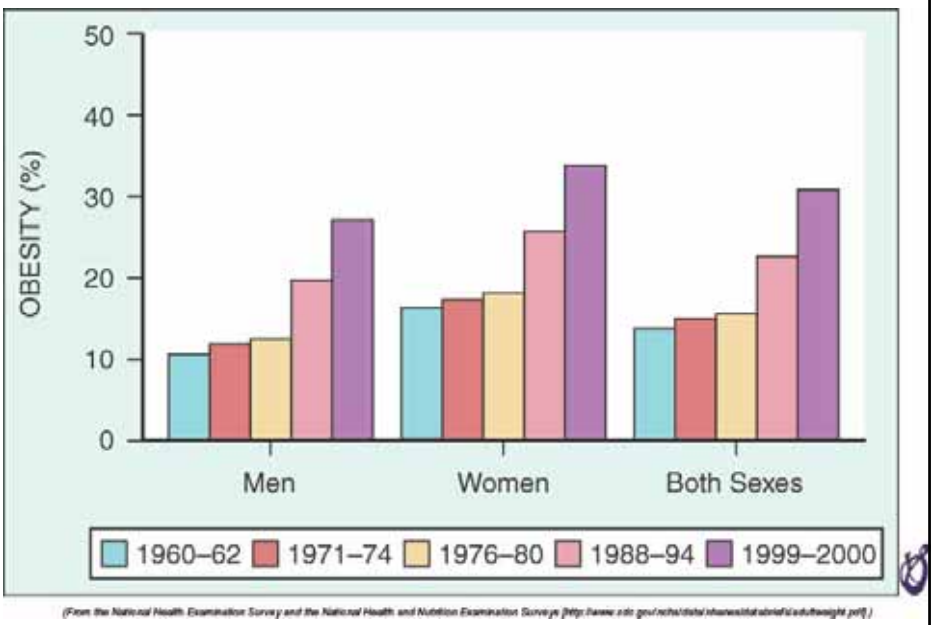
Introduction (cont.)

Obesity:

- Growing health problem in this country
- Increases risk of several health problems
  - Coronary artery disease
  - Hypertension
  - Stroke
  - Type II diabetes mellitus
  - Cancer (certain types)
  - Degenerative joint disease
  - Sleep apnea



Dietary Advice for Cardiovascular Patients

Basic Principles

- Eat less foods that contain "bad stuff"
- Eat more foods that contain "good stuff"
- Accelerate your metabolism
  - Avoid prolonged periods of time without eating
  - Eat small frequent meals/ snacks
  - Exercise regularly

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Basic Principles (cont.)

Don’t be deceived by myths:

- All fats are bad
- All fiber is good
- Cholesterol-free foods cannot raise your cholesterol
- Low fat foods are healthy
- Low sodium foods are healthy
- 2% milk only contains 2% of the fat that whole milk contains

Vitamin D Milk

GIANT EAGLE

GRADE A
PASTEURIZED
HOMOGENIZED

Nutrition Facts
Serving Size 1 Cup (240mL)
Servings Per Container 4

Amount Per Serving	
Calories 150	Fat cal 70
	% Daily Value*
Total Fat 8g	**12%**
Saturated Fat 5g	**25%**
Trans Fat 0g	
Cholesterol 35mg	**11%**
Sodium 120mg	**5%**
Potassium 380mg	**11%**
Total Carbohydrate 12g	**4%**
Dietary Fiber 0g	**0%**
Sugars 11g	
Protein 8g	**16%**

Vitamin A 6% • Vitamin C 4%
Calcium 30% • Iron 0% • Vitamin D 25%
*Percent Daily Values are based on a 2,000 calorie diet.

INGREDIENTS:
MILK, VITAMIN D_3.

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KEEP REFRIGERATED

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Questions? Comments?
Call 1-800-553-2324
GiantEagle.com

ONE QUART (946mL)

2% Reduced Fat Milk
Vitamin A & D added

Nutrition Facts
Serving Size 1 Cup (240mL)
Servings Per Container 4

Amount Per Serving	
Calories 130	Fat cal 45
	% Daily Value*
Total Fat 5g	**8%**
Saturated Fat 3g	**15%**
Trans Fat 0g	
Cholesterol 20mg	**7%**
Sodium 130mg	**5%**
Potassium 400mg	**11%**
Total Carbohydrate 12g	**4%**
Dietary Fiber 0g	**0%**
Sugars 12g	
Protein 8g	**16%**

Vitamin A 10% • Vitamin C 4%
Calcium 30% • Iron 0% • Vitamin D 25%
*Percent Daily Values are based on a 2,000 calorie diet.

Questions? Comments?
Call 1-800-553-2324
GiantEagle.com

GIANT EAGLE

GRADE A
PASTEURIZED
HOMOGENIZED

FAT REDUCED FROM 8g TO 5g
INGREDIENTS:
REDUCED FAT MILK,
VITAMIN A PALMITATE,
VITAMIN D3.
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ONE QUART (946mL)

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Basic Principles (cont.)

Dietary fats

- Cholesterol
- Saturated fat
- Unsaturated fat
  - Monounsaturated
  - Polyunsaturated
- Trans fat

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Basic Principles (cont.)

Fish oil/ Omega-3 fatty acids

- Reduce the risk of:
  - Coronary heart disease (CHD) death
  - Sudden cardiac death
  - Nonfatal myocardial infarction
- Cardiovascular benefits primarily due to:
  - EPA (eicosapentanoic acid)
  - DHA (docosahexanoic acid)

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Basic Principles (cont.)

Fish oil/ Omega-3 fatty acids (cont.)

- American Heart Association (AHA) recommendation:
  - Consume two 4-ounce portions of fish per week (especially fish rich in omega-3 fatty acids):
    - Salmon
    - Mackerel
    - Albacore tuna
    - Swordfish
    - Herring
    - Sardines
    - Lake trout

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Basic Principles (cont.)

Fiber

- Soluble/ dietary
  - *Whole grain* breads, pasta, cereals, etc.
  - Various vegetables, fruits, nuts
- Insoluble
  - Lack (cardiovascular) nutritional value

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Grocery Shopping

- Don’t shop hungry
- (Don’t buy) unhealthy foods/ food preparation items
- Buy (and eat) less red meat
  - Consider poultry or seafood instead
  - When you “must” buy red meat, choose leaner cuts:
    - “Round” or “loin”

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Grocery Shopping (cont.)

- Buy healthier snacks
- Read, understand, *and alter your grocery shopping based on* nutrition labels

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Grocery Shopping (cont.)

Nutrition labels

- Serving size
- Servings per container
- Cholesterol
- Saturated fat
- Trans fat
- Sodium
- Carbohydrates
  - Sugars
  - Fiber (soluble/ dietary fiber is the good stuff)

Sample label for Macaroni & Cheese

Start Here

Limit these Nutrients

Get Enough of these Nutrients

Footnote

Nutrition Facts

Serving Size 1 cup (228g)
Servings Per Container 2

Amount Per Serving

Calories 250 Calories from Fat 110

	% Daily Value*
Total Fat 12g	18%
Saturated Fat 3g	15%
Trans Fat 3g	
Cholesterol 30mg	10%
Sodium 470mg	20%
Total Carbohydrate 31g	10%
Dietary Fiber 0g	0%
Sugars 5g	
Protein 5g	
Vitamin A	4%
Vitamin C	2%
Calcium	20%
Iron	4%

* 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	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Quick Guide to % DV

5% or less is low
20% or more is high

Limit These Nutrients

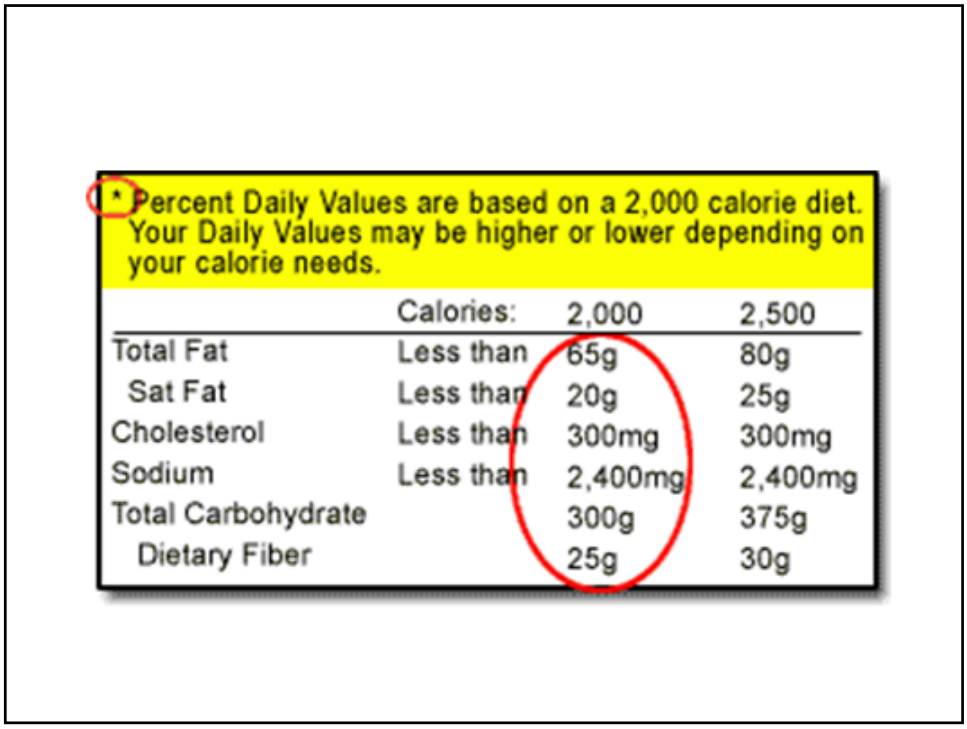
Total Fat 12g	18%
Saturated Fat 3g	15%
Trans Fat 3g	
Cholesterol 30mg	10%
Sodium 470mg	20%

Get Enough of These

Dietary Fiber 0g	0%
Vitamin A	4%
Vitamin C	2%
Calcium	20%
Iron	4%

Quick Guide to %DV:

	% Daily Value*
Total Fat 12g	18%
Saturated Fat 3g	15%
Trans Fat 3g	
Cholesterol 30mg	10%
Sodium 470mg	20%
Total Carbohydrate 31g	10%
Dietary Fiber 0g	0%
Sugars 5g	
Protein 5g	
Vitamin A	4%
Vitamin C	2%
Calcium	20%
Iron	4%



Dietary Advice for Cardiovascular Patients

Nutrition facts terminology

- **"Low": 5% or less of daily value of that nutrient *per serving***
- **"High": 20% or more of daily value of that nutrient *per serving***
- **"Fat free"/ "Sugar free": less than ½ gram of fat or sugar *per serving***
- **"Calorie free": less than 5 calories *per serving***


100% NATURAL
PAM
CERTIFIED
ORGANIC
CANOLA OIL
100%


Nutrition Facts
Serving Size About 1/3 Second Spray (.27g)
Servings Per Container About 419
Amount Per Serving
Calories 0
Calories from Fat 0
% Daily Value*
Total Fat 0g 0%
Saturated Fat 0g 0%
Trans Fat 0g
Cholesterol 0mg 0%
Sodium 0mg 0%
Total Carbohydrate 0g 0%
Protein 0g
Not a significant source of dietary fiber, sugars, vitamin A, vitamin C, calcium and iron.
* Percent Daily Values are based on a 2,000 calorie diet.
INGREDIENTS: ORGANIC CANOLA OIL†, ORGANIC GRAIN ALCOHOL (ADDED FOR CLARITY), LECITHIN FROM SOYBEANS (PREVENTS STICKING), PROPELLANT (NO CHLOROFLUOROCARBONS).
CONTAINS: SOY.
†ADDS A TRIVIAL AMOUNT OF FAT.


BAKE THE VERY BEST®
Nestlé
Scoop & Bake!
makes 3 dozen cookies!
TOLL HOUSE
SINCE 1939
Chocolate Chip
Chocolate Chip


Nutrition Facts
Serving Size 1 oz (28g 1½ inch balls)
Servings per Container 36
Amount per Serving
Calories 130 Calories from Fat 50
% Daily Value*
Total Fat 6g 9%
Saturated Fat 2.5g 13%
Trans Fat 0g
Cholesterol 5mg 2%
Sodium 95mg 4%
Total Carbohydrate 17g 6%
Dietary Fiber 0g 0%
Sugars 11g
Protein 1g
Vitamin A 2% • Vitamin C 0%
Calcium 0% • Iron 2%
*Percent Daily Values are based on a 2,000 calorie diet.
INGREDIENTS: BLEACHED ENRICHED FLOUR (WHEAT FLOUR, NIACIN, REDUCED IRON, THIAMIN MONONITRATE, RIBOFLAVIN, FOLIC ACID), NESTLÉ TOLL HOUSE MORSELS (SEMI-SWEET CHOCOLATE (SUGAR, CHOCOLATE, COCOA BUTTER, MILKFAT, SOY LECITHIN, NATURAL FLAVORS)), SUGAR, MARGARINE (PALM OIL, SOYBEAN OIL, WATER, SALT, VEGETABLE MONO- & DIGLYCERIDES, SOY LECITHIN, NATURAL & ARTIFICIAL FLAVOR, VITAMIN A PALMITATE ADDED, BETA CAROTENE (COLOR), WHEY), WATER, MOLASSES, EGGS, BAKING SODA (CONTAINS SOY LECITHIN), SALT, VANILLA EXTRACT, VANILLIN-AN ARTIFICIAL FLAVOR. MADE ON EQUIPMENT THAT ALSO PROCESSES PEANUTS/NUTS. CONTAINS MILK, EGG, SOY, WHEAT INGREDIENTS.
DISTRIBUTED BY: NESTLÉ BAKING, A DIVISION OF NESTLÉ USA, INC., SOLON, OH 44139 USA

*Compare Desserts!**

Keep an eye on Saturated Fat, *Trans* Fat and Cholesterol!

Granola Bar ±

Nutrition Facts
Serving Size 1 bar (33g)
Servings Per Container 10

Amount Per Serving	
Calories 140	Calories from Fat 45
	% Daily Value*
Total Fat 5g	8%
Saturated Fat 1g ←	5%
Trans Fat 0g ←	
Cholesterol 0mg →	0%

Saturated Fat : 1 g
+ *Trans* Fat : 0 g
Combined Amt.: 1 g

Sandwich Cookies ±

Nutrition Facts
Serving Size 2 cookies (28g)
Servings Per Container 19

Amount Per Serving	
Calories 130	Calories from Fat 45
	% Daily Value*
Total Fat 5g	8%
Saturated Fat 1g ←	5%
Trans Fat 1.5g ←	
Cholesterol 0mg →	0%

Saturated Fat : 1 g
+ *Trans* Fat : 1.5g
Combined Amt.: 2.5g

Cake, Iced and Filled ±

Nutrition Facts
Serving Size 2 cakes (66g)
Servings Per Container 6

Amount Per Serving	
Calories 280	Calories from Fat 140
	% Daily Value*
Total Fat 16g	25%
Saturated Fat 3.5g ←	18%
Trans Fat 4.5g ←	
Cholesterol 10mg →	3%

Saturated Fat : 3.5g
+ *Trans* Fat : 4.5g
Combined Amt.: 8 g

*Compare Spreads!**

Keep an eye on Saturated Fat, *Trans* Fat and Cholesterol!

Butter **

Nutrition Facts
Serving Size 1 Tbsp (14g)
Servings Per Container 32

Amount Per Serving	
Calories 100	Calories from Fat 100
	% Daily Value*
Total Fat 11g	17%
Saturated Fat 7g ←	35%
Trans Fat 0g ←	
Cholesterol 30mg →	10%

Saturated Fat : 7g
+ *Trans* Fat : 0g
Combined Amt.: 7g
Cholesterol: 10 % DV

Margarine, stick †

Nutrition Facts
Serving Size 1 Tbsp (14g)
Servings Per Container 32

Amount Per Serving	
Calories 100	Calories from Fat 100
	% Daily Value*
Total Fat 11g	17%
Saturated Fat 2g ←	10%
Trans Fat 3g ←	
Cholesterol 0mg →	0%

Saturated Fat : 2g
+ *Trans* Fat : 3g
Combined Amt.: 5g
Cholesterol: 0 % DV

Margarine, tub †

Nutrition Facts
Serving Size 1 Tbsp (14g)
Servings Per Container 32

Amount Per Serving	
Calories 60	Calories from Fat 60
	% Daily Value*
Total Fat 7g	11%
Saturated Fat 1g ←	5%
Trans Fat 0.5g ←	
Cholesterol 0mg →	0%

Saturated Fat : 1 g
+ *Trans* Fat : 0.5g
Combined Amt.: 1.5g
Cholesterol: 0 % DV

No Trans Fatty Acids

Nutrition Facts

Serv. Size 1 Tbsp. (14g)
Servings 16
Calories 70
Fat Cal. 70

* Percent Daily Values (DV) are based on a 2,000 calorie diet.

Amount/Serving	% DV*	Amount/Serving	% DV*
Total Fat 8g	12%	**Cholest.** 0mg	0%
Sat. Fat 1g	5%	**Sodium** 110mg	5%
Trans Fat 0g		**Total Carb.** 0g	0%
Polyunsat. Fat 2g		**Protein** 0g	
Monounsat. Fat 4.5g			

Vitamin A 10% • Vitamin E 20%

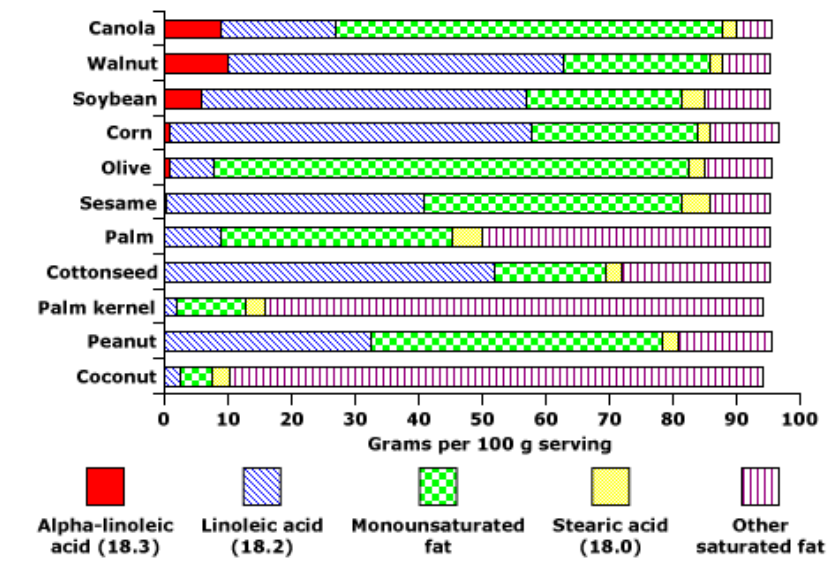
Not a significant source of dietary fiber, sugars, vitamin C, calcium and iron.

Dietary Advice for Cardiovascular Patients

Cooking

When possible…

- Bake, broil, boil, steam, grill, roast, stew, or stir-fry
- Use canola or olive oil
- Use plant stanol/sterol butter substitutes
- Use whole wheat pasta
- Use wild rice



Nutrition Facts

Serv. Size 1 tbsp (14g)
Servings 64
Calories 120
Fat Cal. 120
* Percent Daily Values (DV) are based on a 2,000 calorie diet.

Amount/Serving	%DV*	Amount/Serving	%DV*
Total Fat 14g	**22%**	**Cholest.** 0mg	**0%**
Sat. Fat 1g	**5%**	**Sodium** 0mg	**0%**
Trans Fat 0g		**Total Carb.** 0g	**0%**
Polyunsat Fat 4g		**Protein** 0g	
Monounsat Fat 9g			

Not a significant source of Dietary Fiber, Sugars, Vitamin A, Vitamin C, Calcium, and Iron.

INGREDIENT: CANOLA OIL.

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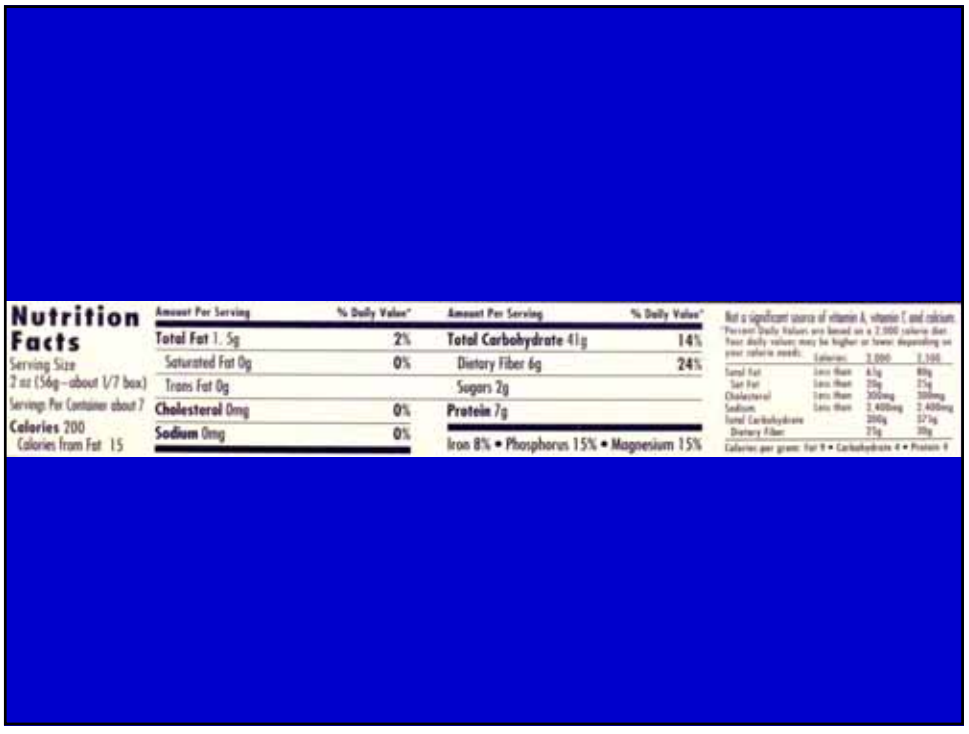
*Limited and not conclusive scientific evidence suggests that eating about 1 1/2 tablespoons (19g) of canola oil daily may reduce the risk of coronary heart disease due to the unsaturated fat content in canola oil. To achieve this possible benefit, canola oil is to replace a similar amount of saturated fat and not increase the total number of calories you eat in a day.


Barilla
Whole Grain
EXCELLENT SOURCE OF FIBER - ALL NATURAL
Made with 51% Whole Wheat
THIN SPAGHETTI
COOKING TIME 6-7 MINUTES
beatlife


Nutrition Facts
Serving Size
2 oz (56g—about 1/7 box)
Servings Per Container about 7
Calories 200
Calories from Fat 15
Amount Per Serving
% Daily Value*
Total Fat 1.5g
2%
Saturated Fat 0g
0%
Trans Fat 0g
Cholesterol 0mg
0%
Sodium 0mg
0%
Amount Per Serving
% Daily Value*
Total Carbohydrate 41g
14%
Dietary Fiber 6g
24%
Sugars 2g
Protein 7g
Iron 8% • Phosphorus 15% • Magnesium 15%

Dietary Advice for Cardiovascular Patients

Cooking (cont.)

When possible…

- **Remove skin from poultry *before* cooking**
- **Remove excess fat from meat/ poultry *before* cooking**
- **Drain the fat off of cooked, ground meat**
- **Skim the fat off of refrigerated gravy, stew, or soup before reheating**
- **Thicken sauces with evaporated nonfat milk instead of whole milk or cream**

Nutrition Facts
Serving Size 1 slice (14g)
Servings Per Container about 24

Amount Per Serving
Calories 25 Calories from Fat 15

	% Daily Value*
Total Fat 1.5g	3%
Saturated Fat 0.5g	3%
Trans Fat 0g	
Cholesterol 10mg	4%
Sodium 135mg	6%
Total Carbohydrate 0g	0%
Dietary Fiber 0g	0%
Sugars 0g	
Protein 2g	4%

Not a significant source of vitamin A, vitamin C, calcium, and iron.

*Percent Daily Values (DV) are based on a 2,000 calorie diet.

Dietary Advice for Cardiovascular Patients

Eating Out

- Bring healthy food from home
- Avoid:
  - Fried foods
  - Processed meats
  - Dairy products that are *not* listed as nonfat or skim
- Beware of salad dressings
- Don’t overeat

Dietary Advice for Cardiovascular Patients

Snacking

Healthy snacks must be *more accessible* than unhealthy snacks

- **Buy healthy snacks**
- **Prepare healthy snacks**
- **Keep healthy snacks close**

Nutrition Facts

Serving Size 1.4oz / 40g (about 3 pieces)
Servings Per Container about 47

Amount Per Serving	
Calories 200	Calories from Fat 110
	% Daily Value *
Total Fat 12g	**18%**
Saturated Fat 7g	**35%**
Trans Fat 0g	
Cholesterol 5mg	**2%**
Sodium 20mg	**1%**
Total Carbohydrate 21g	**7%**
Dietary Fiber 2g	**8%**
Sugars 18g	
Protein 3g	

Vitamin A 0% • Vitamin C 2%
Calcium 6% • Iron 6%

* 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
Saturated Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g


BLUE DIAMOND
NATURAL
Oven Roasted Almonds
Honey


Nutrition Facts


Intense Taste!
Smart Snacking
BLUE DIAMOND
ALMONDS
BOLD
Wasabi & Soy Sauce


Nutrition Facts
Serving Size 1 oz (28g/about 28 nuts)
Servings per Can 6
Calories 170
Calories from Fat 140
*Percent Daily Values are based on a 2,000 calorie diet.
Amount Per Serving % DV* Amount Per Serving % DV*
Total Fat 15g 24% Potassium 180mg 5%
Sat. Fat 1g 6% Total Carb. 6g 2%
Trans Fat 0g Dietary Fiber 3g 11%
Cholest. 0mg 0% Sugars 2g
Sodium 115mg 5% Protein 6g
Vitamin A 0% • Vitamin C 0% • Vitamin E 35% • Magnesium 20%
Calcium 8% • Iron 6%
INGREDIENTS: ALMONDS, VEGETABLE OIL (CANOLA, SAFFLOWER AND/OR SUNFLOWER), SUGAR, MODIFIED CORN STARCH, SALT, SOY SAUCE (SOYBEANS, WHEAT, SALT), HORSERADISH, ONION, SPICE, FRACTIONATED COCONUT OIL, GARLIC, MALTODEXTRIN, YEAST EXTRACT, NATURAL FLAVOR, CITRIC ACID, DISODIUM GUANYLATE AND DISODIUM INOSINATE. PEANUT FREE. MAY CONTAIN OTHER TREE NUTS.
FROM CALIFORNIA. PACKED BY: BLUE DIAMOND GROWERS, SACRAMENTO, CA 95812 USA


Zero grams Trans Fat
Kashi
TLC
Tasty Little Crackers
all natural snack crackers
7g Whole Grains
HONEY SESAME
NET WT. 9 OZ (255g)


Kashi
TLC
Tasty Little Crackers
Nutrition Facts
Serving Size 15 Crackers (30g)
Servings Per Container About 8
Amount Per Serving
Calories 130 Calories from Fat 25
% Daily Value*
Total Fat 3g 5%
Saturated Fat 0g 0%
Trans Fat 0g
Cholesterol 0mg 0%
Sodium 160mg 7%
Total Carbohydrate 22g 7%
Dietary Fiber 2g 8%
Sugars 4g
Protein 3g
Vitamin A 0% • Vitamin C 0%
Calcium 2% • Iron 4%

Nutrition Facts

Serving Size 1 oz (28g 1/8 of package; about a 1 inch cube)
Servings 8
Calories 100
Fat Cal 80
*Percent Daily Values (DV) are based on a 2,000 calorie diet.

Amount/serving	%DV*	Amount/serving	%DV*
Total Fat 9g	**14%**	**Total Carb** 1g	**0%**
Sat Fat 6g	**30%**	Dietary Fiber 0g	**0%**
Trans Fat 0g		Sugars <1g	
Cholest 35mg	**12%**	**Protein** 2g	
Sodium 105mg	**4%**		

Vitamin A 6% • Vitamin C 0% • Calcium 2% • Iron 0%

Nutrition Facts

Serv Size 1 oz (28g/1/8 pkg.)

Servings 8

Calories 30

Fat Cal 0

*Percent Daily Values (DV) are based on a 2,000 calorie diet.

Amount/serving	%DV*	Amount/serving	%DV*
Total Fat 0g	**0%**	**Total Carb** 2g	**1%**
Sat Fat 0g	**0%**	Fiber 0g	**0%**
Trans Fat 0g		Sugars 1g	
Cholest 5mg	**2%**	**Protein** 4g	
Sodium 190mg	**8%**		

Vitamin A 8% • Vitamin C 0% • Calcium 15% • Iron 0%

Dietary Advice for Cardiovascular Patients

Staying Active

- *Force* exercise into your schedule
- Don't set yourself up for failure
- Any (safe) exercise is better than none
- Beware of the scale
- Increasing lean muscle accelerates metabolism

Dietary Advice for Cardiovascular Patients

Summary

- Pay attention to nutrition facts labels
- Use strategy when choosing food:
  - Minimize (completely eliminate, if possible):
    - Cholesterol
    - Saturated fat
    - Trans fat
  - Limit (don't exceed recommended daily allowance):
    - Sodium
  - Increase intake of:
    - Dietary (soluble) fiber
- Not all fat is bad
- *Exercise!*

Dietary Advice for Cardiovascular Patients

References

http://www.fda.gov/Food/LabelingNutrition/ConsumerInformation

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