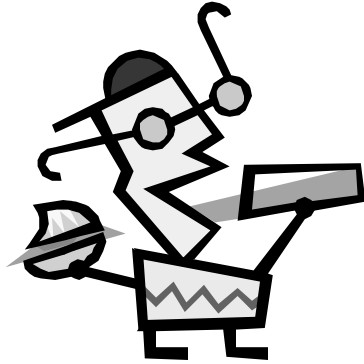


Eating Disorders

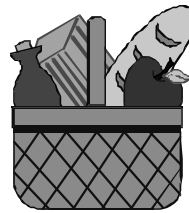


Eating Disorders

- **American Psychiatric Association publishes diagnostic criteria in the Diagnostic and Statistical Manual for Mental Disorders.**
- **The three most common eating disorders are covered in this lecture.**

Disordered Eating

- Eating that is inconsistent with physical signals
- Frequent dieting and restrictions
- Feeling out of control
- Guilt or pre-occupation with food



Possible Causes

- Diet Industry
- Social and Job Prejudice
- Idea of Beauty
- Media/Advertising
- Emphasis on Thinness in Sports
- Cultural Values



A Few Facts

- **92% of young women and 44% of middle aged women have dieted to lose weight at least once**
- **Overestimating body size is common**
 - **45% of healthy weight women**
 - **23% of healthy weight men**
- **Frequent dieting increases chance of being depressed**

A Few Facts

- **95% of enrollees in weight loss programs are women**
- **Media has tremendous influence**
- **5 million persons in the US have eating disorders**

Few More Facts

- **5-15% anorexia and bulimia nervosa affect males**
- **40% of binge eating disorders occur in men and boys**
- **More common in youth, can occur in middle age or elderly**

New Research

- **Looking at twins**
- **ED known to run in families**
- **Thought to be environmental**
- **Now: environmental and genes**
- **Bulimia: 83% genetically influenced**
- **Anorexia: 58%**
 - **Bulik, 9th International Conference on Eating Disorders**

Perfectionism

- **The research: Looking for genetic susceptibility to eating disorders**
 - **Focus: Family of genes associated with serotonin**
- **Found perfectionism does seem to be a predisposing personality trait to eating disorders**

• American Journal of Psychiatry, November 2000

Pressure



- **Girls are hearing messages at home-mom and sisters diet**
- **4th grade: 40% of girls try to diet**
- **2/3 HS students diet and are undernourished**

Pressure

- **As a group teen girls have the poorest nutrition.**
- **21% teenage girls smoke for weight control**



College Age

- **At any one time:
82% of women
and 25% of men
are on diets.**
- **1 in 5 have tried
diet pills**
- **Weight affects
self-esteem**



Changes

- **18-19th Century**
- **upper SES had more food**
- **weight associated with wealth**
- **few eating disorders**
- **20th Century**
- **food widely available**
- **obesity prevalent among lower SES**
- **weight control becomes sign of affluence**
- **more eating disorders**

Early & Late 20th Century



Models

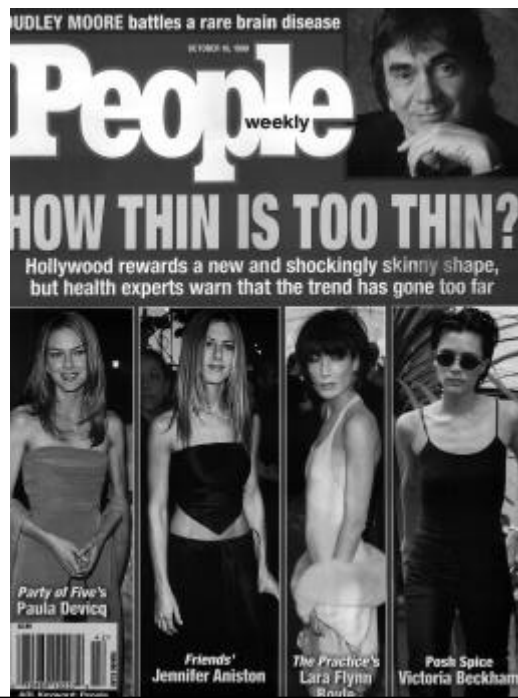
- There are 3 billion women who don't look like supermodels
- Average American woman weighs 144# and wears between a size 12-14
- 1965-models weighed 8% less
- 1999-models weighed 23% less
 - Don't forget air brushing!

Now & Then: Accepted Beauty





1960's
Twiggy
91
pounds
5'7"



Anti-Barbies

- **Get Real Girls**
 - Flat feet
 - Specialize in a particular sport
 - Modest sports bra and underwear
- **Smartees**
 - Have careers- Ashley the attorney and Vicky the veterinarian

Anorexia

- **1649-first documented**
- **Most often starts between ages 13-20**
- **Now seen as early as 9 years of age**
- **Very hard to treat**
 - Addiction traits

Anorexia Nervosa

- **2 million persons with this eating disorder**
- **Causes:** society's pressure, depression, inability to cope, family dysfunction, possible connection with brain chemistry and/or hereditary factors.

Anorexia

- **Do you worry about the number of kcal in the toothpaste?**
- **New findings from the International Conference on Eating Disorders**
 - **It may be in the genes.**
 - **Having a “certain collection of genes” increases chances of developing an eating disorder.**
- **Possibly accounting for 58% of anorexia**

Cynthia Bulik, 9th International Conference on Eating Disorders

Anorexia Nervosa

- **Extreme preoccupation with weight loss**
- **Intense fear of gaining weight**
- **Intake of 500-800 kcal/day**
- **<18 BMI**



TOOLS?

- **Use same tricks as regular dieters**
 - **Higher fiber**
 - **Downside dishes**
 - **Large selection but small samples**
 - **Spicy foods**
 - **Eat slowly**
 - **Use metabolism boosters**

Methods?

- **Lists of “negative kcal foods”**
 - **Endive**
 - **Kale**
 - **Lemons**
 - **Onions**
- **Chew sugar free gum**
- **Drink ice cold water**
- **Lower temperature in your house**
- **Tips on “flipping”**

Creed?

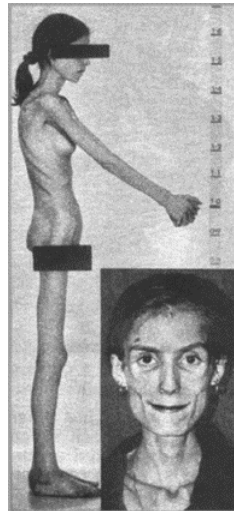
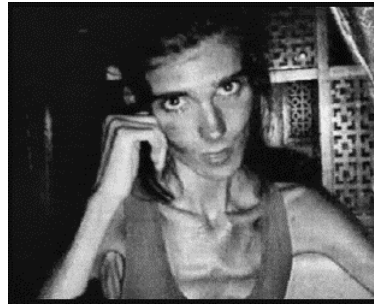
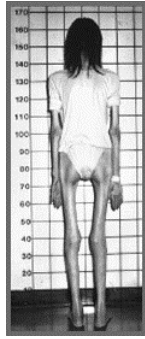
- **Thin Commandments**
 - **If you aren’t thin you aren’t attractive**
 - **Being thin is more important than being healthy**
 - **Thou shall not eat without feeling guilty**
 - **Thou shall count calories and restrict intake accordingly**

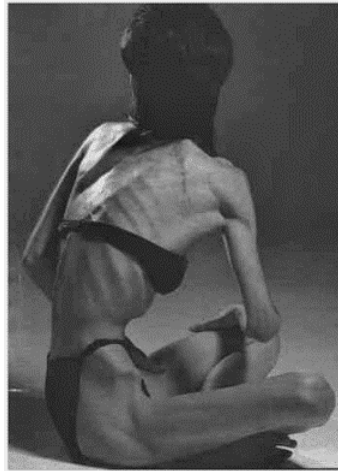
Anorexia Nervosa

- **2 types:**
 - 70% restricting
 - 30% purging
- **Many have compulsive hygiene behaviors**
- **Distorted body image**
 - overestimated body fatness









Anorexia Nervosa

- **Complications:**
 - **Can have loss of bone density & stress fractures**
 - **Anemia, diarrhea, low body temp, fine body hair**
 - **Impaired immune response**

Anorexia Nervosa

- **Can lead to death**
 - heart failure
 - hypoglycemia
- **5% die in treatment,**
 - of these, 1% by suicide

Anorexia Nervosa

- **Athletes and dancers vulnerable**
- **Recovery rate is only 50%**
- **Recognize that the very young vegetarian may be developing an eating disorder**

Anorexia Nervosa

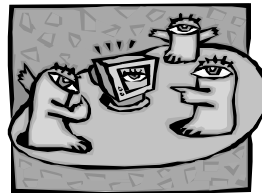
- **Don't be surprised if patient and parents both deny problem at first visit**
- **Patients must be coaxed into eating**
- **Must maintain sense of control**

Wrong Kind of Support

- **Websites teach how to be anorexic**
- **Give support to those with eating disorders**
- **“pro-ana” sites**
- **>400 locations**
- **Some search engines are “delisting”**

Anorexia Nervosa

- **Team approach to treatment**
- **Solve family problems separately from eating problem**



Anorexia Nervosa

- **Progressive eating regimen**
- **Weigh with back to scale**
- **Prevent exercising at night**
- **May have to lock bathrooms**
- **Check clothing for hidden items at weigh-in**
- **Watch for potential water intoxication**

Refeeding

- **#1 Try oral feedings**
 - 25 kcal/kg advance to 30 kcal/kg
- **#2 Add oral supplements if not eating**
- **#3 Intermittent tube feedings**
 - go SLOW
- **#4 Parenteral**
 - start with MVI, 100% protein, 1/3 kcal

Anorexia and Pregnancy

- **Lack of menstruation and low body weight do not preclude pregnancy**
- **10% of women with anorexia nervosa are fertile.**

Anorexia and Pregnancy

- **Some women with eating disorders view pregnancy as a way to overcome their eating disorder.**
- **If you suspect anorexia, ask: weight history, hx of eating disorders, dieting patterns, and do a nutrition assessment.**

Anorexia and Pregnancy

Questions to ask:

- **How do you feel about gaining 20-30 lbs?**
- **How do you feel about getting weighed?**
- **Have you been using laxatives, diuretics, or diet pills for weight control?**

Anorexia and Pregnancy

- **Emphasize the baby.**
- **Facilitate emotional connection to fetus.**
- **Focus on weight gain as baby.**
- **Make baby as real as possible.**
- **Aggravation of body image concerns.**

Children

- **Complications are LBW, prenatal death, cognitive, sensory, physical problems.**
- **Young children acquire and retain the food preferences of their parents, and also parental attitudes to eating from an early age.**

Children

- **Best for child if mother postpones pregnancy until she is fully recovered.**



Anorexia in the Elderly

- **From University of British Columbia**
- **Death certificate review**
 - **Anorexia listed as contributing factor**
- **Excluded records of persons with wasting illnesses also known as anorexia**

Anorexia in the Elderly

- **Results:**
- **median age with the anorexia factor**
 - 69 for women, 80 for men
 - 79% women, 21% men
- **Thoughts:**
- **onset may be triggered by major stressful events: death of a spouse, retirement, etc.**

DSM IV

- **Bulimia**
- **Recurrent episodes of binge eating**
- **Recurrent inappropriate compensatory behavior to prevent weight gain**
- **Occurrence on average of 2x week for 3 months**

Bulimia Nervosa

- **Well educated women, early twenties**
- **Close to IBW**
- **High achievers, sometimes depressed**

Bulimia Nervosa

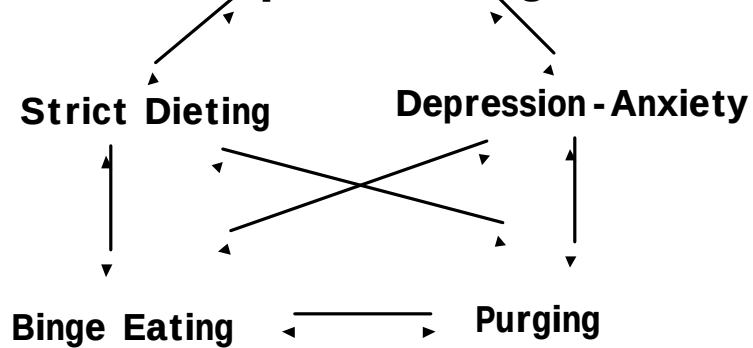
- **Secret binge eating episodes followed by self induced vomiting, fasting, or use of laxatives**
- **Other impulsive behavior - shopping, etc.**

Bulimia Nervosa

- **Begins late in adolescence after many unsuccessful weight reduction diets**
- **Yo-yo dieter**



Extreme Concern About Shape and Weight



Bulimia Nervosa

- **Dental erosion often the finding that identifies the disorder**
- **Russell's sign**



Bulimia Nervosa

- **2 types: purging and non purging**
- **This problem is easier to treat**
- **Feels deeply ashamed and inadequate**

Bulimia Nervosa

- **Team approach**
- **Another case for monitored bathroom time**
- **Use portion controlled foods**
- **Behavior modification methods**

Bulimia Nervosa

- **Mental health and dietary treatments**
- **90% also have concurrent addiction to ETOH, cigarettes, other drugs**



Exercise Bulimia

- **Becoming more common**
- **Bingeing followed by excessive exercise routines to burn off extra kcal**
- **Under diagnosed in athletes**

The Female Athlete

- **ACSM**
- **Recommends body fat of 12-14% as the minimum safe level for high school girls**

The Female Athlete

- **Early development of osteoporosis**
 - Over training
 - Chronic dieting
- **First potential danger sign: amenorrhea**
- **Elite runners more at risk**
- **New Eating Disorder screening tool available-FAST**

Female Athlete Assessment Tool

- **My performance would improve if I lost weight**
- **If I were to be injured, I would still exercise even if I was instructed not to do so by my athletic trainer or physician.**
- **During practice I have trouble concentrating due to feelings of guilt about what I have eaten that day.**

Eating Disorders in Males

- **MDs less likely to recognize in males**
- **Show increased incidence of depression**
- **Often have**
 - **anxiety disorders**
 - **ETOH abuse**
 - **More marriage problems**

Eating Disorders in Males

- **Starts later**
 - **Teens compared to 10 years in females**
 - **Most likely to be involved in sports or an occupation where weight influences performance**
 - **Jockeys, dancers, athletes, models, actors**
- **Bulimia**
 - **Ratio 10 females to 1 male**

Dietary Recommendations

- **Aerobic Athletes (figure skaters)**
- **Training more than 90 minutes/day**
- **50 kcal/kg for men**
- **45-50 kcal/kg for women**
- **Kcal Reality:**
 - **-36 ± 12 for men**
 - **-33 ± 11 for women**

– Ziegler, et.al, J AM Diet Assoc.2001:319

Binge Eating Disorder

- **Compulsion to eat, usually at night**
- **Lasts about an hour**
- **Can consume 1000 or more kcalories**



Binge Eating Disorder

- **High fat, high sugar, low fiber foods**
- **Side effects: bloating, headache, nausea, pain, vomiting, abnormal heart rhythms, esophageal irritation, erosion of teeth**

Binge Eating Disorder

- **Treatment similar to bulimia**
- **Self-help**
- **Diet counseling**
- **Antidepressant drugs**
- **Out-patient counseling**



Binge Eating & Type 2

- **Individuals with hidden BED**
 - **Higher BMI**
 - **Higher TFEQ Disinhibition & Hunger Scores**
 - **Higher variations in food consumption alter glucose control**
 - **Need to think about BED if patient fails to maintain good glucose control or cannot lose weight**

— Crow, *Int J Eat Disord* 2001 Sept 222-226

Management

- **Stabilize medical and nutritional status**
- **Attempt to resolve psychosocial precipitants**
- **Usually outpatient treatment**
- **Pharmacological therapies have limited benefit-use as adjunct to psychotherapy**

Management

- **Indications for inpatient care for any ED:**
 - **Extremely low weight**
 - **Rapid weight loss**
 - **Electrolyte imbalances**
 - **Cardiac disorders**
 - **Acute medical disorders**
 - **Severe & intractable purging**
 - **Psychosis or high risk for suicide**
- *American Family Physician, Oct 1999*

Websites

- **Positive support for those who seek help-information, support groups**
- **www.mirror-mirror.org**
- **Caringonline.com**
- **www.something-fishy.org**
- **www.aedweb.org**
- **Screening tests on many sites**

Tell your patients:
Before the next DIET

- Is health measured just by bathroom scale?
- Is dieting getting in the way of life?
- What are the health risks of this diet?
 - IS the program scientifically valid?
- Consider healthy lifestyle choices:
 - regular exercise, low fat & higher fiber diet, regular mental health breaks