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# NUTRITION AND YOUR BODY

Answering the question-  
Why Should You Care What You Are Eating???

Too many Americans  
think like this . . .



“Never eat  
more than you  
can lift.”

- Miss Piggy

Portion Distortion

# Nutrients Needed By the Body

## 6 Main Nutrients

Vitamins

Minerals

Water

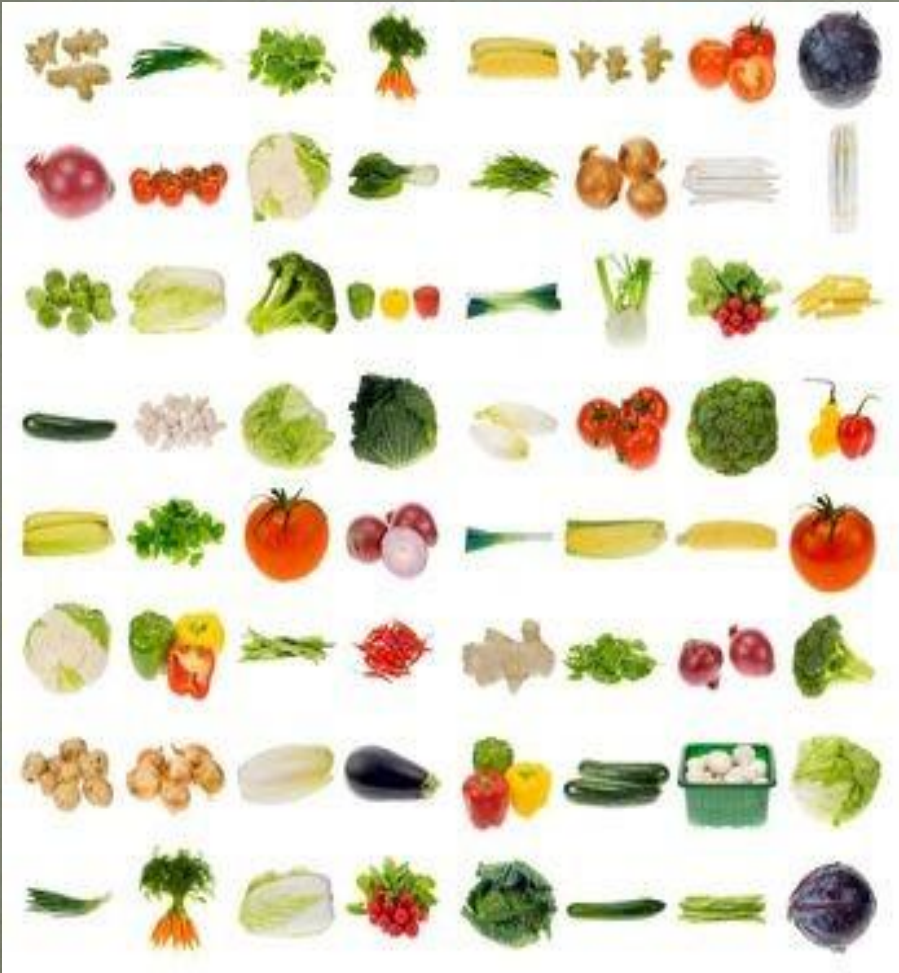
Carbohydrates

Protein

Fat



# Vitamins



- Keep body's tissue healthy and systems working properly
- Help carbs, fats, and protein do their work
- Protect against illnesses such as heart disease and cancer

# General Hints About Vitamins

- Eat dark green leafy vegetables



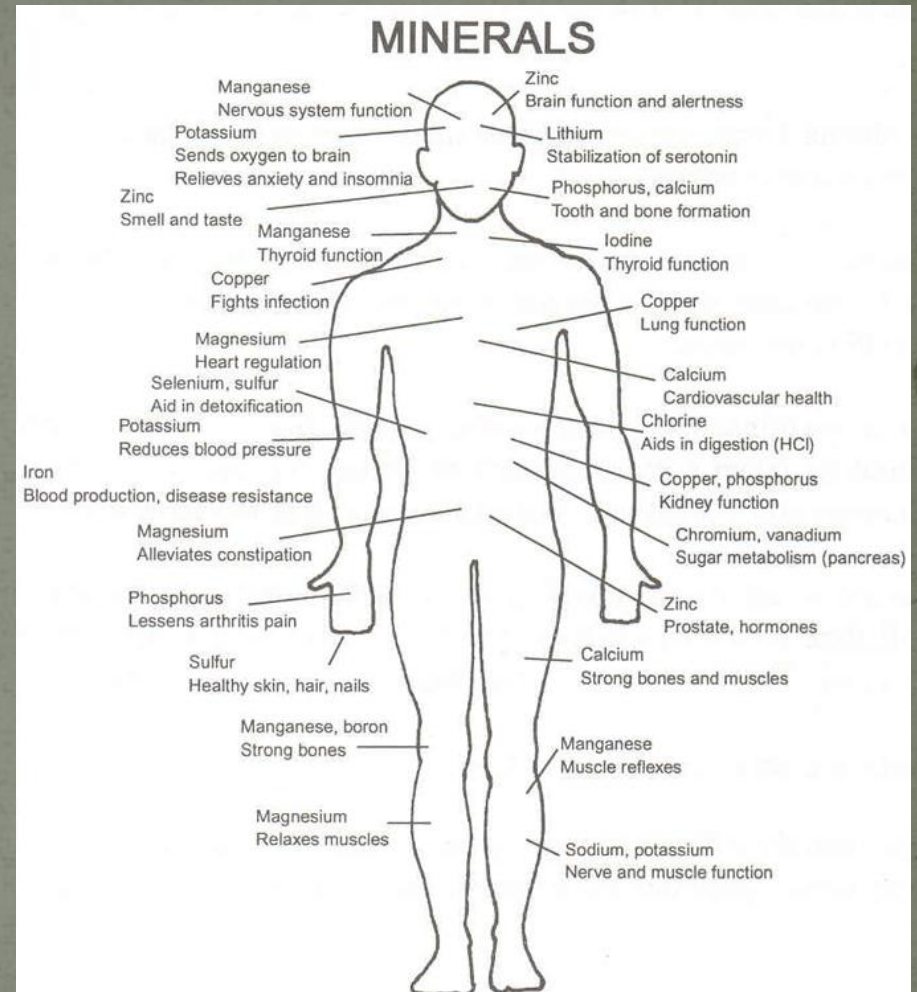
- Eat yellow and orange fruits and vegetables



- Eat foods rather than supplements
  - Foods contain other nutrients
  - Vitamins in foods are more easier absorbed in the body

# MINERALS

- Most minerals become part of the body
  - Teeth
  - Bones
- Maintain body's fluid balance



# General Hints About Minerals

- Eat a **VARIETY** of healthful foods
- Pay particular attention to:
  - **CALCIUM**
    - Dairy foods, dry beans/peas, dark green leafy vegetables
  - **IRON**
    - Lean red meat, dry bean/peas, dark green leafy vegetables



# Reducing Sodium in Your Diet

- Add spices or herbs to season food without adding salt
- Taste food before adding salt.
- Read the Nutrition Facts Panel of pre-packaged foods like soups, breads, broths, frozen meals or canned vegetables. Look for labels that say "low sodium," "very low sodium" or "sodium-free."
- Avoid processed meats such as ham, sausage, hot dogs and luncheon or deli meats.





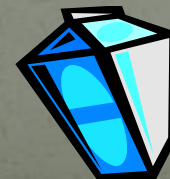
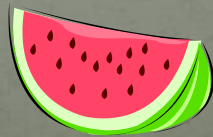
# WATER



- Up to 70% of body is made of water
- Keeps normal body temperature
  - Ex. Perspiring cools down your body
- Helps chemical reactions in the body

# Drink 6-8 glasses of liquid each day

Water	Milk
Popsicles (Try sugar free!)	Soups
Fruits	Vegetables



# FAT

There is so much hype about fat . . .

## IS FAT BAD FOR YOU???

Classification:	Women:	Men:
Essential Fat	10 - 12%	2 - 4%
Athletes	14 - 20%	6 - 13%
Fitness	21 - 24%	14 - 17%
Acceptable	25 - 31%	18 - 25%
At Risk	32% plus	25% plus

# No . . . Our bodies NEED fat

- Functions
  - Stores fat for energy
  - Protects internal organs from injury
  - Insulates the body from shock and temperature changes



# Sources of Fat

## **SATURATED FATS:**

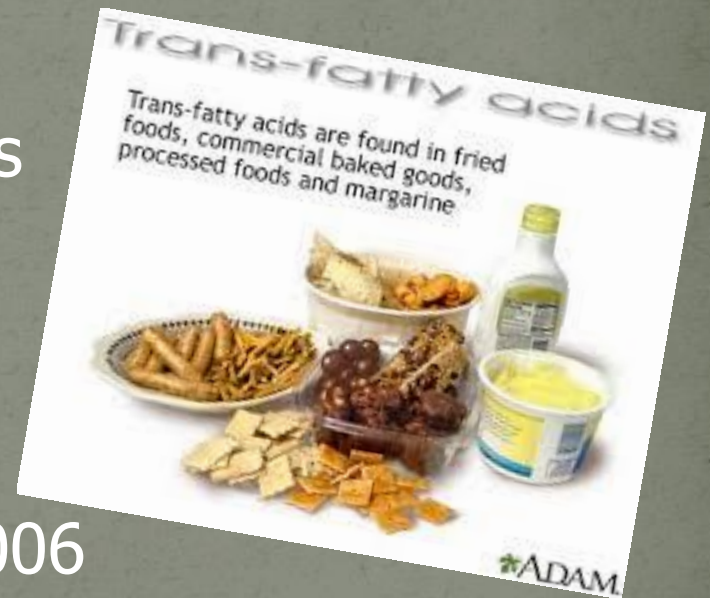
- Typically solid at room temperature
- Primarily animal sources
  - Ex. Butter and animal fat
- Palm and coconut oils
  - Often found in snack foods
- LINKED TO HEART DISEASE



# Sources of Fat

## TRANS FATS

- Created after heating or hydrogenating oil  
Hydrogenation: Adding hydrogen to liquid fat in order to make solid
- Found mainly in processed foods
- LINKED TO HEART DISEASE
- Required on food labels as of 2006



# Sources of Fat




## UNSATURATED FATS

- Generally liquid at room temperature
- Olive oil and canola oil are the healthiest fats in the human diet
  - **FIGHT AGAINST HEART DISEASE!!**



# Tips for Fat Intake

- Fat is found in almost all foods
- Choose healthy meals and snacks
  - Whole grain, fruits, vegetables, lean meat w/out skin
- Limit intakes of fats, oils, and sweets

Calories	68%	▼ '07-'10
 Total fat	67%	▼ '07
Sodium/salt	61%	
Sugars	55%	▼ '07-'10
 Saturated fat	53%	
 Trans fat	51%	▼ '07, '08

\* = Significant decrease from year indicated

(Use NFP: Which of the following information on the Nutrition Facts Panel do you use? Select all that apply.)



# CARBOHYDRATES



**MAIN SOURCE  
OF ENERGY FOR  
THE BODY!!!!**



# Types of Carbohydrates

## Complex

- Used for LONG TERM energy
  - Bread, cereal, potatoes, pasta, rice, and legumes

## Simple

- Used for FAST energy, but not to sustain
- Fruit, fruit juice, table sugar, honey, soft drinks, and other sweets



# Fiber . . . Although NOT a nutrient . . .



- Found in many high-carb foods
- Lowers cholesterol
- Aids bowel movements
- Reduces colon cancer
- Sources:
  - Oat bran
  - Whole wheat products
  - Fruit and vegetable skins

# PROTEIN



- Helps body repair and grow cells
- Maintains hair, eyes, skin, and muscles
- Aids immune system
- Provides energy

PROTEIN CAN ONLY DO ALL OF ITS JOBS IF THE BODY IS GETTING ENOUGH CARBS AND FATS



# High Protein, Low Carb Controversy

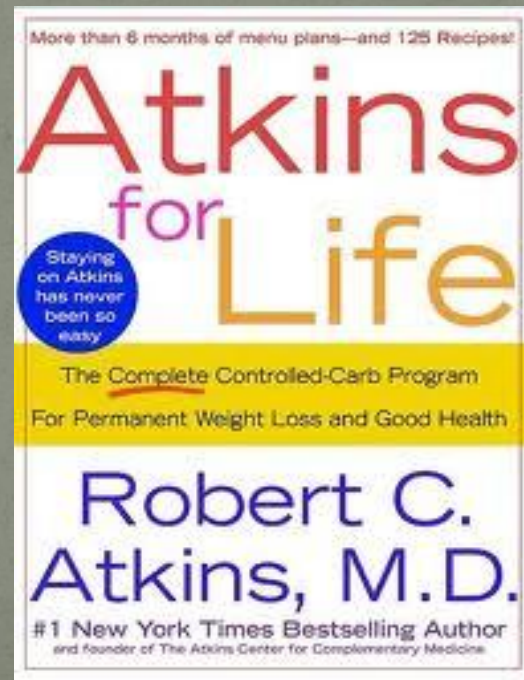
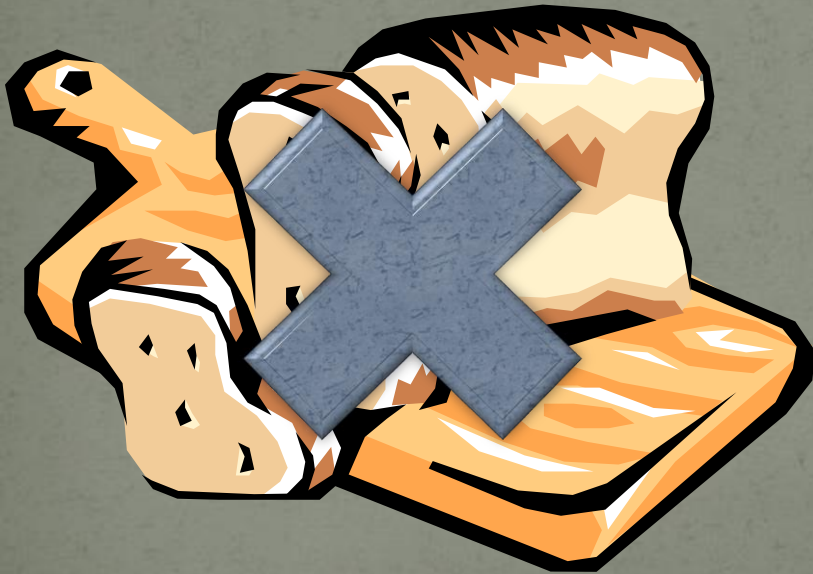


VS



# THE ATKINS DIET and other diets similar to it:

- Suggests to do the following:
  - Eat high protein foods
  - Eat few high-carbohydrate foods





# Is Atkins a good choice?

- Consider what you know about all the nutrients . . .
  - Discuss with a partner your opinion about the Atkins diets regarding its health benefits vs. possible negative effects.



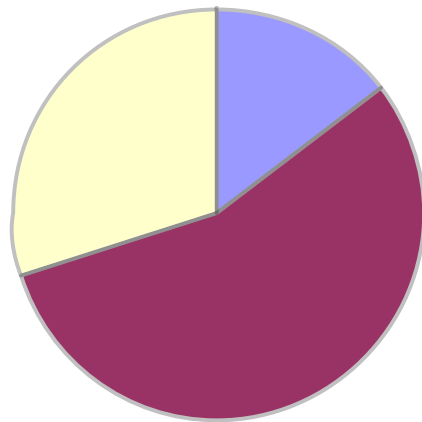
# What do the experts say about the low carb, high protein diets?

- Body goes into survival mode and feeds energy off protein
- MISSING:
  - Fiber
  - Protein not working to full potential
- REMEMBER protein cannot complete all of its functions if carbohydrates and fats are not part of the diet.

[Web MD Article](#)

# What should you do?

## % of Calories From Nutrients



■ Protein: 12-15%

■ Carbohydrates:  
55% or more

■ Fat: 30% or less

# Web-Site to Visit

Click on picture for link

**eat right.** Academy of Nutrition and Dietetics

The world's largest organization of food and nutrition professionals. Formerly the American Dietetic Association.

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It's not just your hands that need washing during food preparation. To prevent foodborne illness, it's also important to know how to properly wash produce, cutting boards and food containers.

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REVIEW  
GAME

# QUESTION 1

- Which nutrient is the body's main source of energy?

A. Protein

B. Carbohydrates

C. Fat

D. Minerals

# QUESTION 2

What nutrient provides insulation to the body?

A. Fat

B. Carbohydrates

C. Protein

D. Vitamins

# QUESTION 3

- Which nutrient aids the immune system and helps maintain hair, eyes, skin, and muscles?

A. Fat

B. Minerals

C. Carbohydrates

D. Protein



# QUESTION 4

- Why should we eat foods to get our vitamins rather than take supplements?

A. Vitamins in foods are more easily absorbed by the body

B. Food contains other nutrients in addition to vitamins

C. Both A and B

D. None the above

# QUESTION 5

- What percentage of our calories should come from fat?

A. 30%

B. 60%

C. 15%

D. 55%

# QUESTION 6

- What do many high-carbohydrate foods contain that help reduce cholesterol and chance of cancer?

A. Calcium

B. Potassium

C. Fiber

D. Iron

# QUESTION 7

- Which mineral below do we need to pay particular attention to when making food choices?

A. Iron

B. Calcium

C. Sodium

D. All of the  
above

# QUESTION 8

- Which of the following is a function of water?

A. Regulate body temperature

B. Aid the immune system

C. Provide the body with energy

D. Protect the body's internal organs from injury

# QUESTION 9

- Which of the following is NOT a nutrient?

A. Water

B. Protein

C. Fat

D. Fiber

# QUESTION 10

- What problems can occur with the Atkins diet?

A. Protein cannot perform all of its functions

B. Fiber often lacking in diet w/out supplements

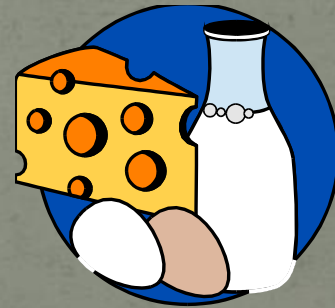
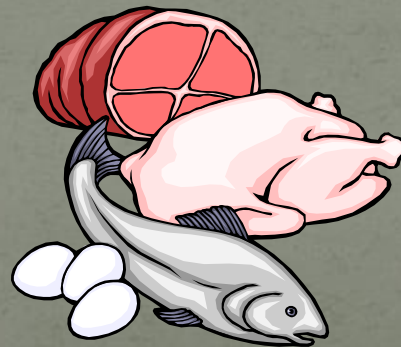
C. Body has to shift into survival mode

D. All of the above

# CONGRATULATIONS

You possess the knowledge to make wise, healthy food choices!!!

USE YOUR KNOWLEDGE!!!





You are correct!!

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