

## Obesity in Home Care Patients

Satellite Conference and Live Webcast  
Wednesday, September 27, 2006  
2:00 - 4:00 p.m. (Central Time)

Produced by the Alabama Department of Public Health  
Video Communications and Distance Learning Division

## Faculty

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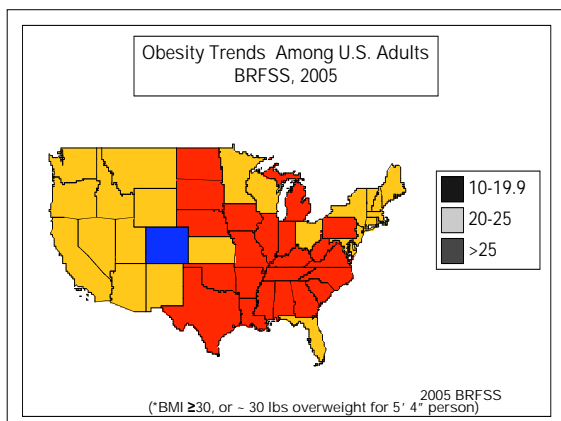
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## Program Objectives

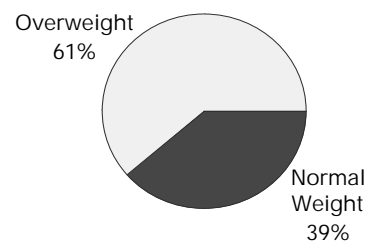
- To be able to define obesity.
- Ability to list five health diseases associated with obesity.
- Assist patients with learning healthier ways of preparing foods.

## Program Objectives

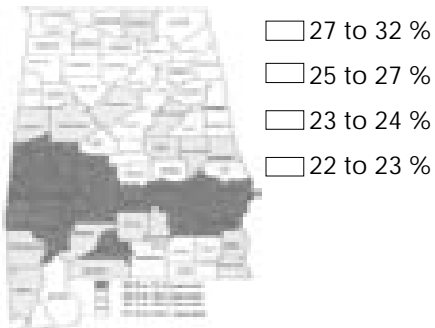
- Assist patients with healthy food choices and appropriate serving sizes.
- Discuss the importance of daily physical activity in promoting health, preventing chronic disease, weight loss and maintenance and preventing obesity.



## 61% of US Adults Are Overweight or Obese

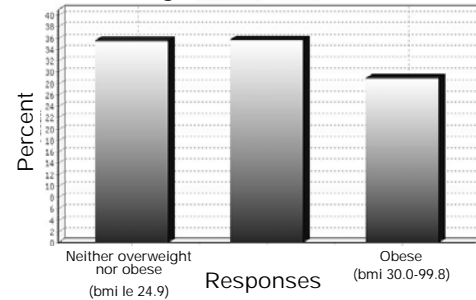


## Obesity in ALABAMA

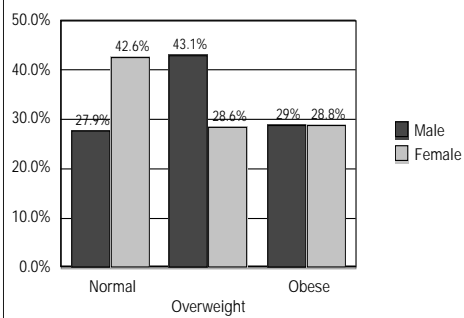


## Weight Status in Alabama

BMI Categories / Alabama - 2005



## BMI in Alabama by Gender

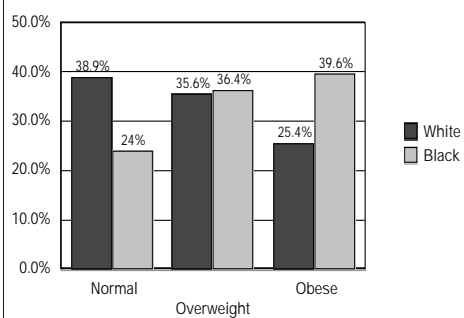


## U.S. Racial/Ethnic Differences

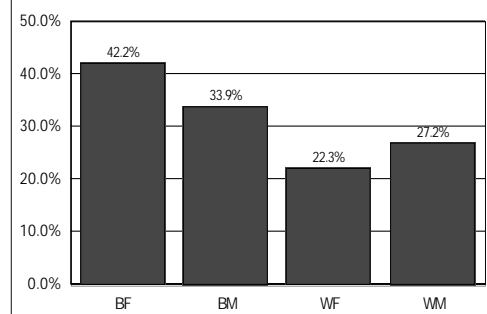
### Adults

- non-Hispanic whites = 30% obese
- Mexican Americans = 37% obese
- non-Hispanic blacks = 45% obese

## BMI in Alabama by Race



## Obesity in Alabama by Race & Gender



## What is Obesity? BMI 30 and Above

- English Formula:
  - BMI= (Weight in Pounds)
    - (Height in Inches X Height in Inches) X 703
- A person who weighs 220 pounds and is 6 feet 3 inches tall has a BMI of 27.5
  - (220)
    - (75 X 75) x 703= 27.5

## BMI Chart for Weight Status

The chart displays BMI values for heights from 5'0" to 7'0" and weights from 100 to 300 pounds. The BMI values range from 16.0 to 40.0. The chart is organized into columns for height and rows for weight, with BMI values calculated for each combination.

## Overweight vs. Over Fat

- BMI at 25 to 29.9 (overweight) is roughly 20 pounds above appropriate weight for height.
- BMI above 30 (obese) is 30 or more pounds over appropriate weight for height.
- Over fat refers to the percentage of body fat.

## Recommendations of Body Fat For Persons in BMI Range of 18.5- 24.9

	Female Fat Range	Male Fat Range
Age 20-39	21- 33	8- 20
40-59	23- 34	11-21
60-79	24-36	13- 25

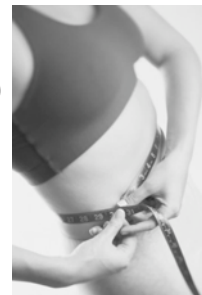
## Waist Size and Body Shape Apple versus Pear

- Men > 40 inches have increased health risks.
- Women > 35 inches have increased health risks.



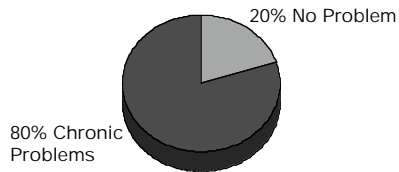
## Waist Measurements

- Measured at the mid point between the ileac crest (hip bone) and the lower rib.



### Additional Health Problems Are Common for the Overweight/Obese

- 80% of the overweight/obese population have one or more chronic diseases.



### Co-morbidities

- Hypertension (high blood pressure).
- Diabetes (high blood sugar).
- Hypertrophic cardiomyopathy (enlarged heart).
- Obesity hypoventilation syndrome (shallow breathing).
- Hyperlipidemia (elevated fat levels in the blood).
- Hypercholesterolemia (elevated cholesterol levels in the blood).
- Obstructive sleep apnea syndrome (airway is obstructed during sleep).

### Co-morbidities

- Cholelithiasis (gallstones/gallbladder problems).
- Psychosocial impairment (emotional and/or social problems).
- Gastroesophageal reflux disease (GERD, heartburn).
- Degenerative arthritis (aching, worn, and swollen joints).
- Coronary Heart Disease.
- Stress overflow - Urinary incontinence.
- Infertility with sex hormone dysfunction.
- Depression.

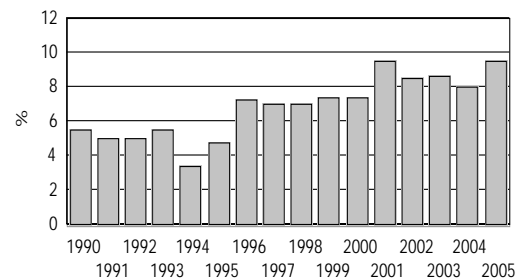
### Co-morbidities

- Chronic venous stasis ulcers.
- Benign intracranial hypertension (pseudotumor cerebri).
- Asthma.
- Atherosclerotic vascular disease.
- Nonalcoholic steatohepatitis.
- Gout.
- Pulmonary embolism.
- Numerous cancers.

### Twin Epidemic: Diabetes Type 2

- Obesity is strongly linked to type 2 diabetes.
- Globally, 154 million people have diabetes type 2 which is blamed for about 3 million deaths a year.
- One in three children born in 2002 to develop type 2 if obesity is not controlled.

### Diabetes Prevalence Alabama Adults 1995-2005



## Gaining From Loss

- Many co-morbid conditions are completely resolved or improved with significant weight loss.
- These include:
  - Type 2 diabetes.
  - Hyperlipidemia.
  - Hypertension.
  - Obstructive sleep apnea.

## The Impact of Obesity

The table shows the estimated percentage of total, Medicare, and Medicaid adult medical expenses that are attributable to obesity in Alabama.

State	Total Pop. (%)	Millions \$	Medicare Pop. (%)	Millions \$	Medicaid Pop. (%)	Millions \$
Alabama	6.3	\$1320	7.7	\$341	9.9	\$269

- Obesity impacts
  - The health care setting
  - The work place
  - The home

## Obesity is a Complex Issue

- Poor diets and lack of physical activity are the major causes of America's overweight and obesity epidemic.

## Causes of Obesity: Increased Calories

- What we do and don't eat.
  - Fruit and vegetable.
  - Milk.
  - Whole Grain.
  - Water.
  - Hidden fat and sugar.
- How we prepare our foods.
  - Bake, Broil, Fry.
  - Seasonings.

## Causes of Obesity: Increased Calories

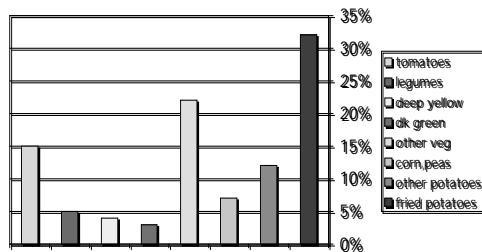
- When we do and don't eat
  - Breakfast
  - Late night eating
- Too many calories (Portion distortion)



## What We Do and Do Not Eat

- Dietary habits are important. But, in Alabama:
  - 79% of adults do not eat 5 A Day.
  - 86% of youth ate less than 5 A Day.
  - 92% of youth drank less than 3 cups of milk a day.

### Proportion of Vegetable Servings



### High Fat, High Sugar Foods Are Readily Available (No longer special treats)



### Health Results from Increased Calories from Colas with Sugar

- Women drinking one or more sugar sweetened soft drinks a day were twice as likely to develop diabetes as women who drank fewer than one a month.
- When differences factored in (weight, diet, lifestyle) women drinking sugary sodas were 1.3 times as likely to develop diabetes.

### Definition: Added Sugars

"Added sugars" are sugars and syrups added to foods during processing or preparation.



They do NOT include naturally occurring sugars found in milk and fruits.

### Look at the Ingredient List for Added Sugars

**A** INGREDIENTS: cultured pasteurized grade A nonfat milk, whey protein concentrate, pectin.

**B** INGREDIENTS: cultured grade A reduced fat milk, apples, high-fructose corn syrup, cinnamon, nutmeg, natural flavors, pectin.

Which food has more ADDED sugar?

### **B** Has More Added Sugar

**A** INGREDIENTS: cultured pasteurized grade A nonfat milk, whey protein concentrate, pectin.

**B** INGREDIENTS: cultured grade A reduced fat milk, apples, high-fructose corn syrup, cinnamon, nutmeg, natural flavors, pectin.

The ingredient that weighs the most is listed first. The ingredient that weighs the least is listed last.

### These Words Indicate Added Sugar

- Brown Sugar
- Corn Sweetener
- Corn Syrup
- Dextrose
- Fructose
- Fruit Juice Concentrates
- Glucose
- High-fructose Corn Syrup
- Honey
- Invert Sugar
- Lactose
- Maltose
- Malt Syrup
- Molasses
- Raw Sugar
- Sucrose
- Sugar
- Syrup

### Foods Containing Most of the Added Sugars in American Diets Are:

- Regular soft drinks.
- Candy.
- Cakes.
- Cookies.
- Pies.
- Fruit drinks, such as fruitades and fruit punch.

### Foods Containing Most of the Added Sugars in American Diets Are:

- Milk-based desserts and products, such as ice cream, sweetened yogurt and sweetened milk.
- Grain products, such as sweet rolls and cinnamon toast.

### How We Prepare Our Foods

- To lower fat intake, try seasoning with herbs instead of fats. Bake instead of fry.
- Fresh herbs pack the most flavor. During the warm months, gardeners can grow their own herbs and then preserve their harvest by either freezing or drying.

### How We Prepare Our Foods

- Some area grocery stores carry fresh-cut herbs in the produce section almost year around. Dried herbs can be found at any grocery store.
- NOTE: When substituting dried herbs in recipes that call for fresh herbs, DECREASE THE AMOUNT BY HALF. For example, if the recipe calls for a cup of fresh basil, substitute with one-half cup of dried basil.

### Common Herbs Used in Cooking

- Basil: This is used in tomato-based dishes and salads. A must in Italian meals.
- Parsley: Use a sprig as a garnish for meat and vegetable dishes.
- Thyme: Delicious as an addition to stews, fish, lamb, pork and beef.

### Common Herbs Used in Cooking

- Chives: Chop up and sprinkle on baked potatoes, soups, eggs and salads.
- Bay Leaves: Use a whole leaf in stews, fish dishes, venison or marinades.
- Marjoram or Oregano: Great in soups, sauces, pizza.

### Common Herbs Used in Cooking

- Tarragon: Add to fish or chicken.
- Mint: Fresh leaves can be mixed into salads and stuffings. Add to vegetables and meats.
- Sage: Used in stuffing for chicken, turkey, goose, pork.
- Rosemary: Great with steaks, stews, sausage.

### When We Eat and Don't Eat. Breakfast Anyone?

- Because your body has not had any food for 8 to 12 hours, your blood sugar levels are very low.
- The blood sugar levels must be increased to allow you to function normally and to concentrate throughout the day.
- A well-balanced breakfast can provide you with iron, calcium, and the B-complex vitamins.

### Why Breakfast?

- Skipping breakfast has a similar effect to starving yourself. It slows down your metabolism because your body conserves energy and burns only what is absolutely necessary until fuel becomes available.
- To lose weight don't slow the metabolism.
- Breakfast is your first opportunity of the day to fuel your body, rev up your metabolism and start burning the most calories possible.

### Why Breakfast?

- Eating whole grain cereals can reduce likelihood of death from heart disease.
- Refined grain cereals had no protective effect on heart health.
- Whole-grain cereals are defined as:
  - Having a whole grain or bran first in the ingredients list
  - Having a whole grain, not listed first, and at least 2 grams of fiber per serving

### "But I can eat whole grain cereal later . . . like mid afternoon"

- People who eat breakfast are significantly less likely to be obese and diabetic than those who usually don't.
- Obesity and insulin resistance syndrome rates were 35 percent to 50 percent lower among people who ate breakfast every day compared to those who frequently skipped it.



"But I can eat whole grain  
cereal later . . .  
like mid afternoon"

"Study results suggest that breakfast  
may really be the most important  
meal of the day."

Mark Pereira, PhD  
Harvard Medical Center

### Summary of Reasons to Eat Breakfast

- Eating breakfast may:
  - Reduce risks of obesity, diabetes, and heart disease.
  - Help use calories better all day.
- You should try to eat something from three of the food guide pyramid groups.
  - Fresh fruit and milk on cereal.
  - Low fat cheese toast and juice.

### But I am In a Hurry

- At night, prepare your cereal with out the milk.
- Keep seasonal fruit on the counter close to the door. Grab one or two on the way out.

### Not Cereal Again

- Your choices are not limited to cereal, eggs, or muffins, try leftovers.
  - A slice of lean ham and low-fat cheese on whole grain bread
  - Baked potato with veggies and low-fat cheese
  - Fruit with peanut butter
  - A protein shake and fruit
- Your choices are only limited to your imagination. You can have anything for breakfast.

### Quick and Easy Breakfast Ideas:

- Deli Breakfast:  
Top 1/2 bagel with 1 slice low fat ham or turkey and 1 slice reduced fat cheese. Toast in a toaster oven until melted. Put it in a Tupperware, add an apple and your ready to go.
- You can also do this with peanut butter.

### Quick and Easy Breakfast Ideas:

- Breakfast Banana Split:  
Peel and slice a banana in half lengthwise, place it in a small Tupperware and top with a 6 oz low-fat yogurt (your favorite flavor), handful of high fiber cereal, sprinkle with blueberries, and walnuts or almonds. Take it with you and eat it on your commute, at work, or put it in the office fridge and eat it when you start getting hungry.

### Quick and Easy Breakfast Ideas:

- Liquid Breakfast:  
8 oz low fat milk, 1 scoop soy protein powder, two tablespoons of raw oatmeal (just try it), a handful of strawberries or blueberries, and flaxseed oil if you have it. If you like add some crushed ice.

### But I Am Not Hungry

- Start out with a light bite, perhaps juice or toast.
- Then have a nutritious mid-morning snack of yogurt, cheese, or a small bagel.

### Eating Late at Night

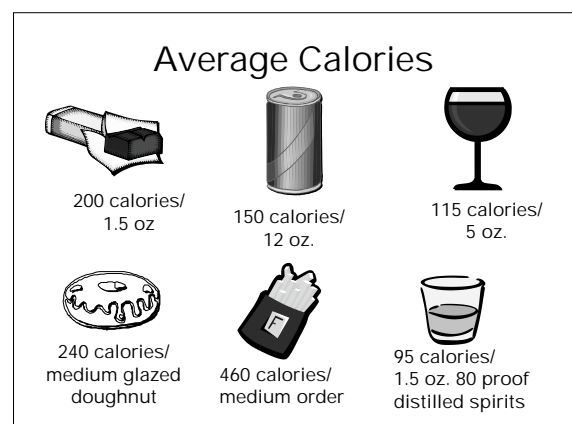
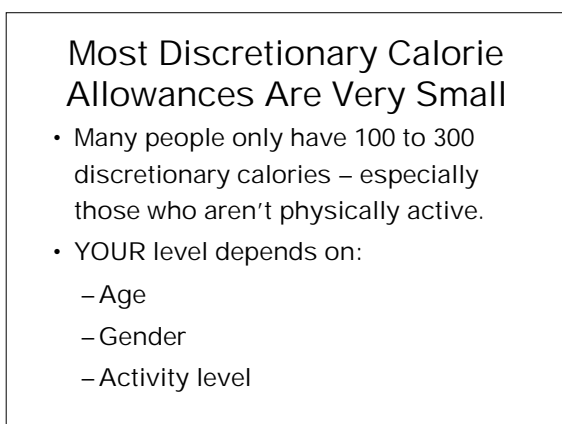
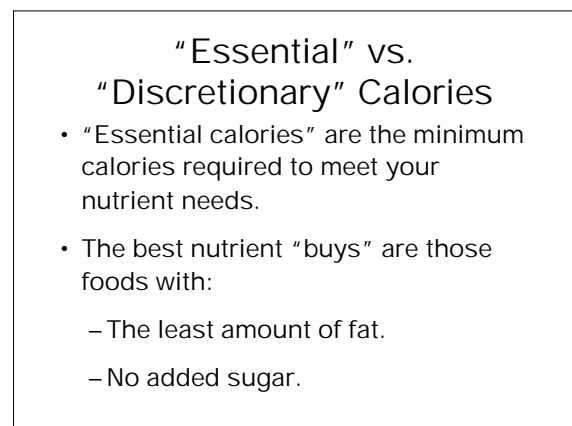
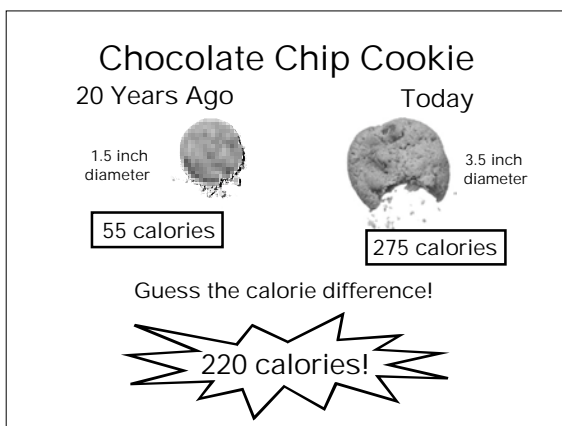
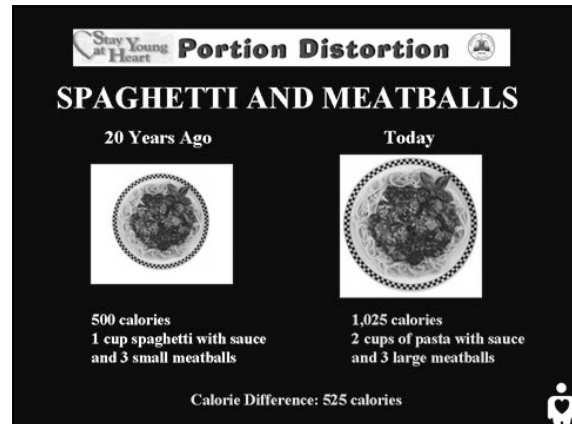
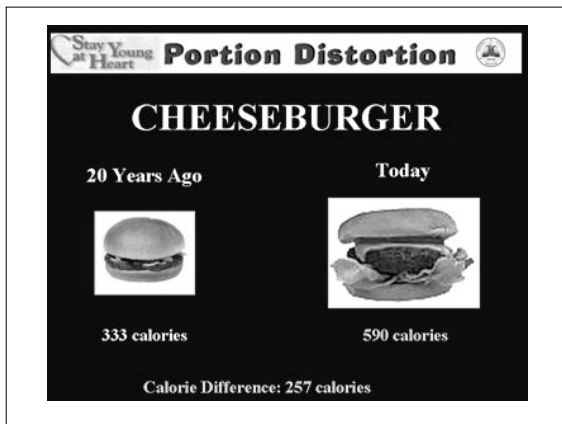
- Eating a large late night meal makes it extremely difficult to drop those pounds.
- Distribute the calories more evenly throughout the day to burn them more efficiently.
- Too many calories at one time are stored as fat.

### Too Many Calories: Portion Distortion

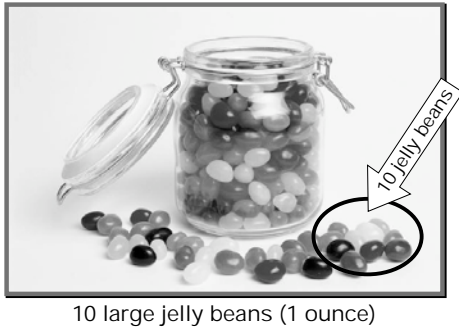
- Increased calories: happen when eating out.
- Americans eat more than one serving.
- Restaurants may give 2 1/2 times more than females need.
- 2/3 of Americans clean their plate during restaurant meals.

### The Problem of Portion Distortion

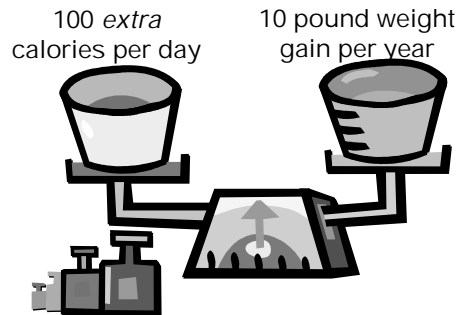




### Example of 100 Calories



### The BAD News



### We Need to Eat "Better" to Lose Weight

- Gradual weight loss is best.
- Limit/Avoid empty calories.
  - Refined sugar (honey, sugar, brown sugar).
  - Sweet drinks (juice punches, colas, aides, sweet tea).
  - Desserts (pies, cakes, snack pastry).
  - Fats (fried foods, gravies, butter/margarine).

### Appropriate Nutrition is Key

- Eat a variety from each food group daily.
- Eat 3 or more healthy meals a day.
- Eat breakfast- selecting cereal with fiber.
- Eat MORE fruit and vegetables.
  - Fewer sugar snacks.
  - Fewer high fat snacks.

### "Successful Losers"

- "Successful losers" eat less calories by eating more whole grains, fruits, and vegetables.



### Weight Loss Tips

- Have two to three low fat milk foods daily.
- Drink water - not colas, sweet tea, power aides, punches, aides, etc.
- Select fruit over juice.
- Eat at the table without the TV on- satiety is blunted when eating before a TV.
- Balance eating with physical activity.

## How Does Your Plate Rate?



## Another Cause of Obesity: Decreased Physical Activity

Cars vs. bikes vs.  
walking

Office jobs vs.  
field work

Gadgets vs. labor



## Promoting Choice:

Routine Lifestyle Habits to Increase  
Physical Activity



## Physical Activity Can Help:

- Weight control
- Strengthen heart
- Lower blood sugar
- Lower cholesterol and triglycerides
- Increase good cholesterol (HDL)
- Reduce hypertension
- Strengthen muscles
- Increase metabolism
- Handle stress
- Think clearer
- Improve moods (PMS too)
- Improved attitude

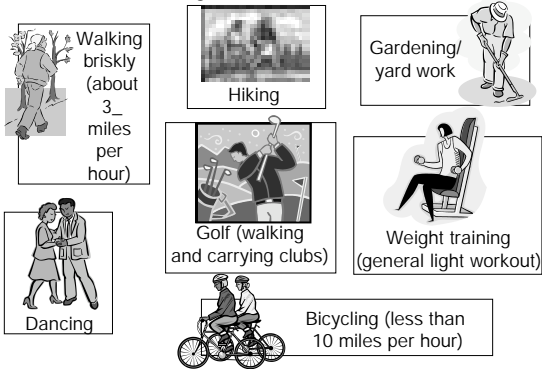
## Lack Of Physical Activity

- Exercise Study:
  - Participants with no exercise during 8 months gained average of 2.5 pounds.
  - But 73% who walked briskly for 11 miles a week (30 minutes a day) maintained or lost.

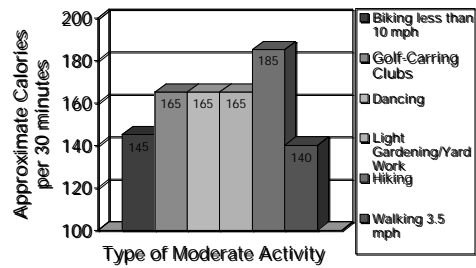
## Physical Activity Reduces Obesity Comorbidities

- Aerobic exercise reduces blood pressure in adolescents with hypertension.
- Regular PA helps in weight loss.
- Regular PA reduces insulin resistance.
- Weight reduction causes hepatic enzymes to normalize.

### Moderate Physical Activities Include

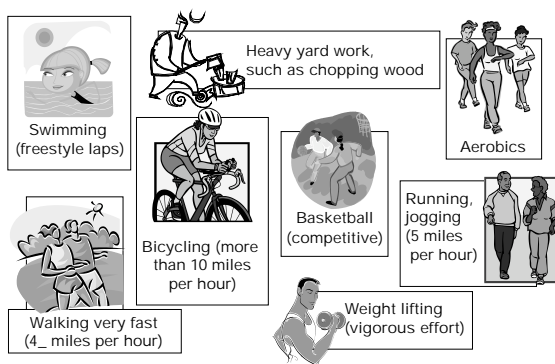


### Moderate Activity and Calories

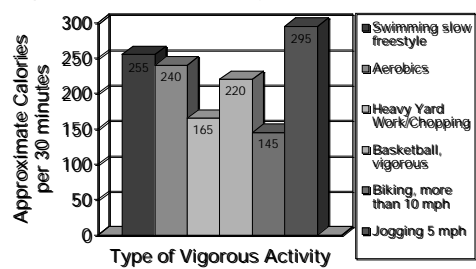


Moderate Activity: Calories used by a 154 pound male, 5'10" both both the activity plus normal body functioning; varies with weight and gender.

### Vigorous Physical Activities Include



### Vigorous Activity and Calories



Vigorous Activity: Calories used by a 154 pound male, 5'10" both both the activity plus normal body functioning; varies with weight and gender.

### Physical Activity is Important

In Alabama:

- 59.6% of adults do not get 30 minutes or more of moderate activity on five or more days of the week.
- 81% of youth do not get moderate physical activity of 30 minutes or more 5 or more days of the week. (Recent recommendation of one hour per day.)



### Ways To Increase Physical Activity

Walking up stairs burns almost 5 times more calories than riding an elevator.



## Ways To Increase Physical Activity



Replace a coffee break with a brisk walk.

Ask a friend to go with you.



## Practical Solutions for Physical Activity

- WALKING- Work up to more steps.
- 10,000 Goal = ABOUT 5 MILES
- 2 to 3,000 reported as average for adults.
- Get good shoes.



## Great Role Model?



## Why Follow the Guidelines? Tomorrow is Important

"Enjoy present pleasures in such a way as not to injure future ones."

~ Seneca (4 BC- 65 AD)



## Eat Better and Move More!

