Managing the Obese Client

Satellite Conference and Live Webcast
Wednesday, May 23, 2012
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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How Is Obesity Determined?

- Several methods can be used:
  - Height-weight tables used to be the standard
  - Measure percent of body fat

How Is Obesity Determined?

- Waist-to-hip measure
  - Measure hips and waist
  - Divide waist by hip measurement

How Is Obesity Determined?

- Waist-to-hip measure ratio
  - Men below 0.90
  - Women below 0.80

How Is Obesity Determined?

- Body Mass Index
  - BMI standard now
  - Measure that compares weight to height

BMI

- Gives a number that indicates:
  - Under weight
    - Less than 18.5
  - Normal weight
    - 18.5 - 24.9
  - Overweight
    - 25 - 29.9

BMI

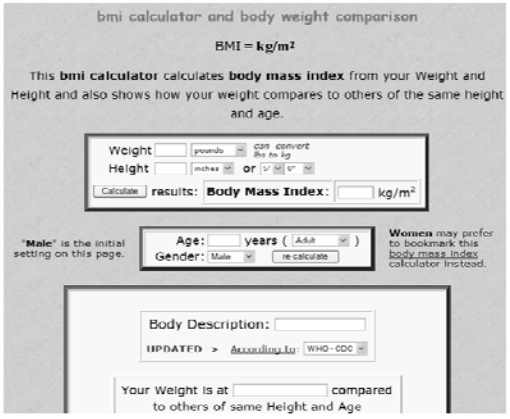
  - Obese, Class I
    - 30 - 34.9
  - Obese, Class II
    - 35 - 39.9
  - Severely obese, Class III
    - 40 or greater

Calculating BMI

- [(Weight – lbs ÷ Height – inches) ÷ Height – inches] x 703
  - Example
    (250 lbs ÷ 63) ÷ 63 x 703 = BMI of 46

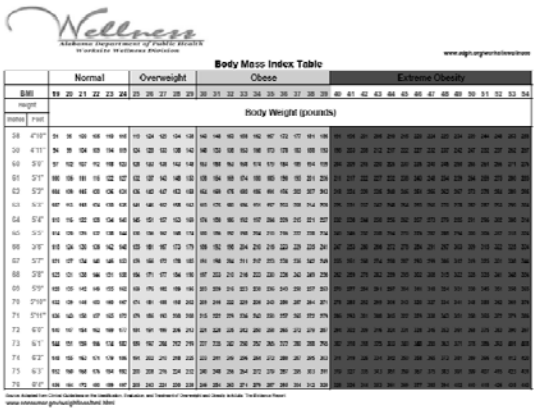
Use BMI Calculator

- adph.org/worksitewellness
  - Related links
  - Quizzes
  - Body Mass Index evaluation



Use BMI Chart

- Height in inches on left side of chart
- Go across to weight in pounds
- Number at top of column is BMI
- Can be found in ADPH Document Library under Professional and Support Services
  - Weight Watchers

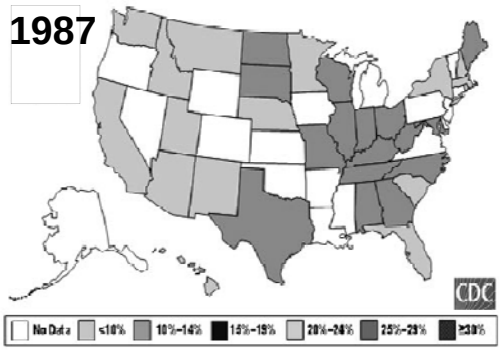


Disease Risks by BMI and Waist Circumference

BMI		Waist ≤ 40 in men or ≤ 35 in women	Waist ≥ 40 in men or ≥ 35 in women
18.4 or less	Underweight	Low	---
18.5 – 24.9	Normal	Low	---
25.0 – 29.9	Overweight	Increased	High
30.0 – 34.9	Obese, Class I	High	Very high
35.0 – 39.9	Obese, Class II	Very high	Very high
40 or greater	Extremely obese, Class III	Extremely high	Extremely high

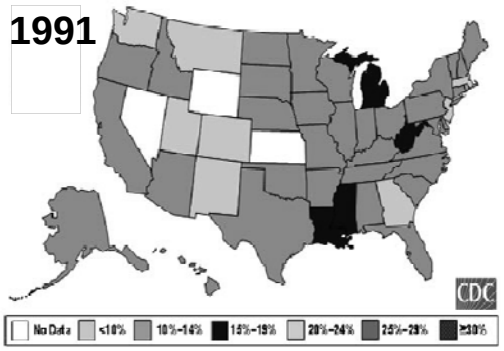
Increase in Obesity in U.S.

1987



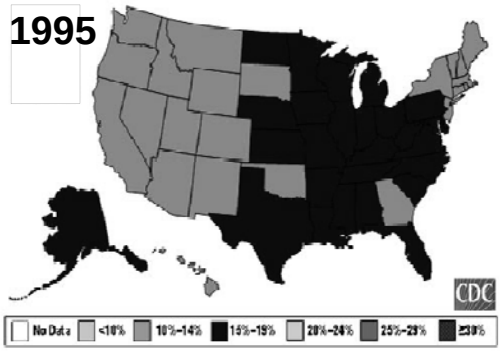
Increase in Obesity in U.S.

1991



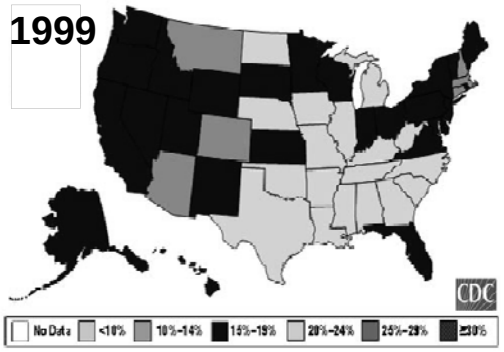
Increase in Obesity in U.S.

1995

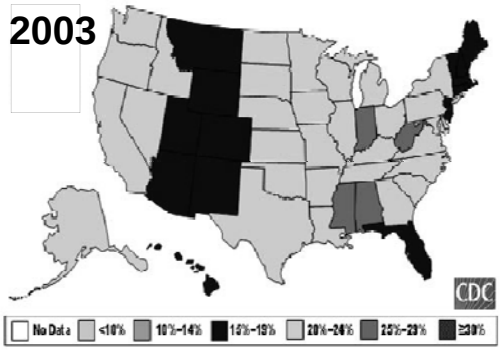


Increase in Obesity in U.S.

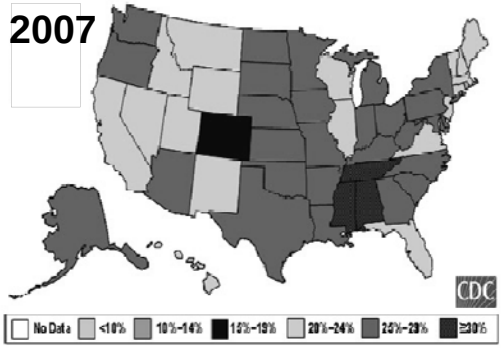
1999



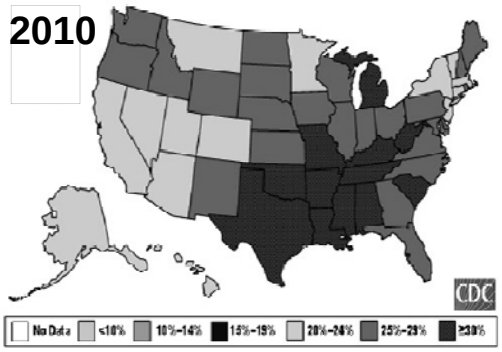
Increase in Obesity in U.S. 2003



Increase in Obesity in U.S. 2007



Increase in Obesity in U.S. 2010



Obesity Forecast

- Over 1/3 of Americans obese now
- By 2030:
  - 42% of Americans will be obese
  - 11% of Americans will be severely obese

Cost of Obesity

- Increased health care costs
- 9% of health care $ for obesity related illnesses
  - Diabetes
  - Heart disease
  - Kidney disease
  - Arthritis

Hospital Equipment Costs

- Replace wall mounted toilets for floor mounted
- Sinks reinforced
- Doorways widened
- Stretchers to accommodate up to 750 pounds

Obesity in Alabama

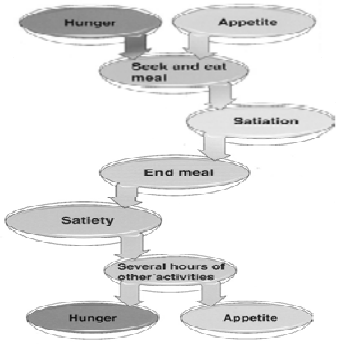
- High rates of obesity in Alabama are well established
  - Adults – 31%
- Ranked 2nd in the country
  - F as in Fat
    - Report for 2010

2010 Obesity Rates in Alabama by Public Health Area

Why Do We Choose to Eat the Foods We Do?

Hunger	OR	Appetite
Physical need		Psychological drive

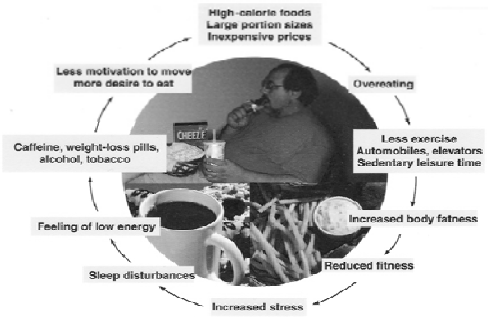
Food Intake: Normal Cascade of Regulation



Factors that Influence Food Intake

- Brain neurochemicals
- Emotional triggers
  - Stress eating
- External cues
  - Environment
- Lack of sleep
- Genetics

Environmental Effects that Contribute to Obesity



Food Composition Affects Intake

- Protein
  - Person eats less and blood sugar levels don't increase or drop quickly
- Complex carbohydrates and fibers
- Creates feeling of fullness and person eats less

Food Composition Affects Intake

- High fat foods
  - Stimulate appetite and person eats more and become hungry sooner

How Can Obesity Be Managed

- Diet
- Physical Activity
- Medications
  - As indicated for weight loss and other disease conditions
- Each part works with the individual's preferences, schedule, and health status

Nutrition and Activity Goals

- Are the same for most people regardless of weight or disease state
  - Eat more fruits and vegetables
  - Get enough calcium from dairy or other sources to help maintain bones
  - Limit the amount of fats
  - Adequate lean protein intake

Nutrition and Activity Goals

- Limit the amount of simple sugars eaten
- Try to get at least 30 minutes of some kind of physical activity each day
- Increase amount of whole grains and high fiber foods

Ways to Increase Intake of Whole Grains and Fiber

- Eat high fiber breakfast cereals
  - Bran, barley, oats
- Add berries, nuts, flaxseed or cinnamon to cereals

Ways to Increase Intake of Fruits and Vegetables

- Eat total of 6-9 servings of fruits and vegetables a day
- Nothing! Mom was right all along!
  - Add applesauce to cooked cereal like oatmeal
  - Blend vegetables and add to soups or sauces

Ways to Increase Intake of Fruits and Vegetables

- Chop vegetables and add to pasta dishes

Aim for More 'Whole' Fruits and Veggies

- Closer to "picked state", generally the more fiber
- Helps to create feeling of 'fullness' to limit caloric intake
- Food groups with lowest calories per serving

Aim for More 'Whole' Fruits and Veggies

- Majority of vitamins and minerals needed are obtained for fruits and vegetables

Frozen and Canned Also Good Choices

- May have vitamins and minerals preserved better than fresh
- Can be more economical when certain produce is out of season
- Easier to chew
- Watch for how much sugar or salt is used in preserving

How Much and What Kind of Fats Should Be Eaten

- Include more monounsaturated fats
  - Olive oil
  - Canola oil
  - Peanut oil

How Much and What Kind of Fats Should Be Eaten

- Reduce saturated fat
  - Butter
  - Lard
  - Shortening

How Much and What Kind of Fats Should Be Eaten

- Limit trans fats to less than 1% of total calories (1g/1000 calories)
- To provide Omega 3 fatty acids:
  - Eat flaxseeds, walnuts, soybeans
  - Include 1-2 servings of fatty fish per week

Limit Portion Sizes

- Scientific experiments have shown the larger the portion size, the more you are likely to eat!

Limit Portions

- Use smaller dishes to serve meals
- When eating out, avoid buffets
- Ask for a carry out box at beginning of meal
  - Put half of food in it
- Choose smaller servings
  - Regular hamburger instead of large

Changes in Portions over the Years: Cola

20 years ago	Today
	
6.5 ounces	20 ounces
85 calories	250 calories

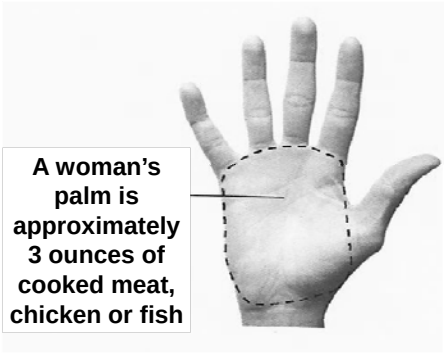
*165 calories more

Changes in Portions over the Years: Popcorn

20 years ago	Today
	
5 cups	11 ounces
270 calories	630 calories

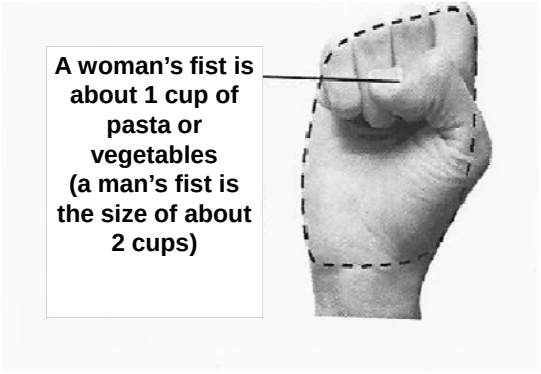
*360 calories more

Hand-y Way to Estimate Portions



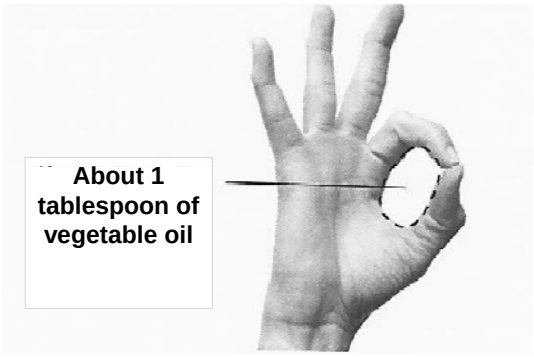
A woman's palm is approximately 3 ounces of cooked meat, chicken or fish

Hand-y Way to Estimate Portions



A woman's fist is about 1 cup of pasta or vegetables (a man's fist is the size of about 2 cups)

Hand-y Way to Estimate Portions



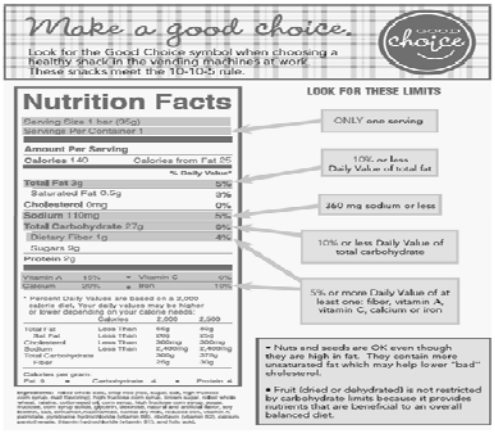
About 1 tablespoon of vegetable oil

How to Choose Healthy Snacks

- 10-10-5 nutrition standard
  - 10% or less of the Daily Value (DV) of total fat *
  - 10% or less of the Daily Value (DV) of total carbohydrates *
  - * Exception with nuts and fruits

How to Choose Healthy Snacks

- 5% or more of the Daily Value (DV) of at least one:
  - Fiber, Vitamin A, Vitamin C, Calcium, Iron
- 360 mg or less of sodium



Good Choice?

Ingredients: Popcorn, Vegetable Oil (Contains One or More of the Following: Corn, Soybean, or Sunflower Oil), Cheddar Cheese (Milk, Cheese Cultures, Salt, Enzymes), Whey, Buttermilk, Salt, and Disodium Phosphate.
CONTAINS MILK INGREDIENTS.

Nutrition Facts
Serving Size 1 oz.

Amount Per Serving	
Calories 160	Calories from Fat 90
	% Daily Value*
Total Fat 10g	**15%**
Saturated Fat 2g	**10%**
Polyunsaturated Fat 5g	
Monounsaturated Fat 3g	
Trans Fat 0g	
Cholesterol less than 5mg	**2%**
Sodium 290mg	**12%**
Potassium 100mg	**3%**
Total Carbohydrate 14g	**5%**
Dietary Fiber 2g	**9%**
Sugars 2g	
Protein 3g	

Vitamin A 0%	•	Vitamin C 0%	
Calcium 0%	•	Iron 2%	
Vitamin E 8%	•	Thiamin 2%	
Riboflavin 6%	•	Vitamin B_6 4%	
Phosphorus 10%	•	Magnesium 6%	
Zinc 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	2,400mg	2,400mg
Potassium		3,500mg	3,500mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Calories per gram:
Fat 9 • Carbohydrate 4 • Protein 4

Individual Will Ultimately Decide on Food Choices

- **The environment can encourage good or poor choices**