Eating Disorders in Adolescents

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What is normal adolescent eating?

- Adolescents renowned for poor eating habits
- Increased autonomy and independence
- Miss meals
- Unconventional meals
- Snacking
- Take away & convenience foods
- Eating away from home
- Consumption of soft drinks, energy drinks and alcohol

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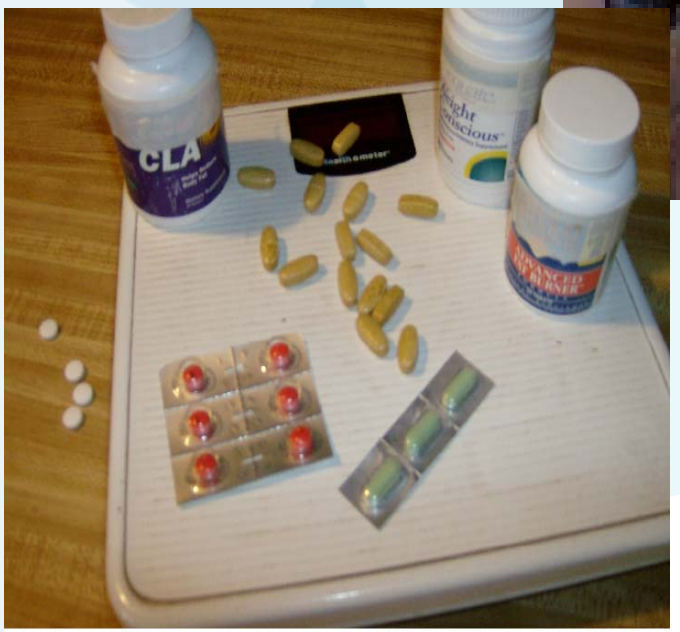
When does it become an eating disorder?

- Develop over time
- Often start with a “healthy” diet
- Nutritional messages taken to extremes
- A means of controlling body shape, size and maturation
- A way of coping
- An obsession
- Driven behaviour
- Relentless
- Out of control
- Priority over all other domains of life



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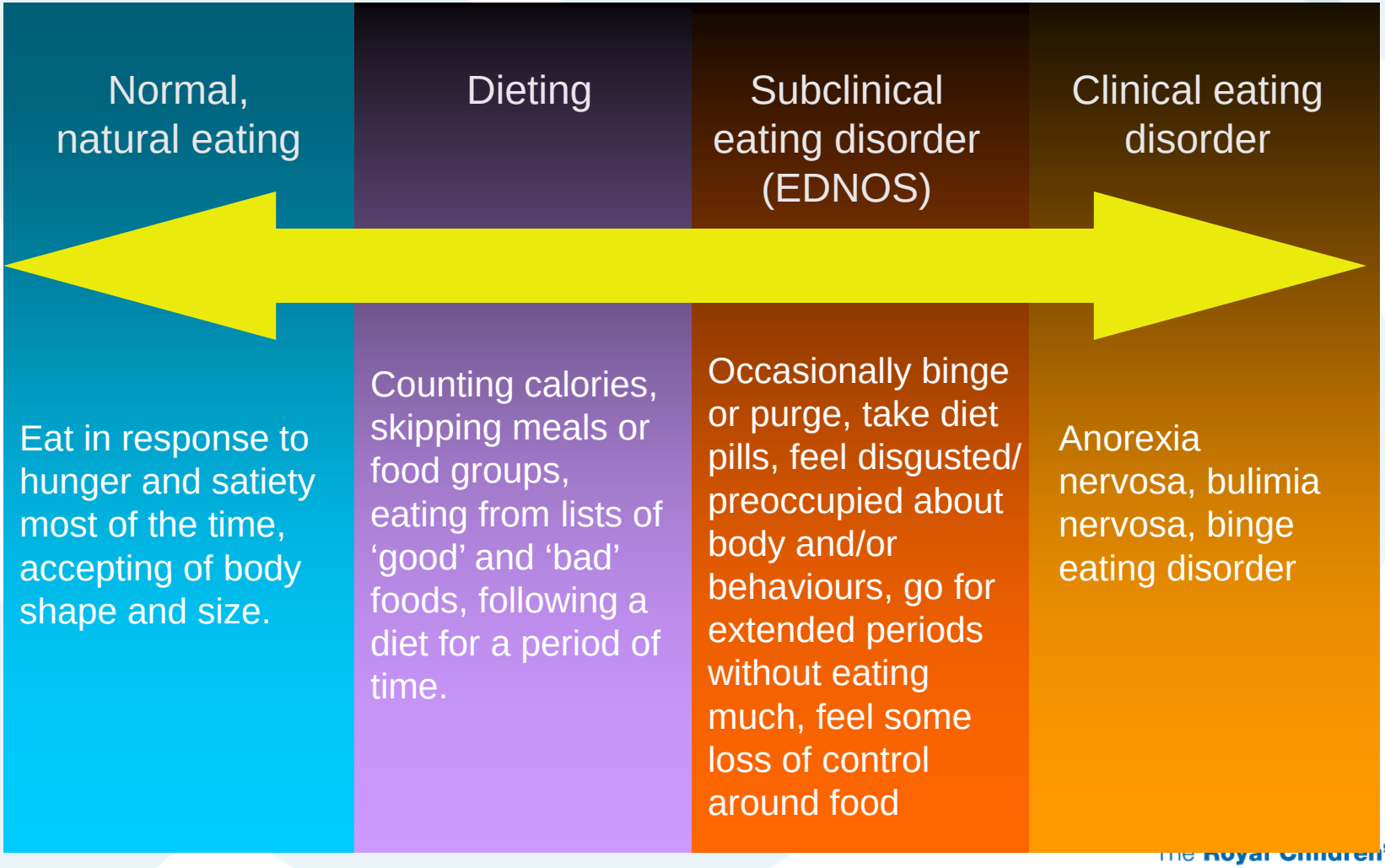
Spectrum of Disordered Eating



Multiple Causes and Risk Factors

- Females (10-25% are male)
- Dieting
- Interest groups that value looks and fitness (e.g., athletes, dancers, models)
- High achievers
- Perfectionistic personality traits
- Family history of eating disorders/other psychiatric illnesses
- Co-morbid psychiatric illness (e.g., depression, obsessive compulsive disorder)
- Changes of body size and shape with puberty
- Negative body image
- Pre-morbidly overweight
- Lack of coping skills
- Poor emotional expression
- Poor communication skills

Types of eating disorders

- Anorexia nervosa
- Bulimia nervosa
- EDNOS
- Binge eating disorder

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Types of eating disorders

Eating disorders are a psychological illness with physical consequences. There are many forms of eating disorders; anorexia and bulimia nervosa, binge eating disorder and eating disorders not otherwise specified (EDNOS).

Additionally, there are many forms of disordered or subclinical eating problems that can result in physical and psychological problems that can later develop into clinical eating disorders.

Anorexia Nervosa

Anorexia is characterised by:

- refusal to maintain weight at or above a normal weight for height, body-type, age and activity level
- intense fear of gaining weight or becoming 'fat'
- body image disturbance, for example, feeling 'fat' despite being underweight
- loss of menstrual periods (females)
- extreme concern with body weight and shape.

Bulimia Nervosa

Bulimia is characterised by:

Over-preoccupation with food and weight resulting in 'out of control' eating patterns such as:

- eating binges which involve the consumption of large amounts of food. These usually occur secretly and are associated with a sense of loss of control and/or shame
- attempts to compensate for binges and avoid weight gain by one or more of the following unhealthy measures: self induced vomiting; misuse of laxatives; fluid or diet pills; excessive exercise; periods of strict dieting.

Binge Eating Disorder

Binge eating disorder is characterised by:

- periods of uncontrolled, impulsive or continuous eating to the point of being uncomfortably full
- repeated episodes of binge eating which often result in feelings of shame and self-hatred
- no compensatory behaviour (such as vomiting, laxative abuse, excessive exercise) after bingeing

While obesity is not considered an eating disorder in itself, it can be the result of binge eating disorder.

Eating Disorders Not Otherwise Specified-EDNOS

There is a range of other disordered eating patterns that do not fall into specific categories. These conditions are still serious and intervention and attention are still indicated.

EDNOS or other eating disorders may include:

- those who have some, but not all of the characteristics of an eating disorder. For example, people who severely restrict food intake, but who do not meet full criteria for anorexia nervosa
- those who chew food and spit it out (without swallowing)
- those who binge and purge irregularly, such as at times of increased stress
- people who experience disordered eating or any subclinical symptoms.

DSM 5 anticipated changes

- Restriction of food intake relative to caloric requirements leading to the maintenance of a body weight less than a minimally normal weight for age and height (e.g., weight loss leading to maintenance of body weight less than 85% of that expected; or failure to make expected weight gain during period of growth, leading to body weight less than 85% of that expected).
- Amenorrhoea no longer a criteria
- Binge Eating Disorder included as a separate disorder

12 year old with Eating Problems

- Can still have AN/BN/EDNOS
- Consider
  - Food Avoidance Emotional Disorder
    - less preoccupation with weight/shape
  - Selective/Restrictive Eating
    - fussy eaters
  - Food refusal
    - more related to circumstance
  - Fear/Phobia/Anxiety leading to avoidance of eating
  - Pervasive refusal syndrome
  - Appetite loss secondary to depression

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Children with AN

- Failure to grow/gain weight is equivalent to weight loss
- Restriction of fluid intake also common
- May present with somatic complaints for food refusal e.g. nausea, bloating, abdominal pain
- Body image disturbance less obvious
- Strong association with pre-existing OCD

Boys with AN

- Shape is more of an issue than weight
- Concern around preventing the development of a flabby shape
- Over-exercise common
- Small numbers, but increasing

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How Common are Eating Disorders?

- Incidence of AN 1% in females and 0.2-0.3% in males
- Incidence of EDNOS 5%
- Prior to puberty incidence equal for boys and girls
- 3rd most common chronic illness in female teenagers (after asthma and obesity)
- Highest mortality of mental illnesses (up to 20%)
  - Medical complications
  - Suicide

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Anorexia Nervosa

- Dangerously low weight
- Refusal to maintain normal weight
- Intense fear of gaining weight or becoming fat
- Body image disturbances
- Loss of menstrual periods
- Extreme concern with body weight and shape
- Mind and body illness

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Psychological effects of anorexia nervosa

- Decreased ability to think clearly
- Decreased concentration, judgment, memory, comprehension
- Irritability and mood swings
- Social withdrawal
- Compulsive behavior –
  - eat in a certain order, counting..
- Rigid thinking styles
- Restlessness
- Apathy
- Trouble sleeping

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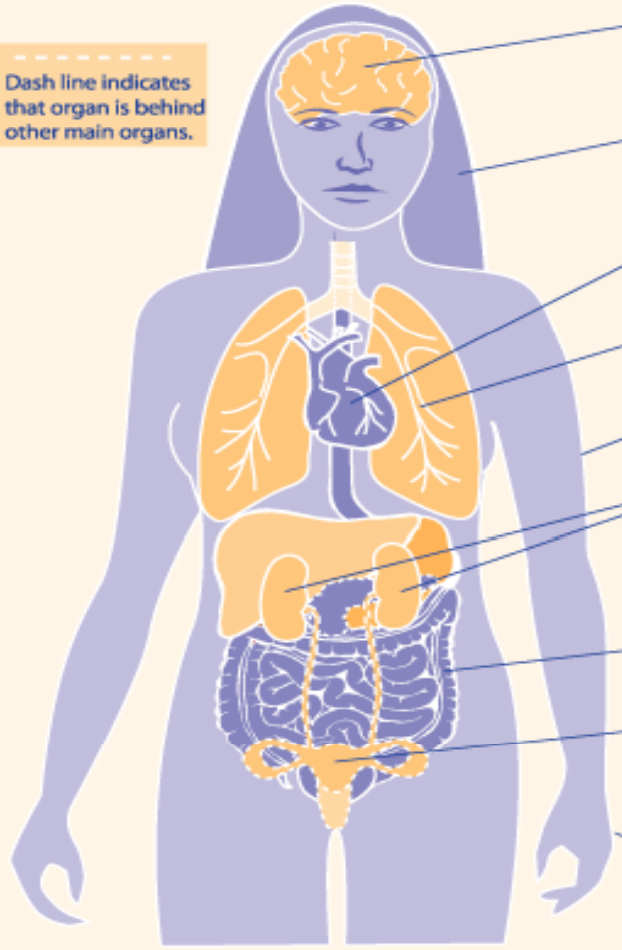
Anorexia affects your whole body



Brain and Nerves
can't think right, fear of gaining weight, sad, moody, irritable, bad memory, fainting, changes in brain chemistry

Hair
hair thins and gets brittle

Heart
low blood pressure, slow heart rate, fluttering of the heart (palpitations), heart failure

Blood
anemia and other blood problems

Muscles and Joints
weak muscles, swollen joints, fractures, osteoporosis

Kidneys
kidney stones, kidney failure

Body Fluids
low potassium, magnesium, and sodium

Intestines
constipation, bloating

Hormones
periods stop, bone loss, problems growing, trouble getting pregnant. If pregnant, higher risk for miscarriage, having a C-section, baby with low birthweight, and post partum depression.

Skin
bruise easily, dry skin, growth of fine hair all over body, get cold easily, yellow skin, nails get brittle

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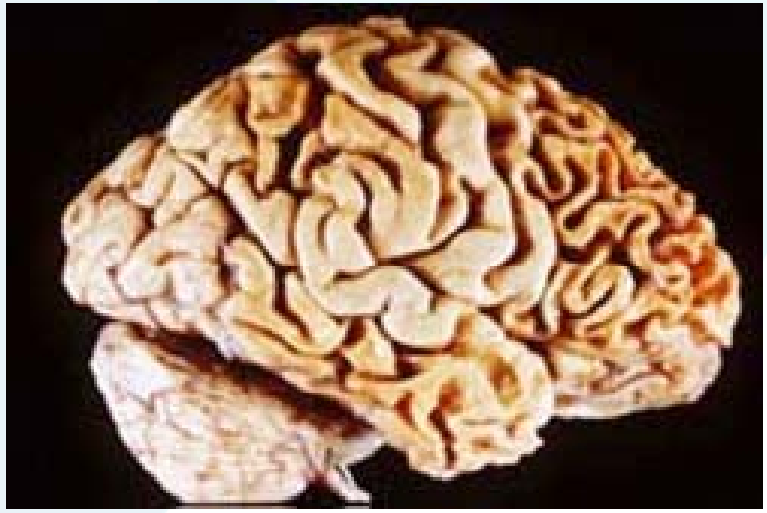
Physical complications of malnutrition
Cardiovascular

- Hypotension (postural drop)
- Bradycardia
- Circulation slows
  - Evidence of poor healing
  - Cold peripheries
- Hypothermia
- Arrhythmia

Physical complications of malnutrition
Brain Function

- Dehydration and malnutrition affect brain function, especially:
  - Short term memory
  - Frontal lobe functioning (“higher executive functions”)
- Recovers full function when not malnourished



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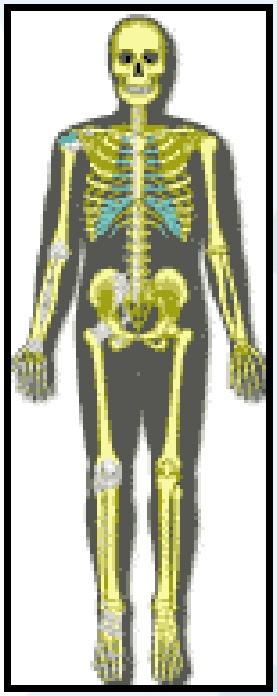
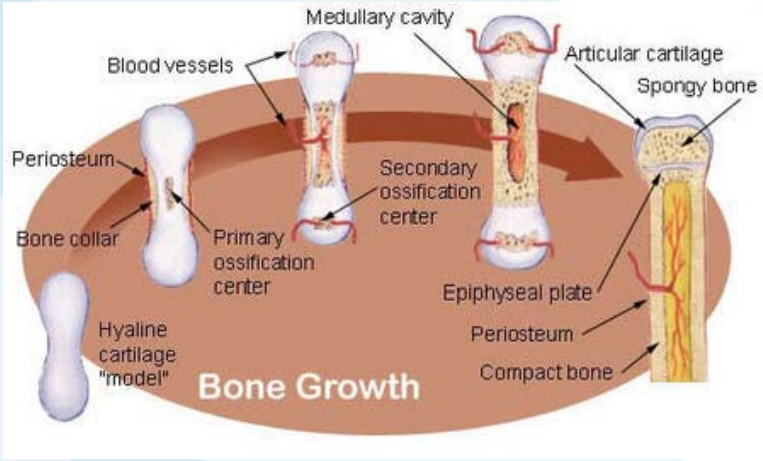
Physical complications of malnutrition
Bone Health



- Bone structure changes in adolescence
  - laying down bone for the future
- Failure of acquisition of peak BMD risks short term and long term consequences
  - Fractures
  - Osteoporosis



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How to Recognise an Eating Disorder

- Difficult to recognise
  - Slippery slope between normal and abnormal
  - Anorexia hides itself well
- Parents feel ashamed
  - “How did we miss it?”
- Numerous signs and symptoms
- Significant decrease in functioning
  - Social
  - Physically
  - Emotional/mood
  - Appearance
  - Interests

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Signs of an Eating Disorder

- Significant weight loss
- Loss of menstrual periods
- Restriction of intake
- No snacking
- Reducing fat
- Calorie counting
- Fasting
- Skipping meals
- Vegetarianism
- Distress/anger at meal times
- Excessive exercise
  - Sports
  - Standing
  - Walking
  - Sit ups
- Obsessive about body shape/size
- Vomiting
- Bathroom visits after meals
- Frequent weighing
- Unusual food behaviours
  - Cutting food into tiny pieces
  - Excessive time for meals
  - Hiding food
  - Food faddism
  - Hoards food
- Cooks but does not eat
- Obsessive interest in food/cooking
- Eats alone/secretly
- Social withdrawal
- Labile mood/irritability
- Lethargy

What to do if you suspect an eating disorder

- Approach young person and parent
- Suggest seeing a general practitioner, paediatrician or specialist eating disorder service
- Persist if concerned
- Hard to recognise, often in denial
- Parent education regarding health risks
- Seek multidiscplinary team approach
  - Multifactorial = multidisciplinary
- Seek specialist consultation
  - Highly complex
  - Regionalised

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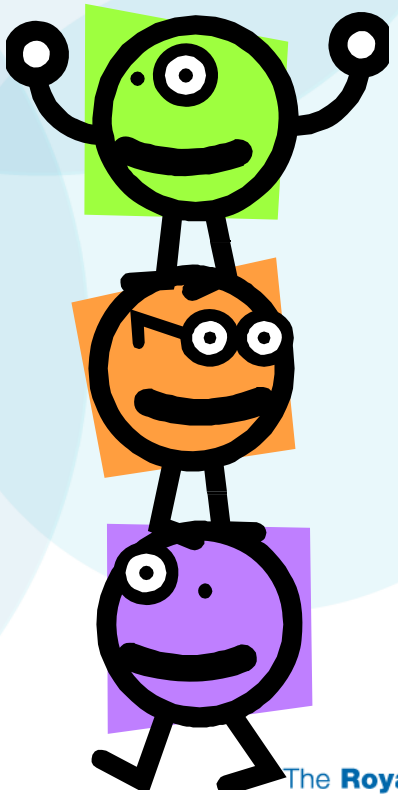
How to treat an Eating Disorder

- Psychological
  - Family Based Treatment (anorexia nervosa)
  - Individual based treatment for other eating disorders
    - Cognitive behavioural therapy
    - Ego-oriented therapy
- Medical
  - Medical stability
  - Medication
- Nutritional
  - Nutritional requirements
    - e.g., iron, calcium
  - Guide to healthy eating



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Eating disorders services for adolescents in Victoria

- Public services are regionalised
  - Royal Children's Hospital
    - Clinical Nurse Consultant for Eating Disorders
    - Stephanie Campbell
      93456533
  - Austin Health
    - Paediatric Liaison Nurse
    - Karen Stewart/Brialie Forster
      94965000 and ask to have them paged (pg 5515)
  - Monash Medical Centre
    - Eating Disorder Nurse Co-ordinator
    - Michelle Caughey
      0427845623

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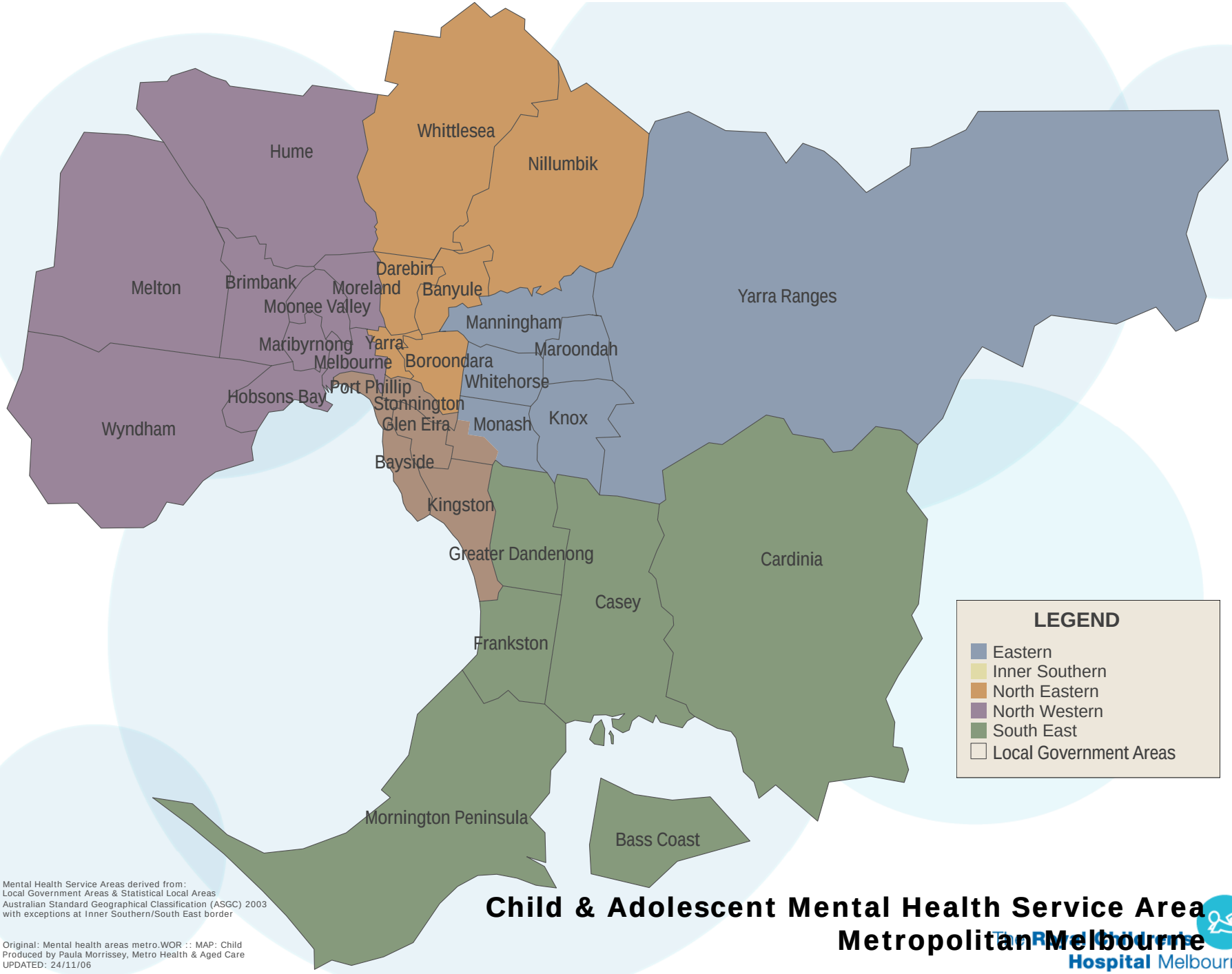

Mental Health Service Areas derived from:
Local Government Areas & Statistical Local Areas
Australian Standard Geographical Classification (ASGC) 2003
with exceptions at Inner Southern/South East border

Original: Mental health areas metro.WOR :: MAP: Child
Produced by Paula Morrissey, Metro Health & Aged Care
UPDATED: 24/11/06

Child & Adolescent Mental Health Service Area
Metropolitan Melbourne

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Criteria for urgent admission

Physiological instability

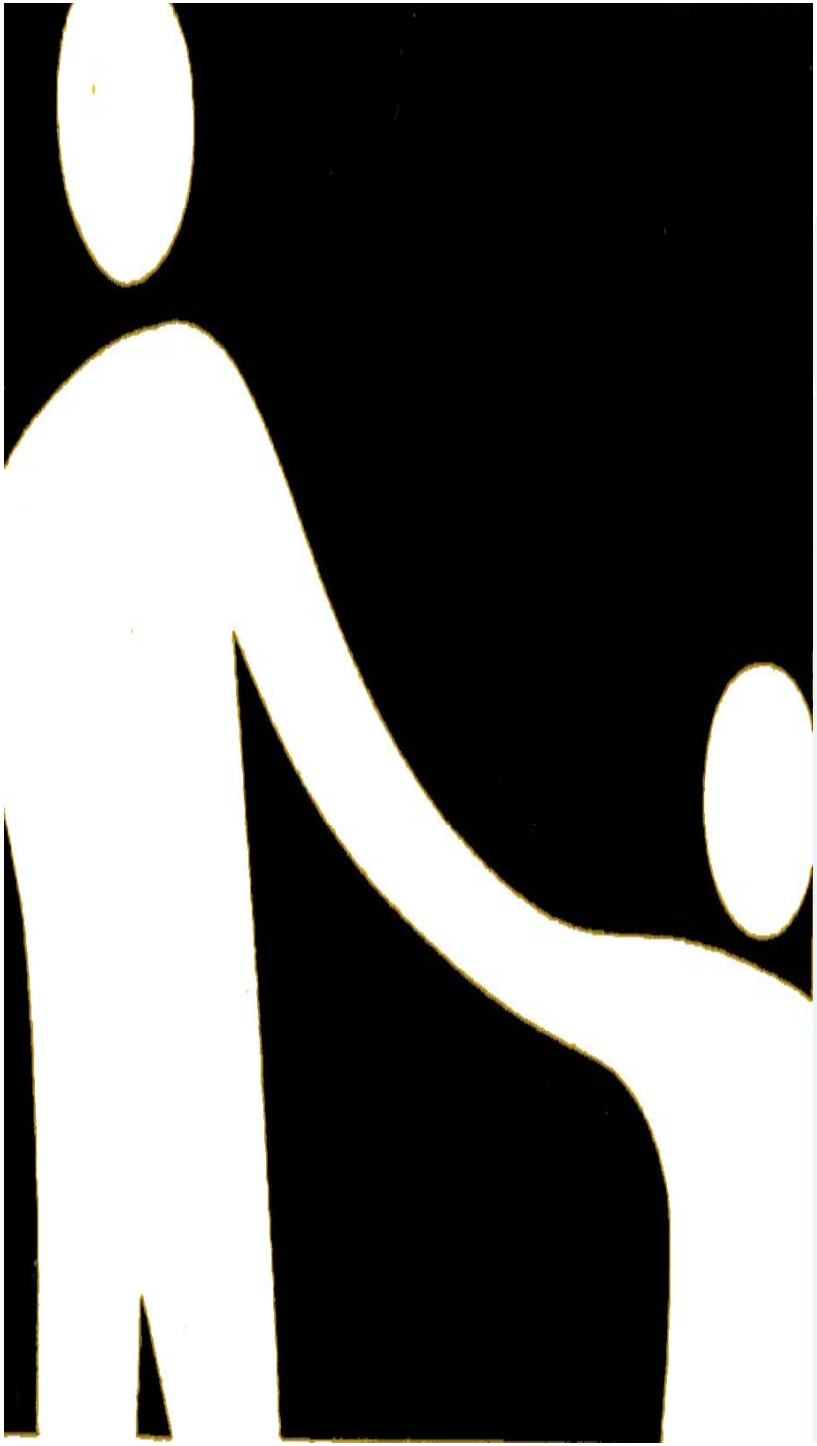
- Postural hypotension (>20mmHg systolic)
- Resting bradycardia (<50 beats/min)
- Temperature <36 degrees
- Electrolyte imbalances e.g. low K+

Other reasons for admission

- Growth arrest and pubertal delay if poor weight gain in outpatient treatment
  - especially for the younger adolescent
- Failure of outpatient treatment
- Patient/parent not coping at home
- Crisis
  - Eg self harm
- Linkage with mental health services

Refeeding syndrome

- Phosphate and K+ generally drop after eating recommences
  - Mg may also drop
- Nadir at 48-72 hrs (Whitelaw et al, JAH 2010)
- Given risk of arrhythmias, replacement is important
  - Measure phosphate daily
  - If required, Phosphate 500mg tds orally
  - Generally able to gradually wean phosphate by week 2



What is FBT?

- Family based treatment (FBT)
- Maudsley Hospital, London
- Outpatient based program
- Approximately 20 sessions over 6-12 months
- Work heavily with parents, siblings and young person

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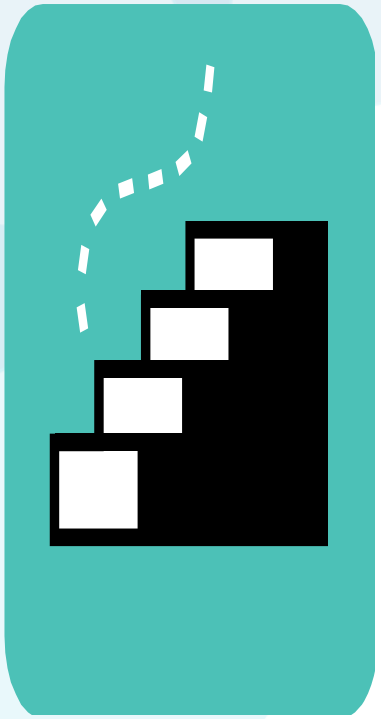
Key Tenets of the FBT Model

- Agnostic view of cause of illness
  - parents are not to blame
- Initial focus on symptoms and refeeding
  - pragmatic
- Parents are responsible for weight restoration
  - empowerment
- Authoritative therapeutic stance
  - joining
- Separation of child from illness
  - respect for adolescent

Three Phases of FBT

Phase 1: Parents restore their child's weight

- Refeeding
- Parental control – replicates meal support
- Do not engage in anorexic debate



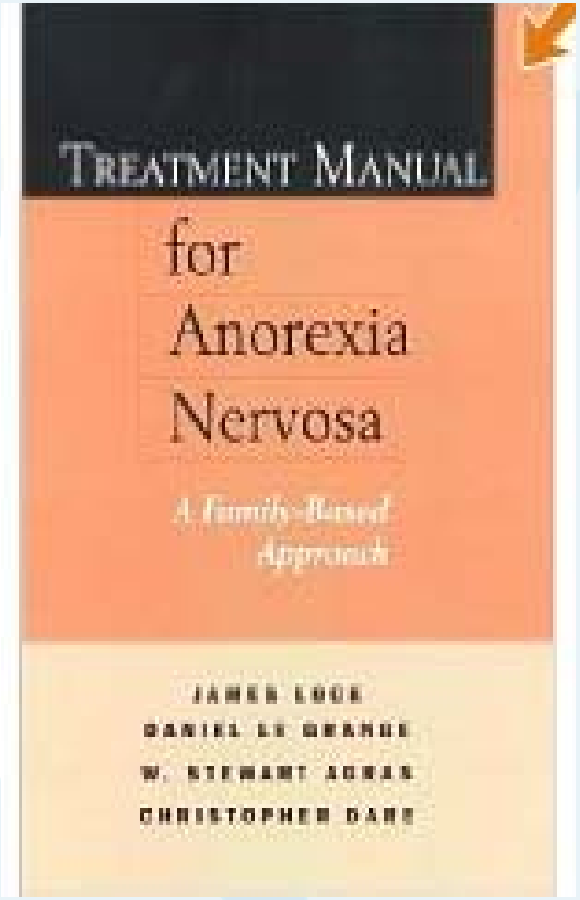
Phase 2: Transfer control back to the adolescent

- One meal at a time
- With weight maintenance

Phase 3: Adolescent developmental issues

- Control of eating returned to young person
- Weight and food no longer the focus of parental-child communication

Why FBT?



- **Evidenced based**
  - Only treatment that has been shown to be successful in adolescents with AN (<19 yrs)
  - Best outcomes with shorter duration
    - less than 3 year history
  - 65% success rate
    - normal weight
    - Normal thinking
  - Outpatient based

Why not FBT?

- One size does not fit all
- If not FBT, case by case
  - Limited evidence for bulimia
  - Chronicity of illness
  - Parental psychopathology
  - High conflict/chaotic families
  - High expressed emotion
  - Maternal criticism
- Other models include individual treatment programs (e.g., CBT, ego-oriented and interpersonal therapy)
- Need greater research

How to refer to CAH for assessment of an eating disorder

- 18 years or under in western region
- GP or specialist referral
- Fax referral to ED coordinator
  - Stephanie Campbell 9345 6343
- Include in referral
  - Weight – current and rate of loss over time period
  - Height
  - BMI
  - Menstrual history
  - Blood pressure – lying and standing
  - Pulse – lying and standing
  - Temperature
  - Amount of exercise
  - Other signs and symptoms
  - Contact details of parent

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Resources for information/help

- **Eating Disorders Foundation of Victoria**
  - Offer support services, helpline, library and information for suffers and carers as well as health professionals
    - www.eatingdisorders.org.au

- **The Butterfly Foundation**
  - Offer support services, helpline, education and direct financial relief for suffers and carers.
    - www.thebutterflyfoundation.org.au

- **Centre for Excellence in Eating Disorders (CEED)**
  - Offer professional development and education, secondary consultation and clinical resources for public mental health services
    - www.rmh.org.au/ceed

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Questions?

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Eating disorders services for adolescents in Victoria

- Private options
  - The Oakhouse
  - St Vincent's Body Image and Eating Disorders Service
  - Melbourne Clinic
  - Mandometer Clinic
  - Geelong Clinic
  - Paediatricians, psychologists and mental health clinicians

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Royal Children's Hospital - Centre for Adolescent Health (CAH)

- Multidisciplinary assessment of eating disorders

- Tuesdays
  - Psychiatrist
  - Adolescent Paediatrician
  - Psychologists
  - Clinical Nurse Consultant
  - Dietitian
  - Research Team

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