FREE WEBCAST

Eating Disorders

August 10, 2011
12:30 p.m. – 1:30 p.m.

Topics

- Overview of ED subtypes
- New insights into causes of ED
- Current treatment options
- How to determine level of care
- What can be done in the office?
- When to refer?

Presenter
Walter Kaye, MD
Professor of Psychiatry, UCSD
Director, UCSD Eating Disorder Research / Treatment Program

No Need to Travel
Access Webcast @ Personal Computer!
Webcast will be recorded for free on-demand access.

Questions – Marty Adelman
madelman@ccc-sd.org

REGISTER ONLINE HERE
https://www3.gotomeeting.com/register/873756374

Council of Community Clinics

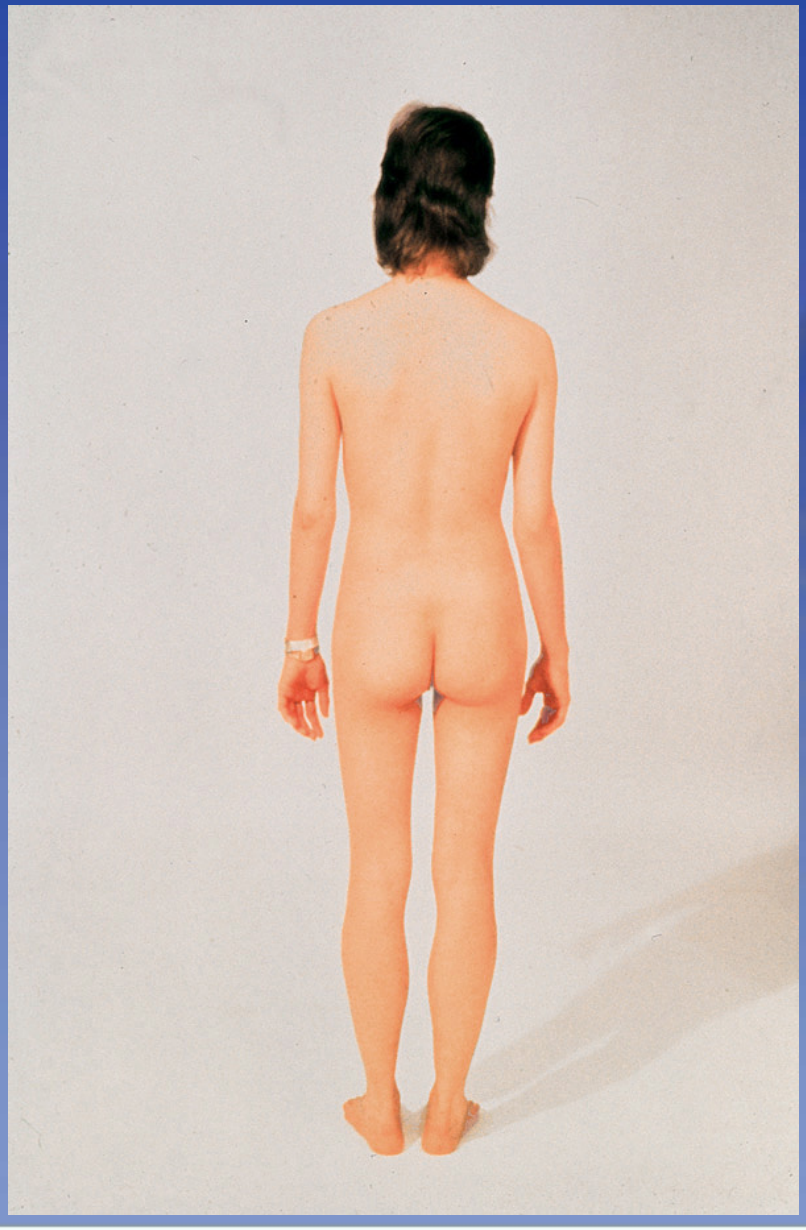
Funding from County of San Diego and Mental Health Services Act

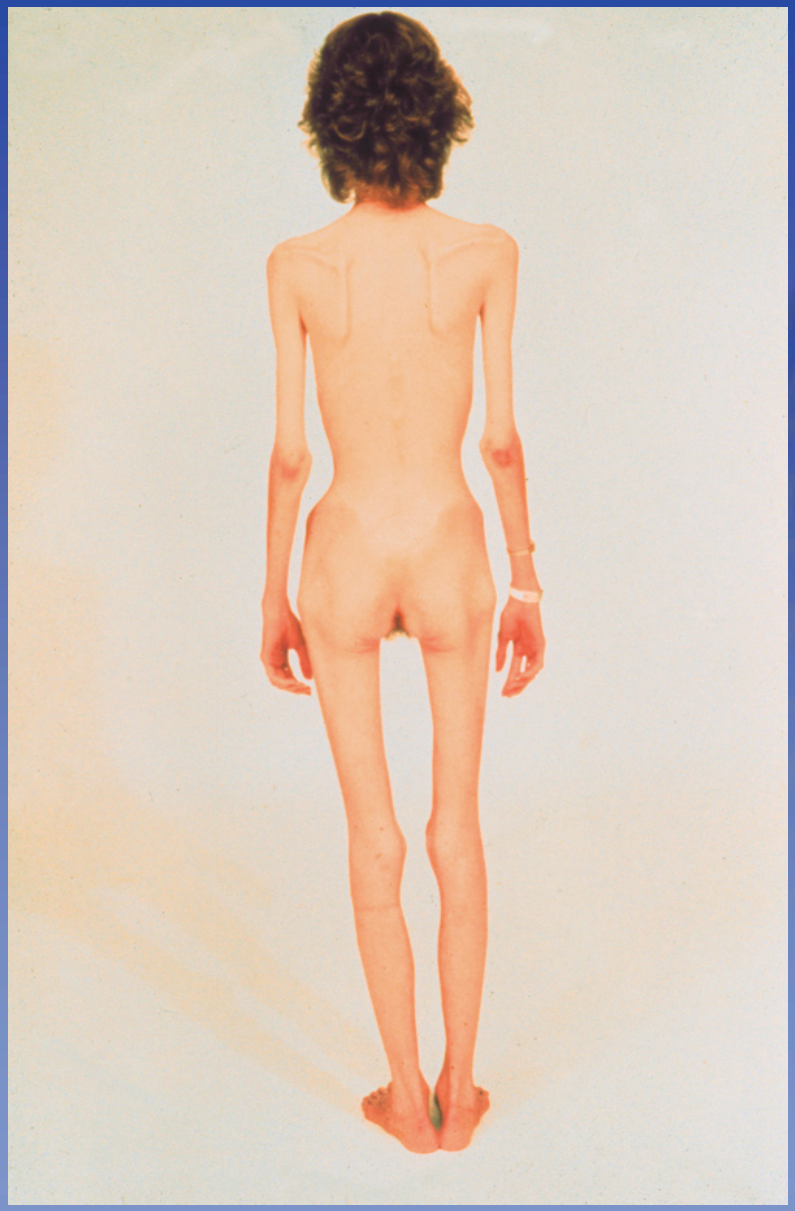
UNIVERSITY of CALIFORNIA, SAN DIEGO
MEDICAL CENTER

TREATMENT OF ANOREXIA AND BULIMIA NERVOSA

Walter H. Kaye MD

Department of Psychiatry
Professor of Psychiatry
Program Director
Eating Disorder Treatment and Research Program
University of California San Diego
Eatingdisorders.UCSD.EDU
858 534 8019






US WEEKLY
TRISTA'S US EXCLUSIVE
HOW I GOT MY BODY BACK!
30 POUNDS IN 5 MONTHS
Fears she'd never be sexy again: 'I was hiding my body'
Her exact diet & workout
Already trying for baby No. 2!
ALL THE BABY DETAILS!
NICOLE
CHRISTINA
EXCLUSIVE
Britney's Best Friend Tells All
'Britney's not crazy,' says cousin Alli Sims


People
TYRA BANKS FIGHTS BACK
YOU CALL THIS FAT?
161 lbs. 'I STILL FEEL HOT'
SHOCKED AFTER GAINING 30 LBS., THE EX-MODEL FIRES BACK AT HER CRITICS
KIDNAPPED TEEN
Getting His Life Back
KEITH URBAN
Talks About Rehab
CAMERON DIAZ
WHO'S THE HOT GUY?

"Nervous Consumption"

(Morton, 1689)

Mrs. Duke's daughter, in the eighteenth year of her age, fell into a total suppression of her monthly courses from a multitude of cares and passions of her mind...from which time her appetite began to abate. She thus neglected herself for two full years. Never did I see one conversant with the living, so much wasted, yet there was no fever, no distemper of the lungs, or signs of preternatural expence of the nutritious juices. Only her appetite was diminished.

Anorexia Nervosa

- Many women diet in our culture
- Relatively few develop anorexia nervosa
- Are there susceptibility factors that make some women vulnerable to dieting, weight loss?

New Understandings of ED

- Family studies (Kendler, 1991; Walters 1995; Lilenfeld, 1998; Strober, 2000)
  - Increased rate of AN, BN, ED NOS in first degree relatives
- Twin studies (Kendler, 1991; Treasure 1994; Berrettini, 2000; Bulik, 2006; Steinglass, 2004)
  - Approximately 50 to 80% heritable risk
  - Genes more powerful than culture
- Genes cause childhood (pre-morbid) behaviors (Anderluch 2003; Stice 2002; Lilenfeld 2006)
  - Anxiety, harm avoidance, perfectionism, inhibition, drive for thinness, altered interoceptive awareness, obsessive personality, drive for achievement
- POWERFUL NEUROBIOLOGY

DSM IV Anorexia Nervosa 307.1

- A. Refusal to maintain body weight at or above a minimally normal weight for age and height
- B. Intense fear of gaining weight or becoming fat, even though underweight.
- C. Disturbance in the way in which one's body weight or shape is experienced, undue influence of body weight or shape on self-evaluation, or denial of the seriousness of the current low body weight.
- D. In postmenarcheal females, amenorrhea, i.e., the absence of at least three consecutive menstrual cycles.

Anorexia Nervosa Subtypes

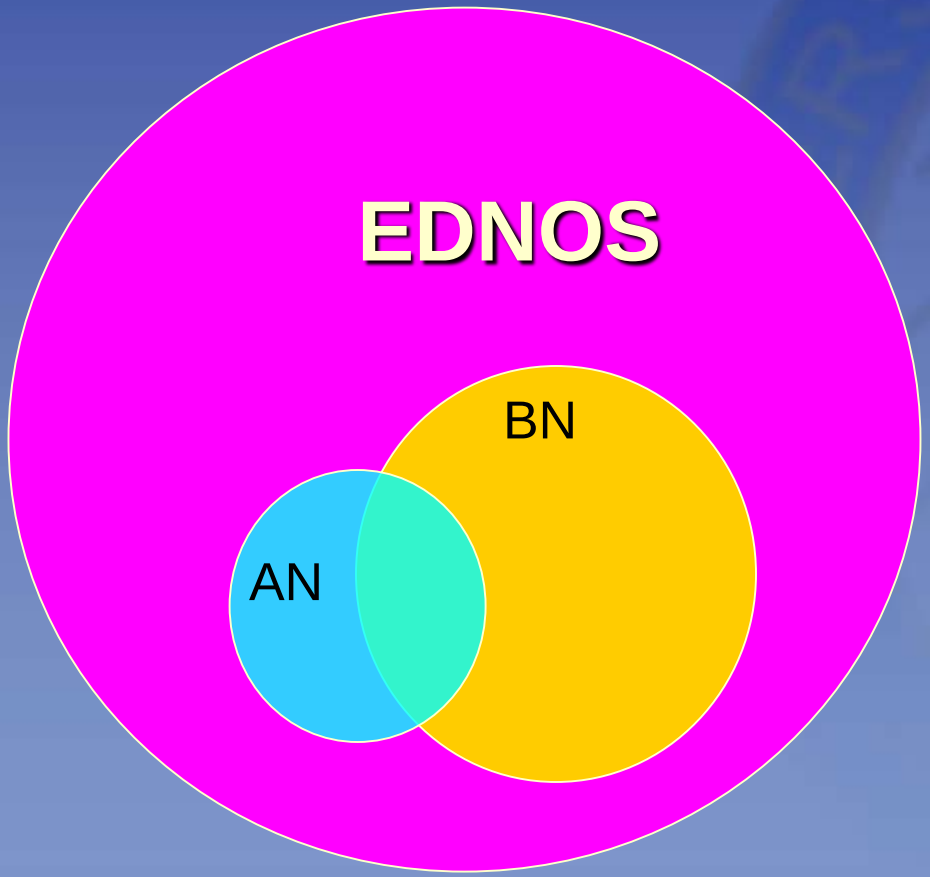
- **Restricting Type:** during the current episode of AN, the person has not regularly engaged in binge-eating or purging behavior

- **Binge-Eating/Purging Type:** during the current episode of AN, the person has regularly engaged in binge-eating or purging behavior

DSM IV Bulimia Nervosa 307.51

- A. Recurrent episodes of binge eating characterized by
  - (1) eating, in a discrete period of time (e.g., within any 2-hour period), an amount of food that is definitely larger than most people would eat during a similar period of time and under similar circumstances
  - (2) a sense of lack of control over eating during the episode (e.g., a feeling that one cannot stop eating or control what or how much one is eating)
- B. Recurrent inappropriate compensatory behaviors in order to prevent weight gain (self-induced vomiting; misuse of laxatives, etc)
- C. The binge eating and inappropriate compensatory behaviors at least twice a week for 3 months.
- D. Self-evaluation unduly influenced by body shape and weight.
- E. The disturbance does not occur during episodes of AN.

Classification



Subtypes of Eating Disorders

DSM-IV	AN	AN-BN	BN
% prevalence	0.25	0.25	1-3
% women	95	95	90
Weight	Low	Low	Normal
Eating	Restrict	Restrict, binge	Restrict, binge
Mood modulation, Impulse control	Over control	Over/under control	Over/under control

AN-BN=anorexia nervosa, binge-eating/purging subtype.
APA. *DSM-IV-TR*; 2000.

Clinical Course

- Onset adolescents/puberty
- Mainly female
- Body image distortions, fear of being fat
- Dieting but preoccupation with food
- Denial, resistance to treatment
- Course
  - 50+% recover
  - 30% chronically ill
  - 5 to 10%+ die

Symptoms in Eating Disorders

	AN	AN-BN	BN
Body image distortion	+	+	+
Neg affect, perfectionistic, obsessive	+	+	+
Exercise	+	+	
Anhedonic	+		
Denial, resistance, ego syntonic	+	+	
Drugs, alcohol, poor impulse control		+	+

Why Pathologic Feeding Behavior?

- AN: Anxiety reducing character to dietary restraint (Kaye, 2003; Strober, 1995; Vitousek, 1994)
  - Reduced daily caloric intake
  - Altered “reward” drive to eat
  - Food causes anxiety, not pleasure
- BN: Overeating is thought to relieve dysphoria and/or anxiety (Abraham, 1982; Kaye, 1986; Johnson 1982; Strober 1994)
  - Alternate between fasting and binge
  - Fear of eating, loss of control
  - Exaggerated “reward” drive to eat

Mortality

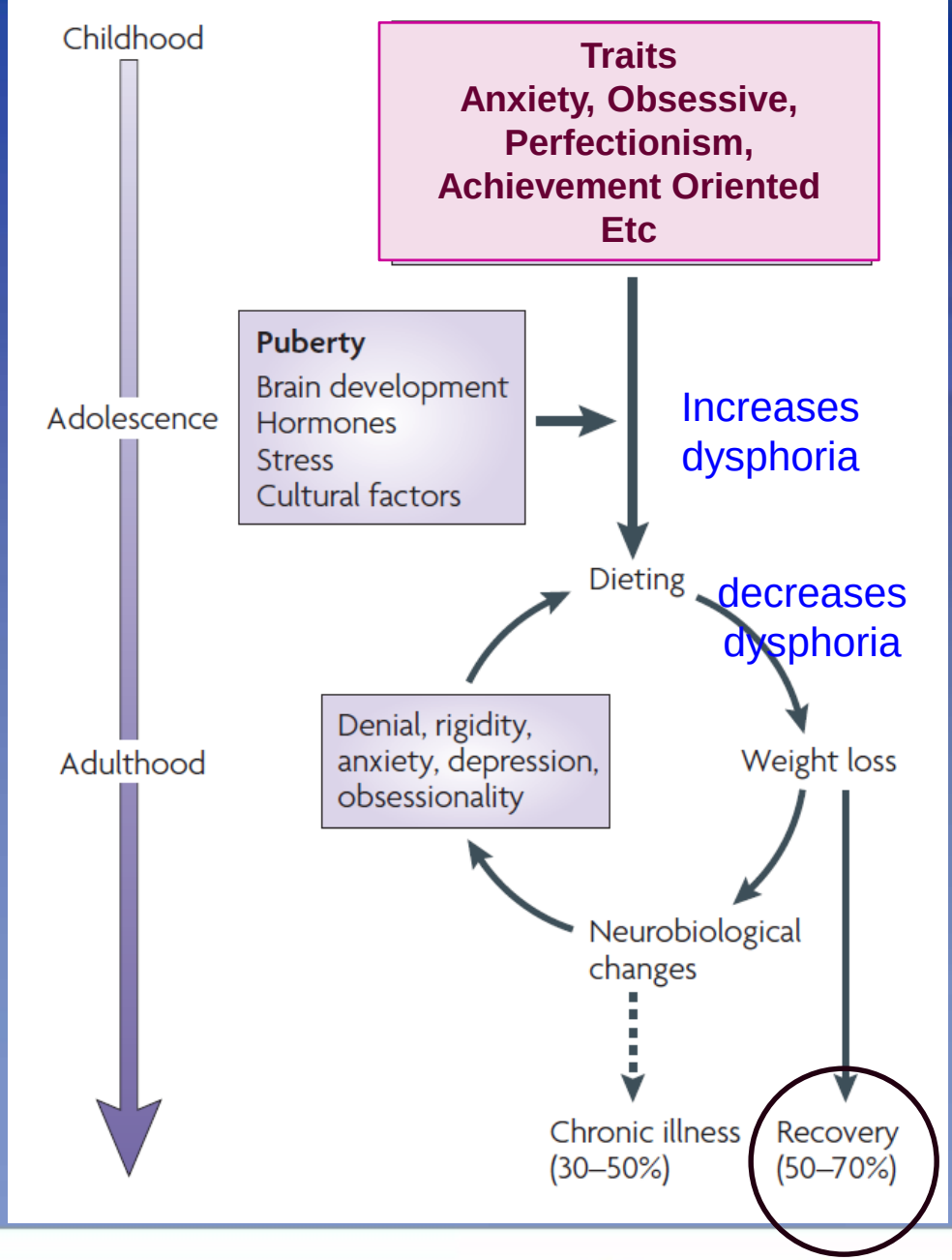
- National Death Index (8 to 25 years follow-up) Crow AJP 2009
  - 4.0% AN
  - 3.9% BN
  - 5.2% ED NOS

Brain and Behavior

- Psychiatric disorders are syndromes
- No brain "centers" for AN, anxiety, depression
- Behavior encoded in brain: learn from reward, negative feedback
- Dysfunctional coping strategies
  - Short term benefits
  - Disturbed problem solving

Temperament, Personality, and Course of AN

Stice 2002
Anderluh 2003
Connan 2003
Lilenfeld 2006
Kaye, Fudge, Paulus 2009



Effects of Malnutrition (AN, BN)

- Examples
  - Reduced brain volume
  - Abnormal neurotransmitter and neuropeptides
  - Prepubertal hormonal function
- Brain not retaining information
  - Impaired concentration, learning
  - Childish reasoning
  - Exaggerated mood disturbances
- Different than “simple” MDD, anxiety, PD

Malnutrition

- Complex synergistic interaction of traits and malnutrition
  - Results in out of control vicious circle
- Critical to reverse malnutrition
  - Improves emotional stability, cognition
  - Takes time - may require higher level of care
  - Powerful biology pathological eating
- Not well reflected in “clinical” measures
  - HR, BP cardiovascular status
  - Brain: hormones, imaging best
  - Regular menses = normalized nutrition

Treatment Rationals

- EDs develop at transition from childhood to adulthood
- Have not learned to use “adult” coping strategies
  - Pathological eating coping with dysphoric mood
- Treatment
  - Talk: constructive coping strategies
  - Meds: reduce dysphoria
- Relapse and ambivalence common
- Little evidence that families cause ED
  - Important resource for keeping patients in treatment

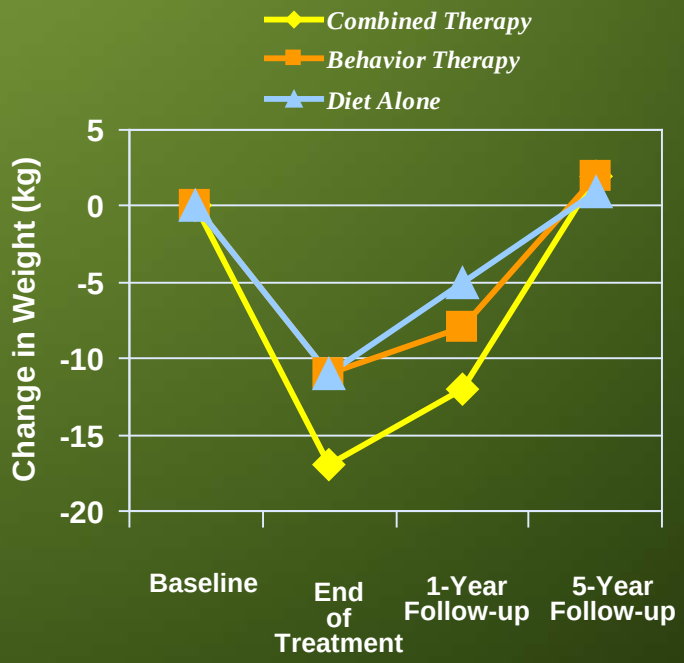
Treatment of Anorexia Nervosa

- First Generation
  - Weight Restoration
  - Behavior Modification
  - Antidepressants, neuroleptics unsuccessful/unproven
  - Successful inpatient weight gain, but high relapse
- Second Generation
  - Relapse Prevention
  - Specialized Psychotherapies (Family, CBT, DBT, etc)
  - Controlled trials - SSRI's, atypicals, etc
  - Goal: Response without hospitalization, reduced relapse

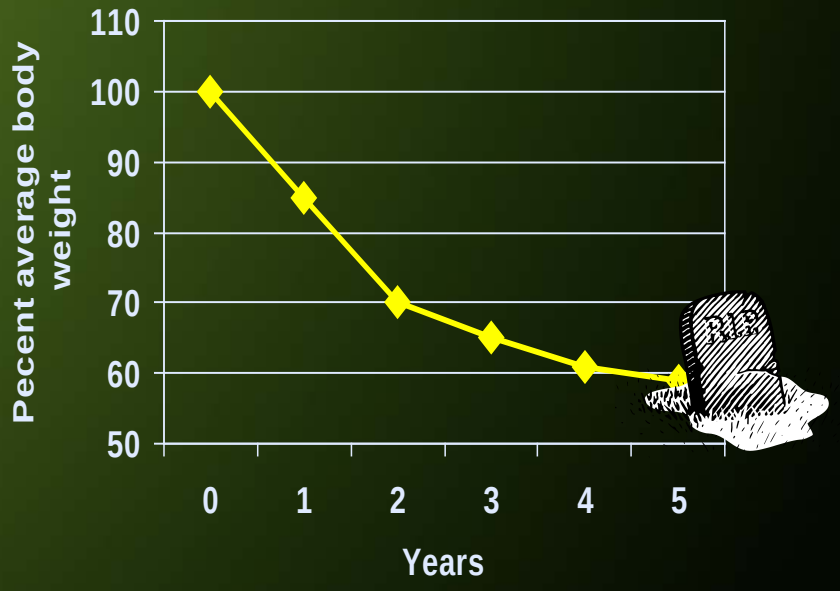
Comparison of obesity and anorexia nervosa

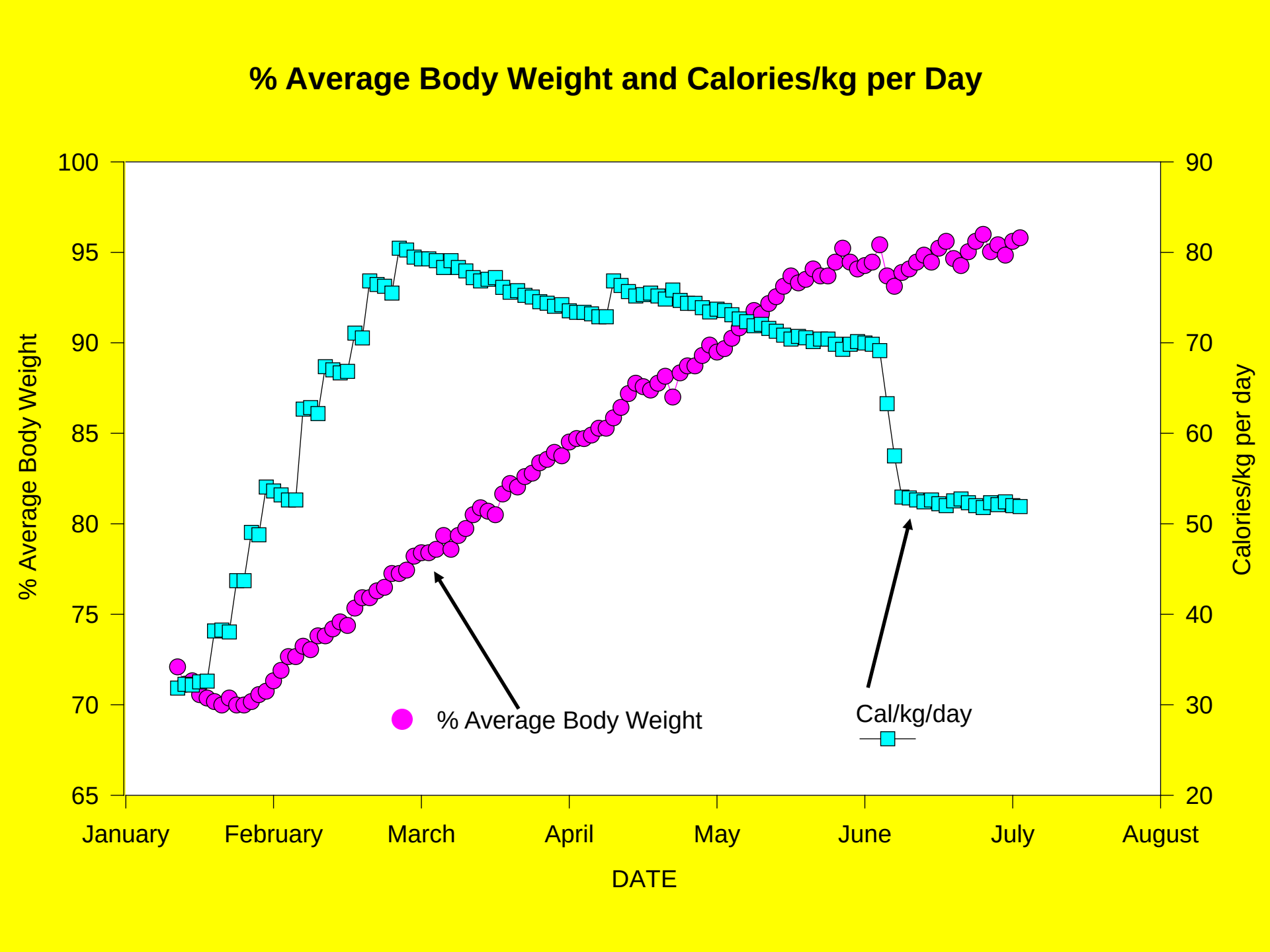
Short-Term Obesity Therapy Does Not Result in Long-term Weight Loss

Wadden et al Int J Obesity 1989
76 obese women, average weight of 106 kg



Weight Loss in Anorexia Nervosa




% Average Body Weight and Calories/kg per Day
100
95
90
85
80
75
70
65
% Average Body Weight
90
80
70
60
50
40
30
20
Calories/kg per day
January
February
March
April
May
June
July
August
DATE
% Average Body Weight
Cal/kg/day

Why is it difficult to gain weight?

- Reduced drive to eat BUT increased caloric requirements
  - When starved, reduced reward, increased anxiety
- Increased dysphoria before and during meals
  - Starvation reduces uncomfortable feelings
- Food and weight obsessions and rituals
  - Stereotypic food choices, ritualized eating, calorie counting
  - Delusionary quality, ego-syntonic
  - **Nothing else is more important**

Medications Summary

- SSRI's, other antidepressants, etc
  - Few controlled trials
  - Not effective in ill AN (but no large scale trials)
  - Possibility SSRI reduce relapse after weight restoration in restrictor AN
- Atypical "antipsychotics"
  - May reduce dysphoria, increase weight in ill AN
  - Requires controlled trial to prove this

Recent Controlled AN Treatment Trials

- Pike (NY; 03), 33 adult AN
  - CBT vs nutritional counseling, OP, 1 year
  - Good outcome: CBT (44%) > nutrit coun (7%)
  - Drop out/relapse: CBT (22%) < nutrit coun (73%)
- Halmi (NY, CA, MN; 05), 122 adult AN
  - CBT vs fluoxetine vs combination, 1 year
  - Overall dropout rate of 46%
  - No difference between groups in survival in treatment
- McIntosh (New Zealand; 05), 56 adult AN
  - CBT vs IPT vs nonspecific clinical management, 20 weeks
  - 70% did not complete or made small/no gains
  - Nonspecific better than CBT or IPT
- Gowers (England; 07), 167 adolescent AN
  - IP ED vs OP ED vs general adolescent services, 2 yr
  - No differences between groups
  - Full recovery in only 33% at 2 years

Why is Treatment So Difficult?

- Resistance and denial
- Caloric requirements for weight gain and maintenance
- Underlying neurobiological “drives”

"The patients should be fed at regular intervals, and surrounded by persons who would have moral control over them; relatives and friends being generally the worst attendants."

William Gull

(1816-1890)

Multiple Studies Show Family Based (Maudsley) Treatment is Effective for Adolescent AN

- Russell et al (1987)—90% improvement in subgroup of with short-duration AN
- Le Grange et al (1992)—70% improvement
- Eisler et al (1997)—five year follow-up on Russell et al (1987) found improvements were maintained.
- Robin et al (1999)—90% improvement with family treatment compared to 65% with individual therapy
- Eisler et al (2000)—65% improvement in cohort
- Lock et al (2010) – superior to individual therapy at 1 year follow-up

Maudsley Treatment Approach

- Agnostic view of cause of illness (No blame)
- Family made responsible to re-feed child (Empowerment)
- Non authoritarian therapeutic stance (Joining)
- Separation of child and illness (Respect for adolescent)
- Highly focused, staged treatment
- Emphasis on behavioral recovery rather than insight and understanding
- Indirect approach to improving family functioning
- Supports gradually increased independence from therapy

Maudsley Limitations

- Adolescents, not adults
- Not tested in severely underweight AN
- Does not reverse temperament, personality
- Family ingredients predicting good outcome ?
  - Intact families
  - Symptoms in family members

UCSD ED Program
Models of Advances in Treatment

- Few FBT therapists in US
- Week long 30 hr Intensive FBT Immersion
  - Patient, parents, sibs at UCSD
  - Family stays in nearby residential hotel
- Started 2008
  - 9 mo outcome few relapse (Rockwell 2011)
  - Transition to multifamily (MFT) and day treatment (DT) models
    - Developed in collaboration with Ivan Eisler, PhD, principal architect of FBT (Maudsley)
- Rational
  - Deal with stress, practice skills, learn to eat in real life

Developing More Effective Treatments

- Two adolescent programs – based at Rady Children's Hosp
  - 1. Week-long intensive MFT for out of town families
    - 5 sequential days, 30+ hours immersions with post discharge follow up
  - 2. Day-treatment
    - Daily 9a to 3p program with substantial FBT involvement
- Programing
  - Maudsley FBT (Evidence based, manualized)
  - Staff training, supervision, meetings 8 hr/week for staff
  - Multidisciplinary team, full-time, advanced degrees
  - Comprehensive medical, psychological evaluation
  - Psychoeducation "facts" based on evidence
  - Consultation with home therapist/physician, follow up therapy after discharge
  - Staff training, supervision
  - Individualized treatment plan with focus on comorbid dx

UCSD model of advances in care

- Rady Med West Unit – Dedicated ED beds
  - Short term medical hosp for stabilization, nutritional restoration
  - Can treat ED patients up to 30 years old
  - Attend DT while in RCH, so smooth transition
  - Family involvement from start
  - Drs. Adams and Loper specialize in ED
- Fluidity of transition between levels of care
  - Not time dependent
  - Depends on ability to progress and become more independent

AN: Outpatient Treatment vs Higher Levels of Care

	Outpatient	Higher Level
Weight*	>85%	< 75%
Medical complications*	none	↓ HR, BP, K etc
Suicidal, comorbid psych disorders*	Not present	present
Motivation, insight, cooperation, cognitive function*	good	poor
Exercise, purge, etc	minimal	severe
Stress, family dynamics	minimal	severe
Local ED treatment resources	available	none

*** Likely to reflect malnutrition**

Treatment of Bulimia Nervosa

- Proven treatments (in controlled trials)
  - Medication “Antidepressants”
  - Psychotherapy
    - CBT - “gold” standard for uncomplicated BN
    - Interpersonal, dialectical behavior therapy
  - Reduce binge/purge, improve function and mood
- CBT + Medication – interactions not clear
- Cluster “B” personality disorders respond poorly

Antidepressant Trials in BN

- 20+ double blind, placebo controlled studies
  - most parallel, short term
  - few cross-over
- Most show active >> placebo reductions of Binge, Purge
  - Minority abstinent
- Trials short term, small number subjects
- Less focus on response of
  - OCD
  - Impulse control
  - Anxiety, depression
  - Core ED symptoms
  - Cluster B

RTC Medication for BN

- SSRI (large scale trials)
  - Fluoxetine (Prozac) 60mg reduced BP (AGP 92)
  - Fluvoxamine not effective (Schmidt 04)
- Sertraline (Milano 2004)
  - 100 mg better than placebo in reducing BP
- Bupropion (Horne 1988)
  - Drug better than placebo in reducing BP
  - 4 of 69 patients had seizures (never replicated)
  - Contraindicated in BN
- Ondansetron (anti-emetic, 5HT3 receptor effects) (Farris 2000)
  - 4 week controlled trial, better than placebo in reducing BP
- Topiramate (Anticonvulsant)
  - 10 week studies {Hoopes, 2003; Hedges, 2003; Nickel 2005) doses 250 to 400 mg/day
  - Better than placebo in reducing BP but some weight loss
  - Not know if has long-term efficacy

Summary
Medication in BN

- Main effect: reduced binge, purge
- ?Reduction negative affect, obsessions
- Response similar all antidepressant classes
- No studies comparing efficacy of 2 or more different drugs
- Choice related to side effects
- Dose similar (or greater) to major depression
- Cluster B personality disorder - ?worse outcome
- Long term maintenance not well studied
    - **Anti-binge attenuation over time in some**

CBT (Manualized)

- Focus: changing symptoms and maladaptive cognitions
- 20+ RCTs (study subjects tended to have less comorbidity)
  - 60 to 80% decrease in BP
  - 30 to 50% cessation rate
  - Substantial drop out rate
- Early response predicts good outcome
- Residual symptoms common

Other Evidence Based Treatments

- Interpersonal Therapy (IPT)
  - 6 yr outcome similar CBT (Fairburn 1993)
- Self-help manuals
  - May help subset of BN
- Family therapy (limited research)
  - Adolescents FBT > SPT at 6 mo FU (LeGrange 07)
  - Older children, married partners: Conflicts, lack cohesion, difficulty expression emotions

Drug and/or Psychotherapy in BN

- Benefit of adding drug to structured psychological treatment, but of small magnitude
- No clinical guidelines identify which patient responds to which treatment
- BN who get greatest benefit from treatment typically exhibit an early response
- Recommendations
  - May be useful to initiate treatment with CBT
  - If not successful, add another intervention, such as medication
  - Medication may be useful for those not responding adequately to or relapsing after psychological treatment

SUMMARY

- Progress made over last 20 years
- Efficacy mainly shown for CBT and antidepressant medication
- At best, about 50+% of patients achieve remission with CBT or antidepressants
- Significant number of relapses with both types of treatment

Adult BN with severe dysregulation

- BLP occurs in 25% to 48% of BN (Rossiter 1993)
  - Cluster B have worse outcome
- Alcohol, drug abuse/dependence common (up to 50% of BN) Lilenfeld 1996
- Dialectic Behavioral Therapy (DBT)
  - Promising results in BN (Safer 2001),
  - BN with substance use (Courbasson, 2011)

UCSD ED Day Treatment Program DBT

- Provides the same skills content as 6 months of outpatient DBT
  - UCSD done in 2.5 months of intensive skills groups
- Focus on
  - skill application
  - chain analysis of target behavior
  - reduction of therapy-interfering behavior.
- Ability to treat suicidal & comorbid patients that most programs will not treat

BN: Office vs ED Specialty/Higher LOC

	Office	Higher Level
BP frequency, laxatives, diuretics	Infrequent	Daily+
Medical complications*	none	↓ HR, BP, K etc
Suicidal, comorbid psych disorders*	Not present	present
Motivation, insight, cooperation, cognitive function*	good	poor
Response to medication (SSRI, etc)	good	poor
Stress, family dynamics	minimal	severe
Manualized, evidence based psychotherapies	Available locally	ED expert needed

*** Likely to reflect malnutrition**

What to look for in treatment providers

- Treatment program:
  - Is it evidence based, and/or best clinical practice?
  - Data showing that the treatment has efficacy?
  - Training, supervision of staff?
  - Is the staff full time or part time?
  - Do they assess long-term outcome?
- Therapist:
  - What is their degree and training
  - What is their ED experience

UCSD Eating Disorders Program

Evidence-based, Best-practice Treatments
Development of Next Generation of Therapy

- Comprehensive Evaluation
- Expert Medication Consultation
- Adult: Day and evening programs
- Adolescent: Day and Intensive Family-based Treatment

www.eatingdisorders.ucsd.edu

Christi Middlesworth

Alyson Merchant

- (858) 534 8019

ED Treatment References

- NICE National Institute for Clinical Excellence guidelines for AN and BN **(Jan 2004)**
  - www.nice.org.uk
- American Psychiatric Association. (2006) *Practice guideline for the treatment of patients with eating disorders*, 3rd ed. American Psychiatric Association.

On-line Survey

In the near future you will receive a link by email to a very short 4 question survey about this training.

Please take a few minutes to complete the survey as the information help us determine if our trainings are helpful to you.

THANK YOU!