

# DIABETES

## *A Growing Public Health Concern*

### What is Diabetes Mellitus?

Diabetes is a disease that keeps your body from using (glucose) sugar correctly. Insulin, a hormone that is made in the pancreas, connects to the cells like a lock and key. This allows the glucose (sugar) to enter the cells to be burned as energy. People with diabetes either do not make enough insulin or can not use the insulin they make.

### The Types of Diabetes

**Type 1:** Usually occurs in children and adults under age 30. The body does not make insulin, therefore patients must take insulin to live.

**Type 2:** Usually occurs in adults over age 40. The body doesn't make enough or can't use adequately the insulin it makes.

### SYMPTOMS OF DIABETES

- *Blurred vision*
- *Feeling very tired*
- *Frequent infections*
  - *Increased thirst*
  - *Increased hunger*
- *Increased urination*
  - *Sexual problems*
- *Sore that will not heal*
- *Sudden weight loss*
- *Numbness or tingling of hands or feet*

### *Risk Factors*

- *Family History of Diabetes (mother, father, sister, brother, and children)*
- *Age (greater than 40)*
- *Overweight*
- *Lack of exercise*
- *Blacks, Hispanics, American Indians, or Asians*
- *Had a child weighing over 9 pounds*
  - *High blood pressure*
- *Have the stress of an illness or injury*
- *History of gestational diabetes*

### IN ALABAMA

Nearly 80 percent of Alabama adults reported not eating enough fruits and vegetables.

Approximately 15 percent of Alabama teens reported that they ate the recommended 5 or more servings per day of fruits and/or vegetables. These proportions were substantially below the national averages.

### COMPLICATIONS OF DIABETES

- *Blindness*
- *Kidney disease*
- *Heart disease*
- *Nerve damage*
- *Amputations of the feet and/or legs*
- *Sexual Problems*



## METABOLIC SYNDROME

Metabolic syndrome is a group of risk factors that increases the risk for type 2 diabetes and heart disease. Individuals with this syndrome have a problem with using insulin effectively.

### RISK FACTORS

- Waist circumference greater than 40 inches for men, 35 inches for women
- Blood pressure greater than 130/85
- Blood sugar readings 110 or greater fasting
- Triglyceride levels greater than 150mg/dl
- Low HDL cholesterol levels - men less than 40mg/dl, women less than 50mg/dl
- Cholesterol levels greater than 200
- LDL greater than 100
- Physical inactivity
- Smoking
- Being overweight (BMI greater than 25 kg/m<sup>2</sup>)
- Being obese (BMI greater than 30kg/m<sup>2</sup>)

### TREATMENT

- Seek counsel from a registered dietician
- Eat a healthy diet
- Lose between 5-7 percent of your body weight
- Exercise at least 150 min/week
- Reduce calories and intake of dietary fat
- Increase dietary fiber
- Those who have pre-diabetes should receive individualized nutritional counseling

### THE IMPORTANCE OF PHYSICAL ACTIVITY

- Exercise improves insulin sensitivity, independent of weight loss
- Acutely lowers blood glucose
- Important in long-term maintenance of weight loss
- It is important to choose activities that you like – biking, walking, swimming, running, aerobics class, or playing a sport – volleyball, soccer, baseball, basketball

## ALABAMA 2008 DATA

**397,350**

Estimated number of adults with diabetes

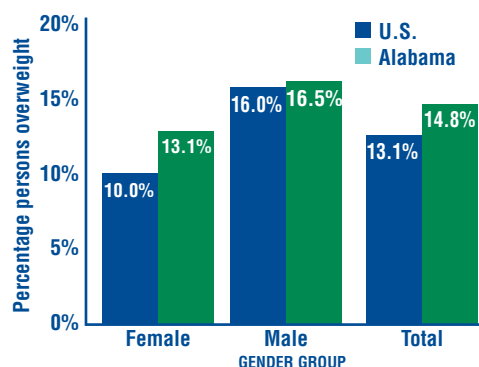
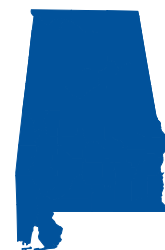


Figure 20  
Percentage Alabama teens (grades 9-12) categorized as overweight\*

\* YRBS, 2005; calculated by CDC from self-reported height and weight; Overweight = 95th percentile for age and sex



## Maintaining Control

- Plan your meals. Eat the right amount of food at the right time.
- Choose healthy foods such as: fruits, vegetables and grains; choose a low fat and low cholesterol diet.
- Get physically active. Exercise controls blood sugar, weight, and prevents heart disease.
- Check your blood sugar levels at least 2 - 4 times a day or as directed by your doctor.
- Take medications as ordered by your doctor.