

Eating Disorders



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Developing people

for health and

healthcare

Aims

- Diagnostic criteria for eating disorders, in particular Anorexia and Bulimia Nervosa
- Psychopathology of eating disorders
- Medical management including re-feeding syndrome

Changes in DSM V classification: 2013

- The merging of feeding and eating disorders into a single grouping with categories applicable across age groups
- Diagnosis can be made on the basis of behaviours (e.g. parental report of excessive exercise) that indicate fear of weight gain or other underlying fears or beliefs
- Broadening of the criteria for the diagnosis of anorexia nervosa and removing the requirement for amenorrhoea
- Inclusion of binge eating disorder as a specific category defined by subjective or objective binge eating in the absence of regular compensatory behaviour
- Introduction of a newer term, 'avoidant/restrictive food intake disorder' (ARFID), to classify restricted food intake in children or adults that is not accompanied by psychopathology related to body weight and shape (Bryant-Waugh 2010).

Anorexia Nervosa: ICD 10

- Weight loss or in children lack of weight gain, body weight 15% below expected BMI
- Self induced weight loss by avoiding fattening food
- Body image distortion with dread of fatness as intrusive, overvalued idea and patient imposes a low weight threshold
- Endocrine disorder involving hypothalamic-pituitary-gonadal axis: amenorrhoea, in men: loss of sexual interest. Exception: if taking the pill
- If prepupertal: delayed development

AN: characteristics

- The discrepancy between weight and perceived body image is key to the diagnosis of anorexia; anorexic patients delight in their weight loss and express a fear of gaining weight
- Have changes in hormone levels which, in females, result in amenorrhea (if the weight loss occurs before puberty begins, sexual development will be delayed and growth might cease)
- Feel driven to lose weight because they experience themselves as fat, even when at a subnormal weight
- Intensely afraid of becoming fat and preoccupied with worries about their body size and shape
- Direct all their efforts towards controlling their weight by restricting their food intake, may self induce vomiting, misuse laxatives or diuretics (purging behaviors), exercises excessively or misuse appetite suppressants

Epidemiology

- Lifetime prevalence (adolescent girls) by age 20 was 0.8% for anorexia nervosa, 2.6% for bulimia nervosa, 3.0% for binge eating disorder, 2.8% for atypical anorexia nervosa (Stice et al 2013)
- 1:200 girls at age 16
- Common age of onset at age 15 (range 9-24)
- Females ten times more often affected than males
- **Highest mortality (cardiac arrhythmias and suicide) of any adolescent psychiatric disorder and standardised mortality rate ten times of normal population**

Aetiology: 1

- Cultural factors: western culture fostering ideal of thinness and self- discontent. Tension may arise between fearing consequences of eating and easy available and appealing food
- Specific environmental risk factors: teasing about weight/shape by peers/family may moderate susceptibility; reinforcing cultural body ideals; loss of social connectivity during meal times
- Perinatal risk factors : Hx of obstetric complications
- Life events and precipitants
- Cognitive vulnerabilities: problems with decision making, rigid thought processes, difficulties with self regulatory control, enhanced skill in processing details, perfectionistic and inability to tolerate anxiety / uncertainty

Aetiology: 2

- Eating Disorders are familial
- The risk of AN among mothers and sisters of probands is estimated at 4% or about eight times the rate among the general population (Strober et al, 2000)
- A large twin registry study appears to confirm that BN and AN are related. This study found that the co-twin of a child with AN was 2.6 times more likely to have a diagnosis of BN than were co-twins of children without an Eating Disorder (Walters and Kendler, 1995)
- Twin studies confirm a genetic link. Studies of identical or monozygotic twins show concordance of up to 90% for AN and 83% for BN (Kaye et al, 2000)
- Nearly all women in Western society diet at some point in adolescence or young adulthood, yet fewer than 1% develop AN

Differential diagnoses: Medical

- Endocrine: diabetes mellitus, hyperthyroidism, glucocorticoid insufficiency
- Gastrointestinal: coeliac disease, inflammatory bowel disease, peptic ulcer
- Oncological: lymphoma, leukaemia, intracerebral tumour
- Chronic infection: tuberculosis, HIV, viral, other
- Rare -Kleine-Levin Syndrome (hyperphagia, hypersomnia, and irritability seen in adolescents with a self limiting course);
- Rare- Kluver-Bucy Syndrome (limbic system dysfunction with visual and auditory agnosia, placidity, hyperorality, hypersexuality, hyperphagia, seen in Pick's Disease, HIV Encephalopathy, Herpes Encephalitis, Brain Tumors, etc.)

Differential diagnosis: Psychiatric

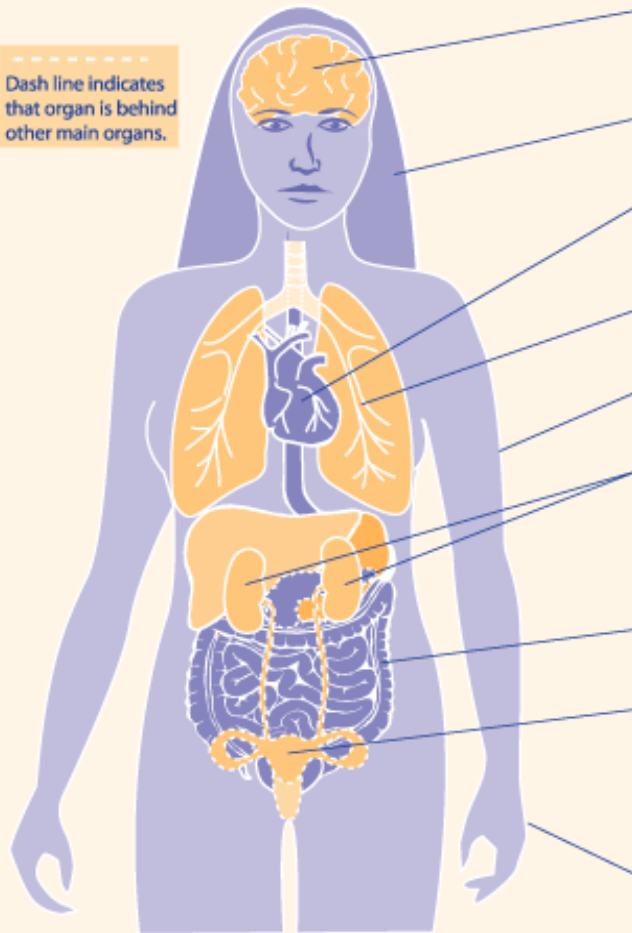
- Schizophrenia, MDD, OCD (ritualistic eating behaviors)
- The majority of patients with an eating disorder will also meet criteria for another psychiatric disorder, most commonly MDD or a PD such as EUPD
- Rates of OCD in anorexia is about 5x the general population; OCPD found in 30% of parents of anorexics

Prognosis

- Prognosis: average duration 5-6 years
- Severe illness markers:
 - long duration
 - severe weight loss
 - purging type
 - psychological problems
 - difficulty gaining weight
 - inability to restore normal weight as inpatient
 - high expressed emotions within family

Anorexia affects your whole body

Dash line indicates that organ is behind other main organs.



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

Clinical management of AN

- Comprehensive approach: dietician, paediatrician, psychiatrist, psychologist, family therapist
- Manage immediate physical risk
- Weight restoration
- Normalise eating patterns, re-establish normal perceptions of hunger and satiety, and correct the biological and psychological sequelae of malnutrition.
- Malnourished patient may have single (e.g. protein-calorie malnutrition) or multiple deficiencies
- Nutrients have highly variable stores in body and blood levels usually poor indicator of body store
- Malnourished patients have low metabolic rate which goes up quickly during re-feeding

Physical Assessment

- Weight
- Height
- Plot on centile charts
- %age weight for height or BMI centile rather than BMI
- Rapidity of change in weight – previous ht/weight
- BP and P - Lying and standing
- Physical assessment – dehydration, temp, peripheries
- Full respiratory, cardiovascular, abdominal and neurological examination
- Squat test – demonstrate and get them to copy
- Episodes of collapse/dizziness fainting/chest pain/shortness of breath/weakness – ask again
- Having periods?

What do you need to know immediately?

Physical risk

- What are they actually eating and drinking Breakfast/Lunch/Tea ?
- How long for
- Rate of weight loss
- Vomiting/pills /laxatives
- Bingeing
- Exercise
- Physical symptoms – though many deny/minimise

Psychiatric risk

- Self harm/suicidality – likely to increase as meal plan goes up
- Likely adherence to treatment
- Capacity/competence – will they agree to being refeed on the ward?

Weight for height

Date of birth:

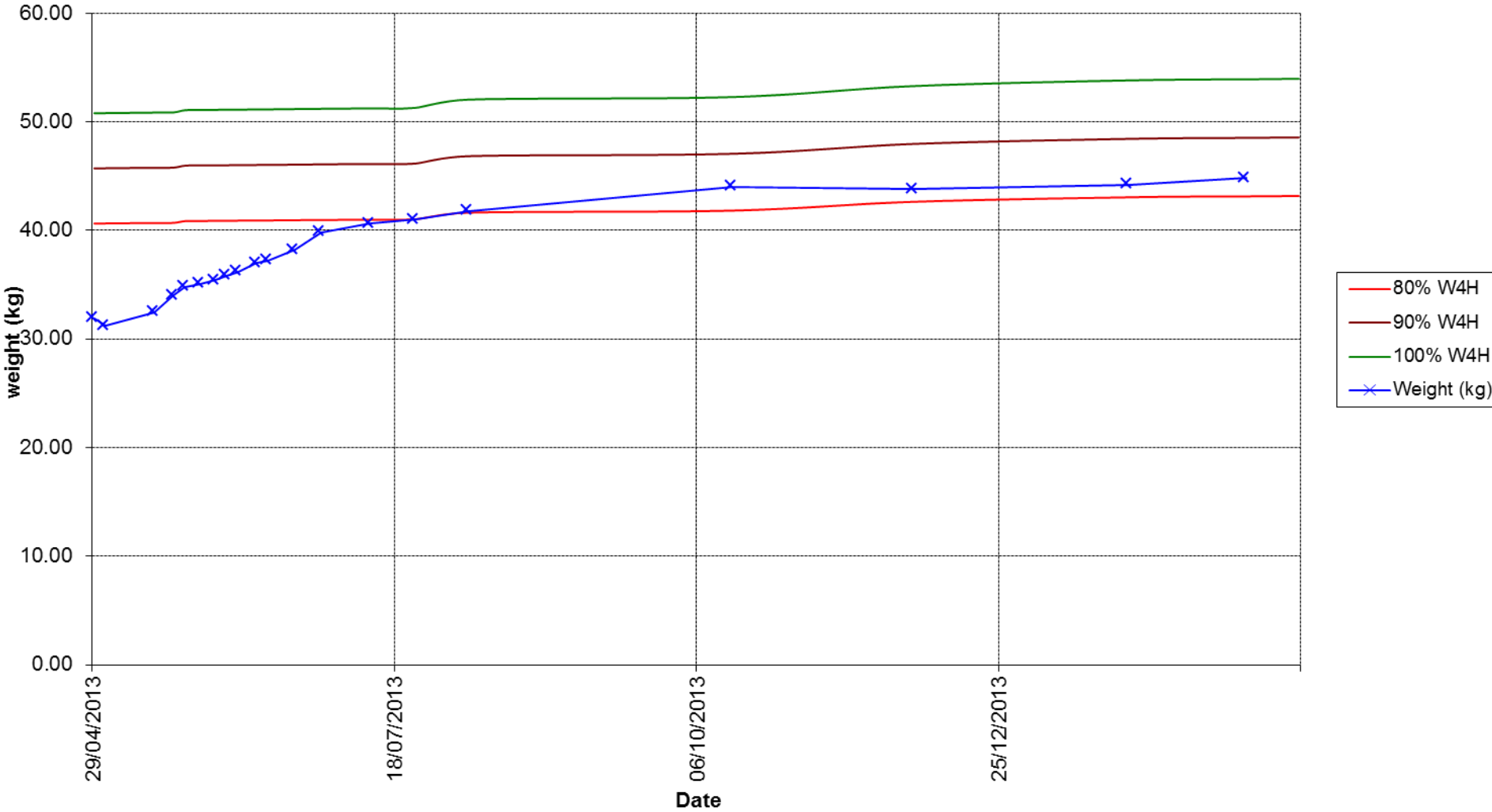
sex:

Date of visit	Weight (kg)	Height (cm)	BMI	Weight centile	Height centile	BMI centile	Weight for height
29/04/2013	31.90	159.30	12.57	0.01	31.06	0.00	62.81
02/05/2013	31.20	159.30	12.29	0.00	30.99	0.00	61.42
15/05/2013	32.45	159.30	12.79	0.01	30.68	0.00	63.82
20/05/2013	34.00	159.30	13.40	0.04	30.56	0.00	66.84
23/05/2013	34.80	159.60	13.66	0.07	32.21	0.01	68.15
27/05/2013	35.05	159.60	13.76	0.08	32.11	0.01	68.62
31/05/2013	35.40	159.60	13.90	0.10	32.02	0.01	69.28
03/06/2013	35.80	159.60	14.05	0.14	31.94	0.02	70.05
06/06/2013	36.20	159.60	14.21	0.18	31.87	0.04	70.82
11/06/2013	37.00	159.60	14.53	0.30	31.75	0.09	72.36
14/06/2013	37.20	159.60	14.60	0.33	31.68	0.12	72.73
21/06/2013	38.20	159.60	15.00	0.59	31.52	0.30	74.65
28/06/2013	39.80	159.60	15.62	1.36	31.38	1.05	77.74
11/07/2013	40.60	159.60	15.94	1.91	31.12	1.76	79.24
23/07/2013	41.00	159.60	16.10	2.21	30.88	2.20	79.95
06/08/2013	41.80	160.70	16.19	2.99	37.12	2.47	80.33
15/10/2013	44.00	160.70	17.04	5.85	35.89	6.65	84.16
02/12/2013	43.80	162.00	16.69	4.98	43.31	4.13	82.19
28/01/2014	44.20	162.50	16.74	5.18	45.80	4.07	82.14
28/02/2014	44.80	162.50	16.97	6.06	45.45	5.17	83.10

Weight against W4H ratios



Health Education England



Management of Really Sick Patients under 18 with Anorexia Nervosa

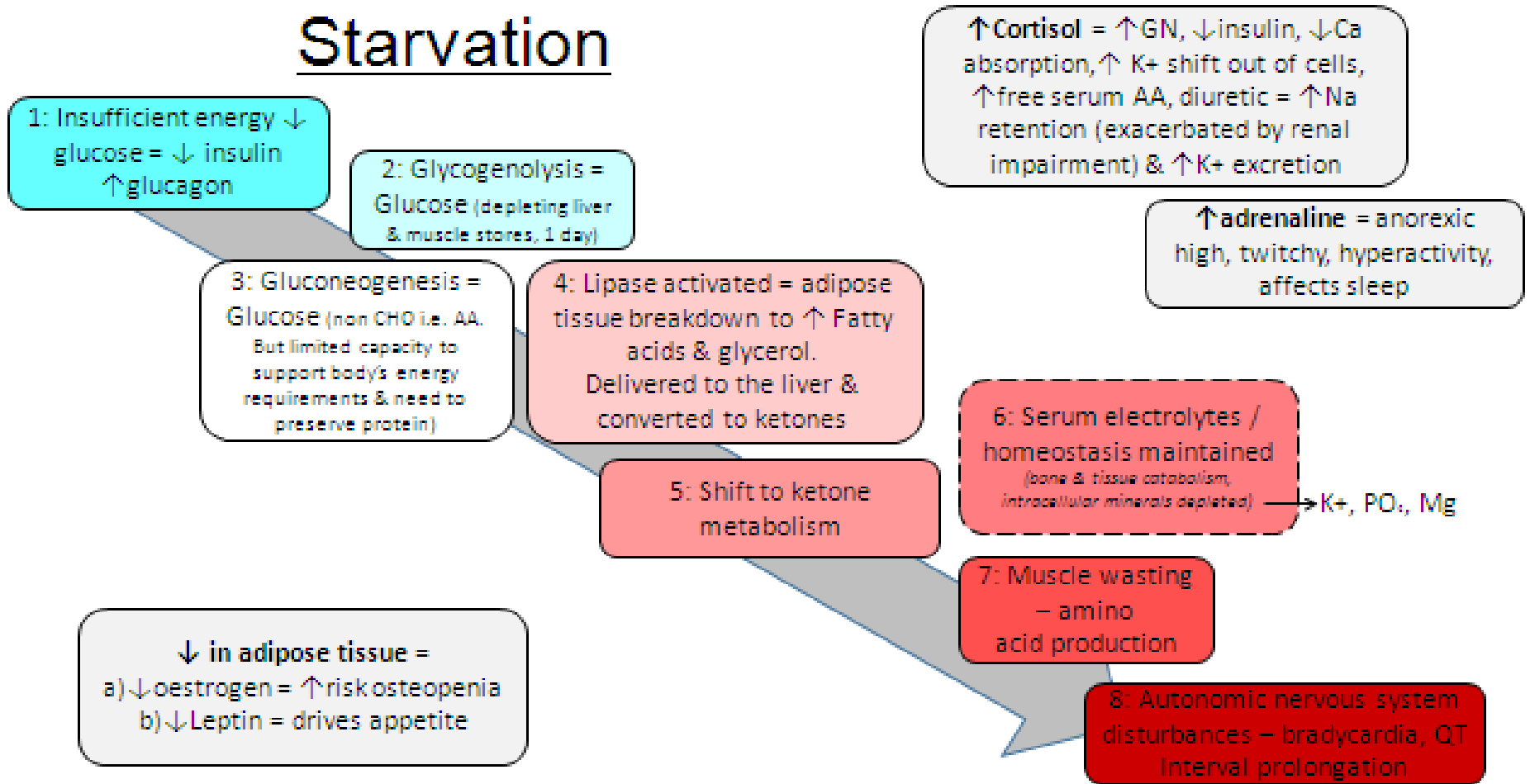
Junior Marsipan guidelines (CR168)

- Risk assessment, physical examination and associated action
- Location of care and transition between services
- Compulsory treatment
- Paediatric admission and local protocols
- Management of re-feeding
- Management of compensatory behaviours associated with an eating disorder in a paediatric setting
- Management in primary care and paediatric out-patient settings
- Discharge from paediatric settings
- Management in specialist CAMHS in-patient settings

	Red High risk	Amber Alert to High concern	Green Moderate Risk	Blue Low Risk
BMI Centile	<70 (approx below 0.4 centile)	70-80% (approx 2-0.4 BMI centile)	80-85% (approx 9-2 nd BMI centile)	>85%
Rate of weight loss	Loss 1 kg or more per week for 2 consecutive weeks	0.5-0.99kg/week for 2 consecutive weeks	Up to 0.5kg/week for 2 consecutive weeks	No Weight loss last 2 weeks
Heart rate (pulse) (Awake)	Less than 40	40-50	50-60	>60
Sitting Blood pressure		Systolic/diastolic <0.4centile	Systolic/diastolic <2nd centile	Normal centile ranges
Lying/ standing BP/P	Fall in systolic BP >20mmHg or Below 0.4- 2nd centile Increase in pulse over 30bpm	Fall in systolic BP of 15mmHg or more Fall in diastolic BP of 10mmHg Increase pulse up to 30 bpm	Pre syncopal Fainting symptoms but no postural drop	No BP/P changes
Syncopal symptoms	history of recurrent collapses/faints	Occasional collapse/faint		
Heart Rhythm	Irregular			Regular
Temperature	<35.5 C tympanic	<36 C		
Stand up from Squat	Unable to get up at all	Unable to get up without using upper limbs	Unable to get up without noticeable difficulty	Stands from squat without difficulty
	SUSS score 0	SUSS Score 1	SUSS score 2	SUSS score 3
Sit up from lying flat	Unable to sit up at all	Unable to sit up without using upper limbs	Unable to sit up without noticeable difficulty	No difficulty
Dehydration	Severe (10%) Dry mouth, sunken eyes, decreased skin turgor, tachypnoea or tachycardia(or inappropriate normal HR if underweight YP) reduced urine output	Moderate (5-10%) Dry mouth, normal skin turgor, some tachypnoea, some tachycardia Reduced urine output	Mild (<5%) May have dry mouth or not clinically dehydrated but concerns re low fluid intake	Not clinically dehydrated

	Red High risk	Amber Alert to High concern	Green Moderate Risk	Blue Low Risk
ECG	QTC>450ms with brady/tachyarrhythmia	QTC>450ms	QTC <450ms and taking meds prone to increase QTC or FHx prolonged QTC or Deafness	QTC<450ms
Biochemical	Hypophosphataemia, Hypokalaemia Hyponatremia Hypocalcaemia	Hypophosphataemia, Hypokalaemia Hyponatremia Hypocalcaemia		
Calorie intake	Acute food refusal Intake less than 600 kcal/day	Severe restriction (less than 50%required intake Vomiting Purging with laxatives	Moderate restriction Binging	
Engagement with management plan	Violent when parents try to limit behaviour/encourage intake	Poor insight into eating problems	Some insight, some motivation Ambivalent but not resisiting	Some insight, motivated
Activity and exercise	>2 hours uncontrolled exercise/day	>1 hour uncontrolled exercise/day	<1 hour uncontrolled exercise/day	No uncontrolled exercise
Self harm and suicide	Self poisoning, suicidal ideas with moderate-high risk of completed suicide	Cutting or similar. Suicidal ideas with low risk of completed suicide		
Other mental health diagnosis		Other major psychiatric diagnosiseg OCD, psychosis, depression		
Other	Confusion and delirium Acute pancreatitis Gastric or oesophageal rupture	Mallory Weiss tear Gastro oesophageal reflux/gastritis Pressure sores	Poor attention and concentration	

Starvation

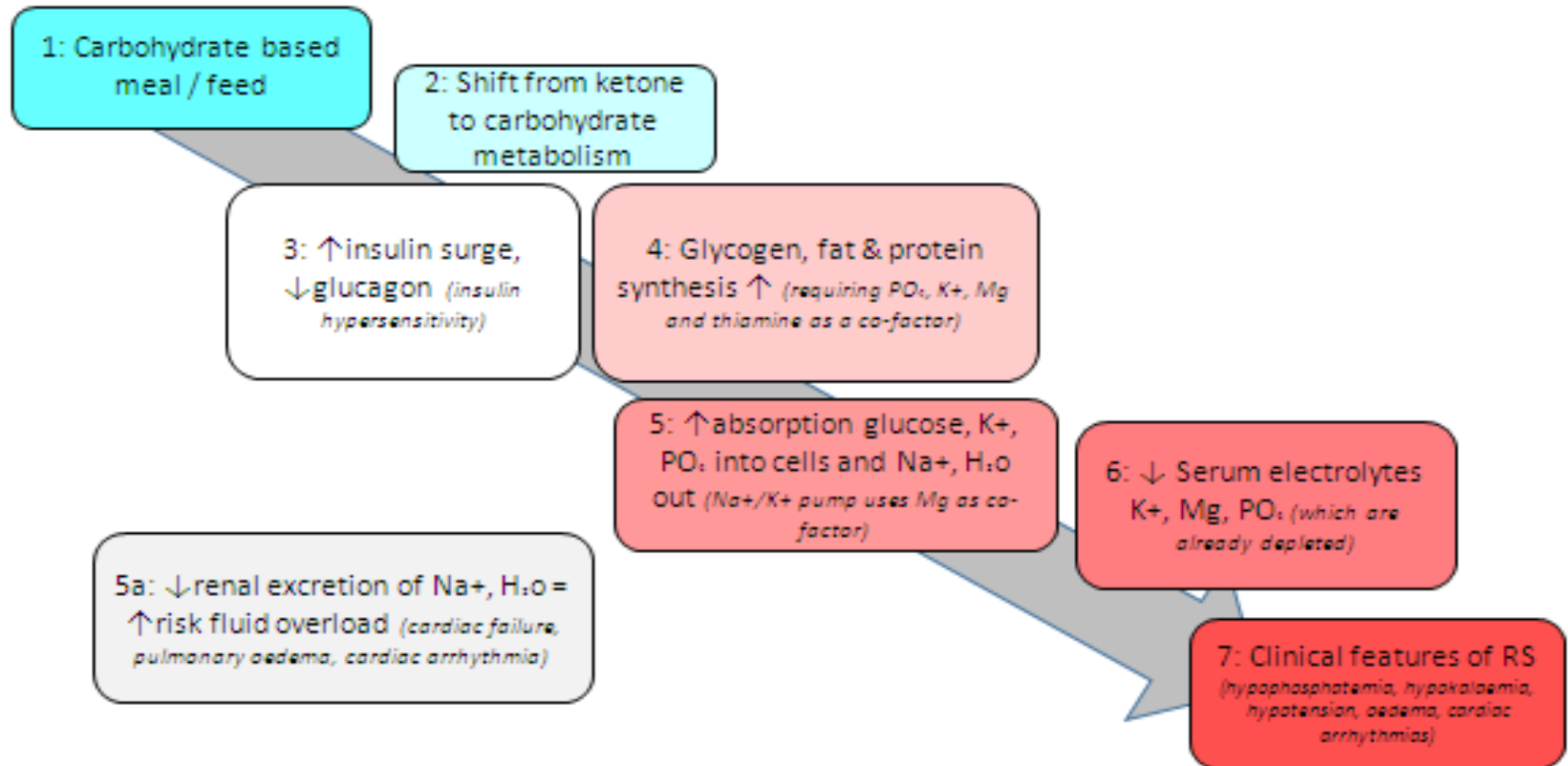


Perceived risks for refeeding syndrome

- Rate of weight loss prior to refeeding* (*Crook, Hally et al. 2001; Boateng, Sriram et al. 2010; Raj, Keane-Miller et al. 2012*)
- The extent of malnutrition* (*Ornstein, Golden et al. 2003; Raj, Keane-Miller et al. 2012*)
- Method of refeeding (*enteral* verse *Parenteral*) (*Weinsier and Krumdieck 1981; Diamanti, Basso et al. 2008*)
- Carbohydrate load (*Kohn, Madden et al. 2011; O'Connor and Goldin 2011*);
- Rate at which nutrition is introduced (*Kohn, Golden et al. 1998; Whitelaw, Gilbertson et al. 2010*)

*Jnr MARSIPAN defines this as: < 70% WfH or 70-80% WfH, or faster rates of wt loss of 500-999g for 2 consecutive weeks. Minimal or no feeding prior to admission, or commencing re-feeding – estimated intake c. 400-600kcal/day or severe restriction (less than 50% of required intake).

Refeeding Syndrome



Why admit to Paediatrics/medical wards?

High risk according to MARSIPAN

- Risky physical state
- Severe weight loss
- Rapid weight loss – beware “normal weight”
- Dehydration – restricting fluid intake
- Physical complications – electrolyte imbalances, slow heart rate, refeeding syndrome
- Refeeding admission – 2 weeks

Standard Re-feeding Plan for Patients with Anorexia Nervosa

Name:

RMC:

	Date: Day: 1-3	Ensure Plus alternative 1.5kcal/ml (not Juice variety)	Date: Day: 4-5	Ensure Plus alternative 1.5kcal/ml (not Juice variety)	Date: Day: 6-8	Ensure Plus alternative 1.5kcal/ml (not Juice variety)	Date: Day: 9-10	Ensure Plus alternative 1.5kcal/ml (not Juice variety)
Breakfast 8am	3 tablespoons cereal (or 1 weatabix) with 100mls SS milk (130kcal)	90mls	3 tablespoons cereal (or 1 weatabix) with 100mls SS milk (130kcal)	90mls	4 tablespoons cereal (or 1 ½ weatabix) with 100mls SS milk (170kcal)	110mls	5 tablespoons cereal (or 2 weatabix) with 150mls SS milk and 100mls fruit juice (not cordial) (275kcal)	180mls
Mid-Morning 10.30am	Toast x 1 With spread (150kcal)	100mls	Toast x 1 With spread (150kcal)	100mls	Toast x 1 With spread (150kcal)	100mls	Toast x 1 With spread (150kcal)	100mls
Lunch 12.30pm	½ sandwich (on plate not in pack) (150-175kcal)	100mls	½ sandwich (on plate not in pack) (225-250kcal)	150mls	½ sandwich (on plate not in pack) (225-250kcal)	150mls	Full sandwich (on plate not in pack) (300-350kcal)	230mls
Mid Afternoon 2.30pm	Yogurt (non diet) (50kcal)	40mls	Yogurt (non diet) (50kcal)	40mls	Yogurt (non diet) (50kcal)	40mls	Yogurt (non diet) (50kcal)	40mls
Evening Meal 5pm	½ full plate cooked meal. Equal portions of protein, carbohydrate, vegetables (225kcal)	150mls	½ full plate cooked meal. Equal portions of protein, carbohydrate, vegetables (225kcal)	150mls	Full plate cooked meal. Equal portions of protein, carbohydrate, vegetables (450kcal)	300mls	Full plate cooked meal. Equal portions of protein, carbohydrate, vegetables (450kcal)	300mls
Supper 7.30pm	150mls SS milk (or fruit juice, not cordial) (75kcal)	50mls	150mls SS milk (or fruit juice, not cordial) and 2 x biscuits (e.g. digestive) (225kcal)	150mls	150mls SS milk (or fruit juice, not cordial) and 2 x biscuits (e.g. digestive) (225kcal)	150mls	200mls SS milk (or fruit juice, not cordial) and 2 x biscuits (e.g. digestive) (250kcal)	150mls
	~ 750kcal		~ 1000kcal		~ 1250kcal		~ 1500kcal	

Offer the patient a drink with each meal and snack. The patient needs to drink 1500mls / day i.e. 250mls with each meal / snack

If food is offered and refused, offer Ensure plus 1.5kcal supplement as an alternative. If half or less than half of the meal or snack is eaten, offer the total volume of Ensure plus indicated for that meal or snack. If more than half portions are eaten but not all, offer half volume of Ensure plus. Do not give Ensure Plus in the bottle, please pour in to a cup.

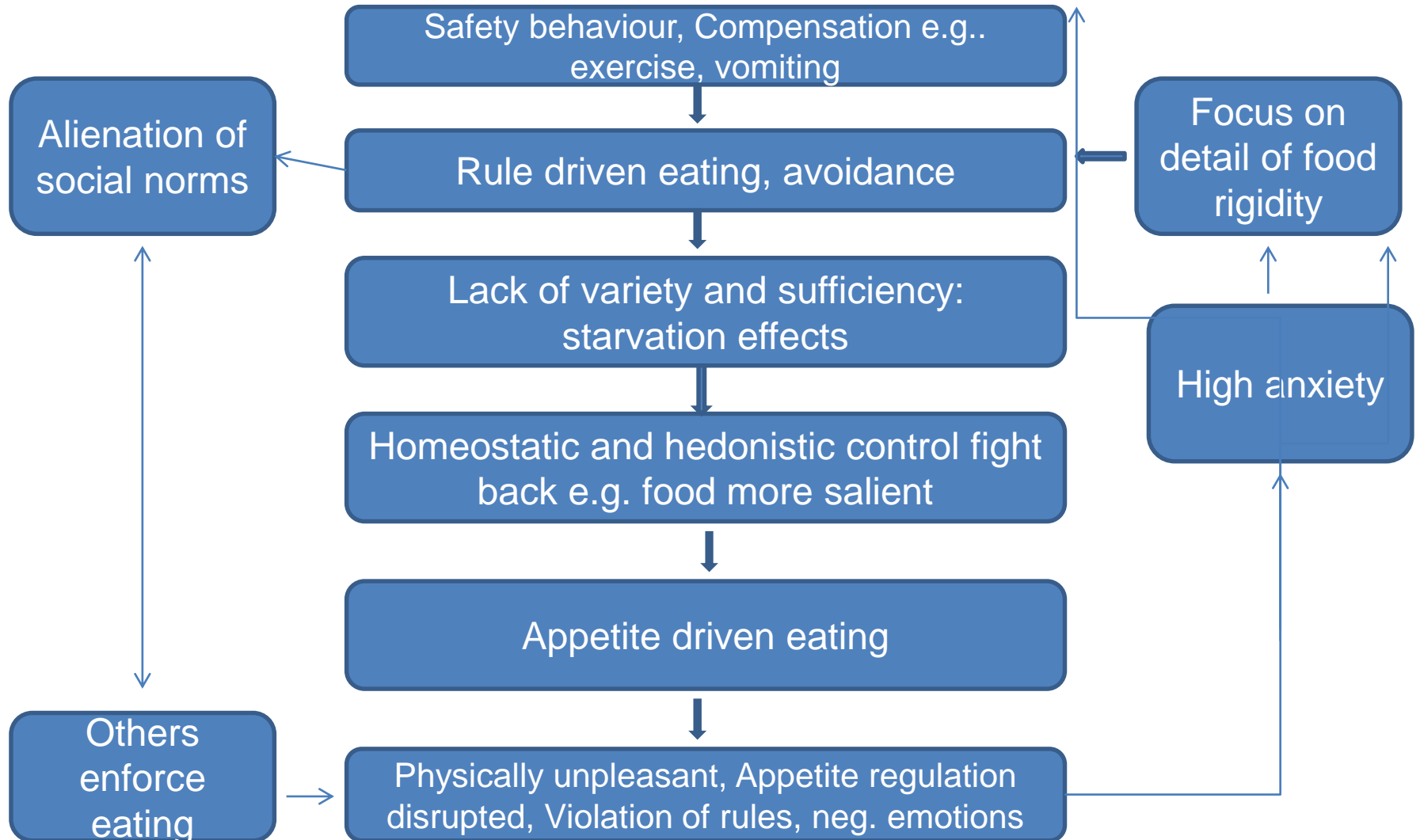
The patient can be re-fed via NGT using supplements only in the volumes indicated if required.

Minnesota Starvation Experiment (Ancel Keys)



- An experiment which ran from November 1944 until December 1945 that studied the physiologic and psychological effects of malnutrition and semi-starvation and the effectiveness of dietary rehabilitation on 36 healthy male “volunteers” (conscientious objectors from historic peace churches), as part of the American effort to re-feed populations that suffered malnutrition during the war.

Factors maintaining under-eating



Psychological therapies

- Engagement with patient and family
- Motivational interviewing-assess readiness for change
- Support Step by Step recovery: relearn how to eat sufficient, flexibly with variety, socially with food set in context of bigger picture
- Family based therapy (Maudsley / Lock models)
- Individual therapies: CBT-ED, psychodynamic psychotherapy, cognitive analytic therapy
- Manage psychiatric comorbidities

Family based therapy: 1

- Family-Based Therapy (FBT) grew out of the work of Minuchin and has been developed at the Maudsley Institute in London
- A problem-focused therapy that aims to change behavior through unified parental action.
- The family in FBT is not viewed as the cause of the disorder but rather as a positive resource in the adolescent's weight restoration and return to normal eating and health.
- FBT takes no stance on disease etiology and tries instead to separate the pathology of AN from the adolescent herself.

Family based therapy:2

- FBT focuses on family strengths
- The first phase of treatment - “Yp is too ill to make safe decisions about eating, parents are taking responsibility for this”
- The second phase begins when the child has reached 90% of ideal body weight and is eating without much resistance; at this point the parents are supported in returning the responsibility for their child’s eating back to the child.
- The final phase generally begins when the adolescent has achieved a healthy weight for age and height and focuses on the general issues of adolescent development and how the Eating Disorder affected this process.
- FBT, or the so-called “Maudsley Method,” has been shown effective in 50 – 75% of adolescents, who in randomized trials achieved weight restoration by the end of treatment and maintained it for up to five years. In one trial of adolescents with a short history of illness, the response rate reached 90% (Eisler et al, 1997).

Medication

- Evidence mainly comes from studies in adults
- The evidence for use of medication in the treatment of childhood-onset eating disorders is limited, and the evidence for effectiveness is weak across the age range:
- Atypical antipsychotics – beware cardiovascular risk. Used in high risk AN eg aggressively refusing refeeding requiring restraint
- Selective serotonin reuptake inhibitors (SSRIs) – not effective at low weight


Bulimia Nervosa

- An episode of binge-eating is characterized by both of the following: eating, in a discrete period of time, an amount of food that is definitely larger than most people would eat during a similar period of time and under similar circumstances
- 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).
- Taking extreme measures for controlling shape or weight (e.g. self-induced vomiting, misuse of laxatives or diuretics, over-exercising and intense dieting or fasting).
- Extremely concerned about their shape or weight.
- The binge eating and inappropriate compensatory behaviors both occur, on average, at least twice a week for 3 months.

BN: characteristics

- Frequent episodes of binge eating, during which they consume a large amount of food within a short period of time
- Feels overwhelmed by the urge to binge and can only stop eating once it becomes too uncomfortable to eat any more
- Feels guilty, anxious and depressed, because they have been unable to control their appetite any they fear weight gain
- Tries to regain control by getting rid of the calories consumed (the most common method is vomiting, but they might misuse laxatives, diuretics or appetite suppressants, fast or excessively exercise)

Anorexia vs. Bulimia

- Denies abnormal eating behavior
 - Introverted
 - Turns away food in order to cope
 - Preoccupation with losing more and more weight
- Recognizes abnormal eating behavior
 - Extroverted
 - Turns to food in order to cope
 - Preoccupation with attaining an “ideal” but often unrealistic weight
- 
- A solid orange horizontal bar at the bottom of the slide, with a decorative white shape on the right side.

Epidemiology

- The prevalence rate of bulimia is 3-8% in females 12 – 40 y; incidence <0.1%
- Bulimics face an increased risk of depression; anxiety disorders may also be increased
- The lifetime prevalence of substance abuse/dependence among bulimics (particularly alcohol and stimulants) is at least 30% (25% among all patients with an eating disorder)
- The diagnosis of a personality disorder among bulimics is not uncommon (especially Borderline PD)

Aetiology

- Aetiology of eating disorders in line with most other psychiatric disorders is generally considered to be multi-factorial
- If young person develops an ED will depend on individual vulnerability, consequent on the presence of biological or other predisposing factors, their exposure to particular provoking risk factors and on the operation of protective factors.
- Eating disorders form a spectrum of clinical severity in which there is a continuum of familial liability

Genetic factors

- Female relatives of those with bulimia nervosa were 3.7 times as likely to suffer with bulimia
- Fifty-four per cent to 83 per cent of the variance in liability has been thought to be due to common genetic factors (Bulik et al., 2000), but again the confidence intervals around the estimation of heritability are broad, thus the relative contribution of genetic to other factors is unclear

How bulimia affects your body

Dash line indicates that organ is behind other main organs.



Blood
anemia

Heart

irregular heart beat, heart muscle weakened, heart failure, low pulse and blood pressure

Body Fluids

dehydration, low potassium, magnesium, and sodium

Intestines

constipation, irregular bowel movements (BM), bloating, diarrhea, abdominal cramping

Hormones

irregular or absent period

Brain

depression, fear of gaining weight, anxiety, dizziness, shame, low self-esteem

Cheeks

swelling, soreness

Mouth

cavities, tooth enamel erosion, gum disease, teeth sensitive to hot and cold foods

Throat & Esophagus

sore, irritated, can tear and rupture, blood in vomit

Muscles

fatigue

Stomach

ulcers, pain, can rupture, delayed emptying

Skin

abrasion of knuckles, dry skin

Treatment

- NICE recommends stepped care approach: as first line treatment to offer an evidence based self help programme, then CBT-BN adapted to need and development, as alternative to CBT offer interpersonal psychotherapy
- Open label study, which treated adolescents for eight weeks with 60 mg of Fluoxetine per day, along with supportive psychotherapy. The study found decreases in binge and purge episodes, and 70% of subjects were rated as improved or much-improved by study's end (Kotler et al, 2003).

ARFID (Avoidant / restrictive food intake disorder)

- No weight loss or persistent low weight *when food is available* i.e. should not be diagnosed in the presence of neglect
- No disturbed thinking regarding weight and body shape/size and no desire to lose weight
- There is no underlying physical cause
- Psychosocial functioning is impaired

- Tend to be younger than those with either AN or BN, are more likely to be male, often have a longer duration of illness and a greater likelihood of comorbid medical and/or psychiatric symptoms
- Little evidence to guide clinicians treating children and adolescents with this condition
- Young people are often treated pragmatically using a combination of medical monitoring, family therapy, medication, and cognitive behavioural therapy

MCQ 1

- When a child with anorexia nervosa refuses treatment that is deemed essential what do the National Institute of Clinical Excellence recommend?
 - A. The Mental Health Act should not be used where parents give their consent
 - B. Parental consent should be relied upon in cases of persistent refusal
 - C. A second opinion from an eating disorders specialist should be considered only as a last resort
 - D. If parents also refuse the treatment, the Mental Health Act should be applied
 - E. The Children's Act should be considered under circumstances where parents also refuse treatment

MCQ 2

- What is the approximate ratio of girls to boys with a diagnosis of any Eating Disorder in the UK?
 - A. 5:1
 - B. 10:1
 - C. 15:1
 - D. 20:1
 - E. 25:1

MCQ 3

- Which of the following is true?
 - A. In children, BMI is a stable measure of severity of Anorexia Nervosa
 - B. Children with Anorexia Nervosa can present with healthy weight
 - C. NICE recommend low dose fluoxetine for the treatment of BN
 - D. During treatment patients with Anorexia nervosa should be aiming for weight gain of more than 2 kg per week
 - E. Oestrogen administration should not be used to treat bone density problems in children

MCQ 4

- What medication do NICE recommend for Bulimia Nervosa?
 - A. Fluoxetine
 - B. Olanzapine
 - C. Venlafaxine
 - D. Methylphenidate
 - E. Mirtazepine

MCQ 5

- Which of the following is not a criterion for diagnosis of Anorexia Nervosa according to ICD10?
 - A. Endocrine dysfunction
 - B. Fear of fatness
 - C. Over-exercise
 - D. Food restriction
 - E. Weight more than 15% below expected weight for age and height

MCQ 6

- All of the following are often present in both Bulimia Nervosa and Anorexia Nervosa except:
 - A. Food restriction
 - B. Self induced vomiting
 - C. Low weight
 - D. Purging
 - E. Episodes of overeating

MCQ 7

- Which of the following is a necessary early treatment for life threatening low weight in a young person with an eating disorder?
 - A. Feeding high calorie meals
 - B. Thiamine replacement
 - C. NG tube feeding
 - D. CBT
 - E. Psychotropic medication

MCQ 8

- Which of the following are features of anorexia nervosa (1 or more)?
 - A. Low FSH, LH and Oestradiol
 - B. Shortened QT
 - C. Delayed gastric emptying
 - D. Reduced Growth Hormone
 - E. Low T3, normal TSH
 - F. Normocytic, normochromic anaemia

MCQ 9

- Which of the following are true about the long term complications of Anorexia Nervosa?
 - A. Pubertal delay is common
 - B. Osteopenia and osteoporosis are less frequent in children and adolescents than in adults
 - C. Catch up growth can occur with nutritional restoration
 - D. Hormone replacement is recommended for teenagers with Anorexia
 - E. Weight gain and the establishment of healthy eating habits usually results in restoration of menstruation

MCQ 10

- Which of the following are true regarding the prognosis of Eating Disorders:
 - A. Bulimia has a worse prognosis than anorexia nervosa
 - B. Vomiting in Anorexia Nervosa is a predictor of poor prognosis
 - C. The 30 year mortality rate in women with Eating Disorders has been found to be 20%
 - D. The mortality rate for Eating Disorders is greater than for psychiatric in patients
 - E. Some bone loss experienced in Anorexia Nervosa is irreversible

Answers

1. D
2. B
3. B
4. A
5. C
6. C
7. B
8. ACEF
9. ACDE
10. BDE