Americas Deadly Disease

• Myths of how obesity came to be
• Eating food high in fructose, syrup, or a virus
• An epidemic disease
History of Obesity

- In 1950 obesity was ignored by the public
- Major medical journals and health agencies issued warnings about health risks of obesity.
- Researchers estimated that obesity kills 325,000 Americans a year.
- Eight times the number who die of AIDS and more than the combined deaths from alcohol, drugs, firearms, and motor vehicles.
Obesity a killer disease

- Two out of three individuals are obese
- One out of three will die from complications due to obesity
Fighting the Disease

- The body is naturally calibrated around a certain weight level, it will fiercely defend itself to retain that level.

- Regular exercise and balanced diet will not necessarily produce weight loss, but it will help to maintain a healthy way of living.
Binge Eating Disorder

BED associated with obesity

23% - 46% of obese patients seeking weight loss treatments suffer from BED

Greatest concerns are eating, weight and shape and suffer from depression
America's Five Fastest Growing Health Concerns

<table>
<thead>
<tr>
<th>Health Concern</th>
<th>2001</th>
<th>1999</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obesity</td>
<td>61%</td>
<td>56.4%</td>
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<tr>
<td>Diabetes</td>
<td>18.3%</td>
<td>12%</td>
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<tr>
<td>Depression</td>
<td>19.1%</td>
<td>14.8%</td>
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<tr>
<td>Impotence</td>
<td>9.2%</td>
<td>7.4%</td>
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<tr>
<td>Aging Related Problems</td>
<td>22.5%</td>
<td>19.2%</td>
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Obesity rates 27% in 1991
58 Million overweight
40 Million or obese
3 Million morbidly obese
8 out of 10 over age 25 are overweight
78% not meeting basic activity level
25% completely sedentary
76% increase in Type II diabetes in adults 30-40 yrs since 1990
**Obesity Related Diseases**

- 80% of type II diabetes related to obesity
- 70% of Cardiovascular disease related to obesity
- 42% breast and colon cancer diagnosed among obese individuals
- 30% of gall bladder surgery related to obesity
- 26% of obese people having high blood pressure

**Costs Overwhelming**
- **Type II Diabetes** ($63.14 Billion)
  - Osteoporosis ($17.2 Billion)
  - Hypertension ($3.23 Billion)
  - Heart Disease ($6.99 Billion)
  - Post-menopausal breast cancer ($2.32 Billion)
  - Colon Cancer ($2.78 Billion)
  - Endometrial Cancer ($790 Million)
Cost of Lost Productivity

• Workdays lost: $39.3 Million
• Physician office visits: $62.7 Million
• Restricted Activity days: $29.9 Million
• Bed-Related days: $89.5 Million
Childhood Obesity Out of Control

• 1982 - 4% overweight
• 1994 - 16% overweight
• 2001 –
  – 25% white children overweight
  – 33% African American children overweight
• Hospital costs rising from $35 Million in 1979 to $127 Million in 1999
• One in four overweight children show signs of Type II Diabetes
• 60% already have risk factor for heart disease
• Between 8% - 45% newly diagnosed cases are type II associated with obesity
• Only 4% in 1990 - rise of approximately 20%
• Depending on age group (Type II most frequent 10-19 group) and the racial/ethnic mix of group stated
• Of Children diagnosed with Type II diabetes, 85% are obese
Causes

- Genes
- Eating habits
- Lack of exercise
- Metabolism
- Medical and emotional problems
Risk Factors

• Heart Disease
• Diabetes
• High Blood Pressure
• Stroke
• Breathing Problems
• Hyperlipidemia
- Osteoarthritis
- Gout
- Gallbladder Disease
- Some Types of Cancer
- Depression
- Low Self-Esteem
Prevention

- Assessing environment/become more physical
  Today’s society is dominated by speed and convenience.

- Changing eating habits
  High calorie foods, fat and added sugars, and larger portions promote unhealthy behaviors.
Adopting healthy habits
Eating healthful, lowered fat consumption and increase in vegetables and fruits.

Exercise, Exercise, Exercise!!!!!!
Moderate physical activity at least 5 times a week, 30 min. for adults and 60 min. for children
**Prevention**

- Examples for Moderate Chores:
  - Washing and waxing a car: 45-60 min.
  - Gardening: 30-45 min.
  - Washing windows and floors: 40-60 min.
  - Pushing a stroller: 1 _ mile in 30 min.
  - Walking: 2 miles in 30 min.
  - Stair walking: 15 min
Examples for sporting activities:
- Playing volleyball: 45-60 min.
- Playing touch football: 45 min.
- Bicycling: 5 miles in 30 min.
- Dancing: 30 min.
- Swimming Laps: 20 min.
- Jump rope: 15 min.
Body Mass Index

- Body Mass Index (BMI) is calculated as weight in pounds divided by the square of the height in inches multiplied by 703
- BMI of 30 or higher in adults is considered obese
- BMI of 25-29 in adults is considered overweight
Intervention

• SETTING AN INTERVENTION PROGRAM
• NUTRITIONAL PLAN
• GOOD EXCERCISE PROGRAM
Why are we overweight?

How do we spend our time?

- Americans eat more fuel than they burn
- Caloric Imbalance
  - Ride instead of walk
  - Email instead of walk
Social Views

- Lack of willpower or weakness
- Lifestyle choice
- Disease vs. behavior
- Obese vs. Overweight

Obese = BMI 30 or more
Overweight = BMI Between 25 – 29.9
Treatment

Weight Loss, Maintenance, Nutrition, Counseling

Strategy  Goals  Medication  Progress
Pharmacotherapy

Appetite Suppressants

- Promote weight loss
- Decrease appetite
- Feeling full
- Increase Serotonin or Catecholamine

Orlistat - reduces body's ability to absorb fat by 1/3

FDA Approved

- Orlistat
- Sibutramine-Meridia
- Benzphetamine-Didrex
- Diethylpropion-Tenuate
- Mazindo-Sanorex
- Phendimetrazine-Phendiet
- Phentermine-Lonamin

Risk

- Drug Abuse
- Dependence
- Tolerance
- Side effects
- Lack of data on safety
- No Mixing:
  - Anti-depressants
  - Serotonin reuptake inhibitors (Zoloft)
  - Street drugs - Ecstasy, marijuana
Alternative Treatment

Gastric Bypass Surgery (GBS)

- Popular in the last decade
- Leading treatment options for the morbidly obese
- 60% of excess weight lost is result of bariatric surgery
- Effective for long-term reductions in blood pressure
- Effective for resolution of diabetes in 76.8% of bariatric patients
- Reason for 89% reduced relative risk of death and marked improvements in hyperlipidemia and other lipid disturbances in patients

Circumgastric Banding

Vertical Banded Gastroplasty

Gastric Restriction
Conclusion

• Obesity is one of the deadliest diseases in America today
• Kills an estimated 325,000 Americans a year
• More deaths than AIDS, and combined deaths from alcohol, drugs, firearms, and motor vehicles have caused
• Obesity is a chronic disease
• We know that it is possible to control obesity through education, proper treatment and preventive measures
• It’s time to treat obesity as a disease and not a social enigma