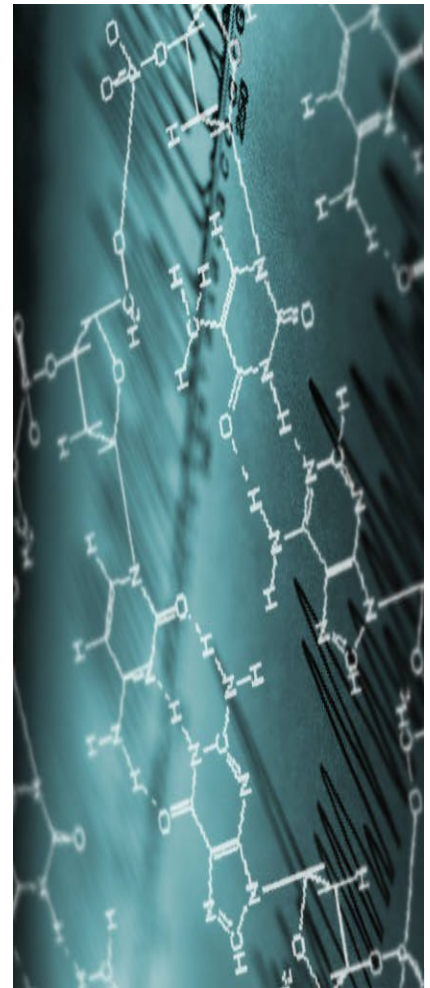




# Eating Disorders

## An Information Pack for General Practitioners

The Eating Disorders Association Resource  
Centre is funded by the Department of Health



[Early Recognition](#)

[On-going Primary Care](#)

[Referrals](#)



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The Eating Disorders in Primary Care Committee originally developed the resource and the EDA would like to continue to that the original members consisting of:

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## Queensland Eating Disorder Sector

### Community Organisations

#### ISIS - The Eating Issues Centre Inc

On-going Therapeutic Support & Groups.  
Self referral for people with eating issues.  
Ph: (07) 3844 6055  
58 Spring St, West End 4101.

### Adults

#### Public Hospital Services

##### **Eating Disorders Outreach Service**

(Need GP referral)  
(07) 3114 0809  
Rosemount, Building 14, Windsor  
Inpatient and Outpatient Services

##### **Eating Disorders Adult Service (Gold Coast)** (Need a GP referral)

Ashmore : (07) 5667 2000  
Palm Beach: (07) 5525 5661  
Inpatient and Outpatient Services

#### Private Hospital

**New Farm Clinic** Private Clinic  
22 Sargeant St, New Farm 4005  
(07) 3254 9100  
Inpatient and Outpatient Services

### Children and Young People

#### Public Hospital for under 18 's

##### **Child & Youth Mental Health Services**

For young people <18yr with eating disorders.  
Mater CYMHS: 07 3163 8188  
Gold Coast CYHMS: 07 56671714  
CYHMS, Children's Health Services for  
Brisbane Northern Suburbs & Pine Rivers:  
07 33109444  
To find your closest CYMHS call:  
07 3310 9444

#### Headspace (07) 3727 5000

Assists young people 12-25yrs who experience a mental health and/or drug & alcohol problem, including eating disorders.  
Self or family referral.

### National Services

#### **Eating Disorders HELPLINE**

1300 550 236 (Toll free)

#### **Butterfly Foundation (Sydney)**

1800 ED HOPE, 1800 33 4673

#### **National Eating Disorder Collaboration**

Www.nedc.com.au

## EATING DISORDERS ASSOCIATION RESOURCE CENTRE

Accessing community based organisations can be extremely helpful to a patient and/or their family. The Eating Disorders Association (EDA) is a not-for-profit organisation providing support, information, group work, peer support line and referrals to people with eating disorders, their friends, family, carers and health professionals in the state of Queensland.

The EDA also advocates and raises awareness about eating disorders and the issues experienced by those affected to the broader community. We aim to improve services as a means of prevention, intervention and elimination of these disorders in society.

The EDA is a free service and can be accessed by phone, email and face to face. Please contact for a range of eating disorder information packs and kits.

The EDA Facebook Page can be accessed for regular global updates on eating disorders and other related issues.

The EDA library has specialist eating disorder resources.

The EDA newsletter "Through the Looking Glass" is produced monthly covering a range of relevant recovery topics and is offered for free to all EDA members, of which there is close to 300.

Community based organisations continue to be play a vital and integral role that ensures people with eating disorders and the people who care for them, continue to have a voice in their treatment and recovery.

Eating Disorders Association

12 Chatsworth Rd, Greenslopes Qld 4120

Phone: 07 3394 3661

Fax: 073394 3663

Email: [admin@eda.org.au](mailto:admin@eda.org.au)

Web: [www.eda.org.au](http://www.eda.org.au)

Monday—Friday 9am-4pm.



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## *Role of a General Practitioner*

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Early Detection of an Eating Disorder is the best indicator of a swift and complete recovery. Many people with eating disorders and their families have been turned away from medical intervention and support because they have been told they or their child is “not sick enough”. Identifying an Eating Disorder before a patient is medically compromised and therefore incredibly important.

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### **First Presentation**

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Developing a rapport with a patient is essential to elicit quality information. A BATHE procedure was suggested as a simple way to gather information in the context of the patient’s total life situation and within the time constraints of a general practice setting.

*See Appendix D : Mental State Examination Form*

It may be necessary to organise a time for a longer consultation. Under the new Medicare Benefits Schedule there is opportunity for GPs to participate in care plans and case conferences for people with chronic conditions such as eating disorders if consent can be achieved.

*See Appendix I : Framework for Supporting People with Eating Disorders Over Time : Medicare Benefits Schedule Items*

#### **At first presentation ...**

Issues to cover in the initial interview:

1. Establish the patients expectations
2. Record identifying information
3. Elicit the patients description of presenting problem/s
4. Determine the history of the development of the problem/s
5. Assess physical state.
6. Do a preliminary nutrition and exercise assessment
7. Record comorbid psychiatric problems and treatments
8. Undertake a mental state examination
9. Make a provisional diagnosis and formulation
10. Let the patient know that you will be raising the issues again the next time you see them

### What are eating disorders?

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Eating disorders are psychological and medical disorders that involve very serious abnormalities in eating and weight control behaviours. Two of the most common eating disorders are anorexia nervosa and bulimia nervosa.

Anorexia nervosa is characterised by a refusal to maintain a minimally normal body weight.

Bulimia nervosa is characterised by repeated episodes of binge eating followed by inappropriate compensatory behaviours such as self-induced vomiting, misuse of laxatives, diuretics or other medications, fasting or excessive exercise. A disturbance in perception of body shape and weight is an essential feature of both disorders.

Eating disorder not otherwise specified is also provided to describe disorders that do not comply with the criteria applying to anorexia nervosa and bulimia nervosa and includes people who develop a Binge Eating Disorder. Please note that the DSM Version 5 due out this year, is making BED a separate disorder to EDNOS

Binge Eating Disorder is, in many ways, similar to Bulimia Nervosa in that the individual feels a sense of lack of control over their eating, but they do not engage in compensatory behaviours. Not all people with Binge Eating Disorder will be overweight. In fact, only about half will be considered overweight. It is believed that there is a higher prevalence of Binge Eating Disorder than Bulimia Nervosa, and more males will have Binge Eating Disorder than any other Eating Disorder.

### What is the morbidity and mortality rates for eating disorders?

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Eating disorders have become a major health problem in Australia. Despite low prevalence, the impact and outcome of eating disorders makes them a significant health issue. In Australia, approximately 0.5 – 1% of girls aged 12 – 19 years develop *anorexia nervosa*. Those that develop *anorexia nervosa* have a **mortality rate of almost 20% over 20 years**, which is the highest mortality rate of any medical and psychiatric disorder in adolescence. This is completely unacceptable for a disease whose sufferers have an average age at onset of 17 years.

The medical morbidity of people with eating disorders can be extremely variable – ranging from a mild single illness in adolescence to a lifelong recurrent or persistent disorder with significant mortality. Morbidity rates for anorexia nervosa and bulimia nervosa are shown on the table on the following page.

## What causes eating disorders?

Eating disorders are a complex interplay of biopsychosocial factors, including development issues, relationship and family factors, life events, biological vulnerability or genetic pre-disposition and socio-cultural influences. There is no single, easily identified cause for eating disorders. Anorexia nervosa and bulimia nervosa risk factors are usually described in terms of predisposing, precipitating and perpetuating factors. Predisposing factors refer to the individual, genetic, familial and socio-cultural influences. Typical examples include someone with perfectionistic tendencies, a high achiever, or a seemingly perfect family that never argues or societal pressures on sex-roles and appearance. Precipitating factors include development stages in life (particularly adolescence), a life crisis (such as an episode of loss or grief), an illness or personal disappointment. Factors that perpetuate an eating disorder include dietary restriction, binge eating, compensatory weight control behaviours and dysfunctional cognitive thoughts such as over concern with weight and shape and often longstanding low self esteem.

Given the high morbidity and mortality rates associated with eating disorders, general practitioners play a crucial role in recognising and responding to people with these conditions. The aim of the information pack is to assist general practitioners to detect people with eating disorders and provide appropriate management or referral to specialist services.

The pack is supported by a Quick Reference Guide to assist during consultation. This document is also available electronically from the Eating Disorders Association Resource Centre website ([www.eda.org.au](http://www.eda.org.au)).

### Eating disorders:

- affect a sizeable minority
- cause severe distress and disruption to sufferers and families
- are difficult to treat and carry high mortality
- can result in multiple medical symptomatology including physical complications such as cardiac arrhythmias, osteoporosis, infertility, and difficulties in reproduction and parenting and seriously poor psychological health

### Outcomes:

#### **For anorexia nervosa:**

around 40% of patients will make a 5-year recovery

40% will remain symptomatic but function reasonably well

20% of patients remain severely symptomatic and are chronically disabled

#### **For bulimia nervosa:**

about 50% of patients make a full recovery

about 30% make a partial recovery

20% continue to be notably symptomatic



## *A voice from someone who has lived experience of an eating disorder*

*Hi. I'm Karla. I have the privilege of being the voice for the thousands of people with eating disorders in Queensland. I hope I can deliver for them. Most people with eating disorders don't really have a voice. There are so many things they can't bring themselves to say because of the nature of the disorder.*

*It keeps us silent. It keeps us in isolation. But at the same time, we desperately want you to know more about us even though we are unable to express ourselves.*

*I grew up in a violent and abusive situation. From all the years of hostility and fighting, I learned that if I was always the "good girl" and kept quiet, did what I was told without question, I could stay out of trouble. But the price I paid was not having my own needs acknowledged. My brother and I were often force fed when we wouldn't eat our vegetables.*

*Food was used as a punishment and a reward in my house. I would often get into trouble for taking the food off my brothers plates after they had finished eating. My mother would say "don't be such a pig Karla, girls don't need to eat as much as boys". And I was much bigger than both my brothers.*

*A class experiment at 10 years old showed that I was the heaviest girl in my class at 50 kilos. I was crying to my mother that night about how I didn't want to be the fattest girl in the class. All she could say was, "Well, you are a pig with food". Then she reminded me that I could never be skinny like the other girls because I was a "big girl" with a "solid frame" and "heavy bone structure".*

*None of that sounded very good to me. I thought girls were meant to be feminine and petite. My female relatives would compliment my mother on maintaining her "girlish figure" even after all those children, then turn around and pass comment on my body, not letting me forget that I was a "big girl" with a "big build" and a "big butt". My body had let me down again, I felt.*

*At 15, I got my first full time job. I also started to binge eat. In a short space of time, I gained 10 kilos. Again the comments started coming - from home, from my boyfriend, from people at work. This time, I got angry with myself for being so out of control. I reasoned that no-one else in my family had a problem with food, why did I? I started my first diet. I was so sick of the old me, I wanted a brand new me. I wanted everything the diet promised. I was going to "show them all" that I could do it.*

*I was so good at dieting. In eight months, I lost 16 kilos and I didn't know how to stop. I became completely obsessed. Dieting and exercising were my new grown up lifestyle and they took up every ounce of my energy to maintain. In the end, I was falling asleep at work and I started fainting regularly on the bus to work, which really scared me.*

*The day I broke my diet, was the day I became bulimic. I stayed there for the next 5 years. (At least with bulimia you get to eat.) After bingeing there is a very strong compulsion to "get rid of it". I chose to vomit. It was always disgusting. After throwing up, I had immense feelings of shame and guilt. I knew that most people didn't do this, and if they knew what I was doing, they would like me less than I liked myself. After bingeing and purging, the only thing left to do is start dieting again. And so the cycle continued for me; self-loathing in full swing.*



*After bulimia, I moved straight onto binge eating disorder and stayed there for 7 years. By not vomiting the binged food back up now, I had another problem of getting fatter. This became my new weapon to beat myself up with.*

*My thought process here was "If I'm not happy, its because I'm now x kilos overweight. If I can just lose this weight then I won't have any more problems".*

*Whatever the question in my life at the time, the answer was always a diet. For me binge eating was my way of stuffing down my anger or suppressing my feelings with food.*

*There were many times over this period of 13 years of disordered eating when I felt like I was watching myself from the outside. I knew what I was doing to myself was really destructive and "not good" but I felt powerless to stop. I wanted someone to notice that I was suffering and help me get off the merry go round. I knew I didn't want to spend the rest of my life living like this - and for what? Other peoples approval? I needed help but I was so practised at not using my voice that I didn't know how to ask.*

*Over the years I tried to get help. This is what didn't work.*

*At 21 I went to a lady doctor with "strange abdominal pains" and diahorrea. (I knew it was caused by overdosing on Fibreslim). She looked me up and down and with disapproval on her face said "Are you always this thin, you're very thin you know?" Before I could give her any information, she had already judged me and found me to be lacking - and told me so. I couldn't wait to leave. There was no way I would be sharing anything with someone so judgemental.*

*At 24, I went to a local medical centre complaining of being tired all the time and having no energy. (I knew it was caused by never eating nutritious food) The lady doctor's response was "Dear, did you realise that at any one time, 50 percent of the population feels the same way you do?" (Like, get a real problem then come back and see me).*

*At 26, I told a doctor that I had an eating disorder and asked for a referral to a psychiatrist. On my first visit to the specialist, he leaned back on his chair, put his hands behind his head and with a smirk on his face said "Listen, I don't think you really have a problem, do you?" The smirk stayed for the whole visit but I certainly didn't want to. What was the point if he didn't believe me? He was patronising, judgmental and into superiority. None of these things help.*

*Look the person in the eye. People with eating disorders are perceptive and intuitive. They need to feel they can trust you. If you don't have their trust, you won't be getting much information from them. Bear in mind they already feel bad about themselves and they're mindful of "wasting your time".*

*All it's going to take will be a look of shock, disapproval or disgust from you, or a vibe or your body language that says "hurry up, get on with it" I've got real patients out there, do I have to listen to this?'*

*That's all it will take for a person with an eating disorder to sense that this isn't the right place or time, and get up and walk out and keep their disorder for another 5 years until they can again work up the courage to seek help.*

*Karla Cameron*

### Diagnostic Features (DSM – IV 4<sup>th</sup> Edition 1994)

#### **ANOREXIA NERVOSA (AN):**

- Refusal to maintain body weight at or above the minimum normal weight for age and height ( 85% of expected weight);
- Intense fear of gaining weight or becoming fat even though underweight;
- Disturbance in the way in which body weight or shape is experienced, undue influence of body weight on self-evaluation, or denial of the seriousness of the current low body weight;
- In postmenarcheal females, amenorrhoea ie. the absence of at least 3 consecutive menstrual cycles.
- Restricting type – those who restrict food intake and neither binge nor purge.
- Binge-eating/purging type – those who restrict food intake but who also regularly engage in bingeing and purging.

#### **BULIMIA NERVOSA (BN):**

- Recurrent episodes of binge eating. A binge is defined as period of time (eg. 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; plus a sense of lack of control over eating during the episode (eg. a feeling that one cannot stop eating or control what or how much one is eating);
- Recurrent inappropriate compensatory behaviours in order to prevent weight gain, such as self-induced vomiting, misuse of laxatives, diuretics, enemas, or other medications, fasting, or excessive exercise;
- The binge eating and inappropriate compensatory behaviours both occur, on average, at least twice a week for 3 months;
- Self-evaluation is unduly influenced by body shape and weight;
- The disturbance does not occur exclusively during episodes of anorexia nervosa.

#### **EATING DISORDERS NOT OTHERWISE SPECIFIED (EDNOS):**

- For females, all of the criteria for anorexia nervosa are met except that the individual has regular menses;
- All of the criteria for anorexia nervosa are met except that, despite significant weight loss, the individual's current weight is in the normal range;
- All of the criteria for bulimia nervosa are met except that the binge eating or inappropriate compensation mechanisms occur at a frequency of less than twice a week or for a duration of less than 3 months;
- The regular use of inappropriate compensatory behaviours by an individual of normal weight after eating small amounts of food (eg. self-induced vomiting after the consumption of two biscuits);
- Repeatedly chewing and spitting out, but not swallowing, large amounts of food.

#### **BINGE EATING DISORDER (BED):**

- Recurrent episodes of binge eating (as defined for bulimia nervosa);
- Binge eating is associated with three or more of the following: eating much more rapidly than normal, eating until uncomfortably full, eating large amounts of food when not feeling physically hungry, eating alone because of being embarrassed by how much one is eating, feeling disgusted with oneself, depressed or very guilty after over-eating;
- Marked distress regarding binge eating is present;
- The binge eating occurs, on average, at least 2 days a week for 6 months;
- The binge eating is not associated with the regular use of inappropriate compensatory behaviours (eg. purging, fasting, excessive exercise) and does not occur exclusively during the course of anorexia nervosa or bulimia nervosa.

## Diagnostic Issues

In its later stages *anorexia nervosa* is usually a publicly visible disease because of its obvious medical manifestations. However because it is 'ego syntonic' (accepted as part of the self) sufferers rarely see the need for treatment and therefore do not willingly seek it.

*Bulimia nervosa* is a private disease whose medical manifestations are usually hidden, but unlike *anorexia nervosa*, in the majority of cases, *bulimia nervosa* is 'ego dystonic' (not accepted as part of the self) to the patient. Hence reluctance to seek treatment is more likely due to shame and embarrassment than denial of the problem. Eating Disorders are serious psychiatric and physical disturbances and present their own diagnostic paradoxes.

- Avoid a "rule-out" approach to diagnosis. Medical examination and psychiatric assessment positively diagnose eating disorders. Using an extensive series of tests to rule out all possible medical causes of symptomatology (eg. amenorrhoea) before considering an eating disorder delays access to appropriate treatment. This increases the risk of the disorder progressing to a more severe and entrenched stage where treatment is more difficult and prognosis is poorer.
- *Anorexia nervosa* varies considerably in its severity and by the time DSM criteria are met, the concept of early intervention is a misnomer. **Recognition of the illness in its early stages of development is vital for improved outcome.**
- *Anorexia nervosa binge eating/purging subtype*, combines the medical consequences of starvation with the complications of binge behaviour and purging activities and as such, it the most severe. These patients bear the twin burdens of the physical and psychological effects of low weight as well as the effects of binges, self-induced vomiting, and laxative or diuretic abuse.
- Where an adolescent displays all the symptoms of *anorexia nervosa* but does not meet the diagnostic criteria because of insufficient weight loss or continued menstruation, assertive intervention should still be implemented. The Society for Adolescent Medicine Position Paper states that the threshold for intervention in adolescents should be lower than in adults due to the potentially irreversible effect of an eating disorder on physical and emotional growth and development in adolescents. The risk of death and the evidence suggesting improved outcome with early treatment is significant.
- *Anorexia nervosa* and *bulimia nervosa* cannot co-exist. The identifying difference between *bulimia nervosa* and *anorexia nervosa binge purge subtype* is weight  $<17.5 \text{ kg/m}^2$ . *Anorexia nervosa* takes precedence as a diagnosis as it is more difficult to treat and has more immediate and severe health consequences.
- In *bulimia nervosa*, the physical examination is usually normal; hence the diagnosis is often overlooked. Only one tenth of cases of *bulimia nervosa* in the community are ever detected and on average those who do seek help suffer with the disorder for 7.5 years before coming forward. This makes positive diagnosis in primary care vital.
- Eating Disorders, Not Otherwise Specified (EDNOS) describes a large and heterogeneous diagnostic category. The term "not otherwise specified" could be interpreted as connoting eating problems of minor clinical significance. This assumption is incorrect, since the clinical picture for many people with EDNOS can be as complicated and serious as that for people with *anorexia nervosa* or *bulimia nervosa*.

- Binge eating disorder falls within the EDNOS category and, as such, whilst not a stand alone DSM classified eating disorder, it can cause serious and long-standing problems for many people. While the terms, “binge” and “binge eating” are technical terms found in the literature on eating disorders, they also form part of the vernacular and hence the potential for confusion exists. It is important to make an objective clinical assessment of a binge, as the individual’s understanding of what constitutes a binge is highly subjective.
- People with eating disorders are shown to visit GPs more frequently than controls in the 5-year period before diagnosis is made.

## Misdiagnosis

- People with eating disorders often present to their GP with a multitude of symptoms and complaints that are directly attributable to their underlying disturbed eating behaviour. Because the behaviours may not be disclosed by the patient misdiagnoses, leading to interventions that perpetuate or exacerbate the underlying eating problems, can occur.

Common misdiagnoses include:

- Intermittent diarrhoea and constipation that is the result of laxative abuse +/- starvation being diagnosed as either lactose intolerance or irritable bowel syndrome.
- Abdominal pain.
- Hypoglycaemia
- Premenstrual syndrome
- Systemic candidiasis
- Food ‘allergies’
- Chronic fatigue syndrome.

**Professor Peter Beumont, a leading eating disorder specialist in Australia, notes: ‘Generally, clinicians should assume that anyone who is underweight or exhibits rapid weight loss has a dieting disorder unless proven otherwise.’**

People who are experiencing a major depressive episode may lose weight following the loss of appetite or motivation to eat. However, depressed people do not exhibit an excessive concern about their body shape or the caloric content of food, unless the depression is secondary to a diagnosis of an eating disorder.

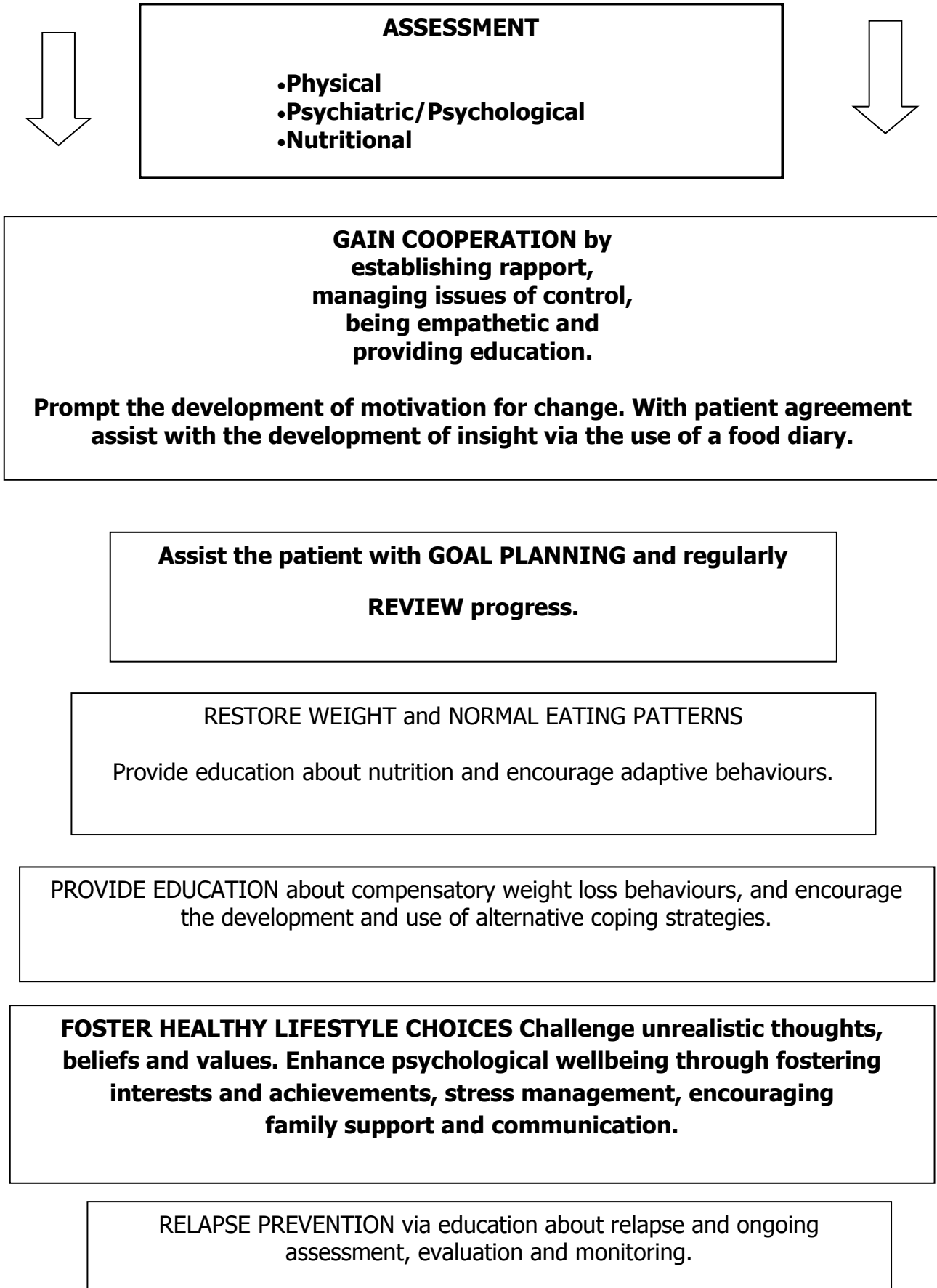
A person with anorexia nervosa does not experience a loss of appetite: rather they choose not to eat despite great hunger and desire for food, which they will frequently deny. They will be pleased about their weight loss unlike someone who is depressed. As always, a thorough psychiatric history will need to be taken prior to making a firm diagnosis.

## Differential Diagnosis

While there are many organic conditions that cause weight loss, the most common cause of substantial weight loss, in adolescent females in the developed world, is undoubtedly anorexia nervosa. The following organic causes of weight loss can present as an eating disorder. Some of these are:

- hyperthyroidism
- systemic disease – rheumatological, renal, infectious, haematological
- depression
- anxiety disorders, psychogenic vomiting
- drug abuse (eg. chronic marijuana use)
- gastrointestinal disease – including celiac disease and peptic ulceration
- lymphoma or other malignancies
- rare causes – diabetes mellitus, Addison’s disease.

It is not advisable to encourage extensive and invasive medical investigations if the patient’s symptoms can be adequately explained by the diagnosis of anorexia nervosa.



Consider eating disorders in any young adult female who presents with vague, non-specific signs and symptoms that are not easily explained. The following are examples of common presentations in primary practice.

### Physical Signs and Symptoms

**Menstrual Irregularities**, amenorrhoea, delayed menarche, difficulty falling pregnant

#### Weight Patterns

- vague psychological problems and concern about weight
- of normal weight (*bulimia nervosa*) or with recent significant weight loss (*anorexia nervosa*)
- perhaps with a history of considerable weight fluctuation
- body image disturbance or • asking for help with weight loss

#### Eating Patterns

- restrictive eating • vegetarianism • calorie counting • bingeing and/or purging

#### Excessive Exercise

- hours per day spent of exercise • feelings of guilt if not able to exercise
- activity increases not considered formal exercise eg. stop catching the bus as prefer to walk
- continues to exercise despite pain, sickness or injury

#### Drug/Self Abuse

- use of appetite suppressants, laxative or diuretics
- history of alcohol/drug abuse • other forms of self harm

#### Somatic Complaints

##### Evidence of starvation or dietary restriction

- fatigue, lethargy, cold intolerance and complaints of food intolerance or 'allergies'
- gastro-intestinal disorders, abdominal pain (physical complaints of starvation), bloating, constipation
- poor weight gain in pregnancy if applicable or seeking help to induce pregnancy
- deterioration in the texture of scalp hair, hair loss, dry or pigmented skin and cold extremities

##### Evidence of vomiting behaviour

- facial puffiness/parotid gland or submandibular gland enlargement
- hoarseness of the voice, sore throat
- irritation/cracking skin around the mouth or mouth ulcers
- acid damage to nails of fingers/callous over dorsum of the dominant hand due to self induced vomiting



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## Psycho-social Signs

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### Psychological

- having had a possible previous psychiatric referral (depression, obsessive compulsive disorder, anxiety disorder) • a family history of psychological or weight problems
- tendency to perfectionism and self-criticism • feeling out of control, helpless, lonely
- major life events/changes
- 

### Historical

- history of eating disorders, sexual abuse, depression, anxiety disorder or self harm

### Family Patterns

- Enmeshment (blurring of boundaries and personal identities within a relationships or families)
- - “perfect family” • conflict avoiding or chaotic/disengaged
- - first generation biological relative with an eating disorder

Despite the seriousness of many of the symptoms, it is common for people to deny dieting or weight loss behaviours and to down play the severity of their problem. Maintain a high index of suspicion for eating disorder in any person who is underweight, losing weight rapidly, or who presents with any of the other symptoms of *anorexia nervosa* or *bulimia nervosa*.

Frequently, it is the family of the person with a suspected eating disorder that may report key symptoms and behaviours. There often include:

- gradual changes in behaviour and appearance occurring over months or years
- a narrowing of food choices, with a preference for “diet foods”, avoidance of meat, sauce, dessert and other high-calorie food
- increasing absences from family dining, with excuses of having already eaten or the intention to eat later
- prolonged visits to the toilet that may or may not be associated with vomiting, abuse of laxative or diuretics
- excessive exercise that is solitary, done at unusual hours or for extreme duration (and is not part of a competitive sporting program) and which seems to be pursued with an obsessive determination
- gradual withdrawal from social activities, particularly involving eating or drinking, and
- for *anorexia nervosa*, persistent and noticeable weight loss which the person may or may not attempt to conceal

If a person is brought to the clinician’s attention by a parent or spouse who is concerned that their loved one has an eating disorder, it is generally the case that the relative’s assessment is correct.

**Very rarely do relatives make a mistake in the recognition of these disorders.**

## Screening

### When an eating disorder is suspected, start with questions such as:

'Many people have concerns about food and weight. Do you have any concerns or worry about these things?' or 'Many people have trouble with eating too much. Has this ever been a problem for you?'

If the person says yes, then ask more detailed questions in an empathic and non-judgmental manner.

### A further two questions have been shown to have a high sensitivity and specificity to bulimia nervosa.

These questions are not diagnostic but would indicate further questioning and discussion is required.

'Are you satisfied with your eating patterns?' ('no')

'Do you ever eat in secret?' ('yes')

Note: A 'no' for Question 1 and 'yes' for Question 2 indicates a high suspicion for bulimia nervosa and further questioning is warranted.

### SCOFF Questionnaire

The SCOFF reliably identifies people who are likely to have an eating disorder.

The SCOFF five-question screening tool:

S – Do you make yourself **S**ick because you feel uncomfortably full?

C – Do you worry you have lost **C**ontrol over how much you eat?

O – Have you recently lost more than **O**ne stone (6.35kgs) in a three-month period?

F – Do you believe yourself to be **F**at when others say you are too thin?

F – Would you say **F**ood dominates your life?

One point for every 'yes' and a score of  $\geq 2$  indicates further questioning is warranted.

### If the person raises the eating disorder problem him/herself:

- acknowledge how difficult it must have been to disclose such personal information
- acknowledge that they may feel shame and isolation over the disorder
- accept the patients' experience as they describe it
- recognise that you may be one of the first people to hear about the symptoms
- acknowledge that the symptoms may be experienced as involuntary and that there is often an enormous sense of powerlessness and hopelessness accompanying the lack of resolution of these problems.
- provide information about the negative consequences of an eating disorder and options for treatment in a non-threatening way. Encourage the patient to seek specialist help if necessary
- assure the patient that they would benefit from treatment and that support will not be withdrawn immediately after symptom resolution. That is, the person will not be abandoned (Eating and weight symptoms are just the 'tip of the iceberg')
- avoid making comments about the patients' appearance, positive or negative
- avoid power plays and aim to establish a collaborative relationship using a non-coercive approach
- let the patient know that these problems are not uncommon, other people also suffer from them and resolve them successfully, though it may take time
- encourage the person to discuss any underlying problems as well as their eating behaviour at future visits

The assessment phase is crucial to engaging the person with an eating disorder, establishing the seriousness and severity of symptoms and to highlight the type and level of intervention required. A long consultation is necessary and a further appointment should be scheduled if this is not possible at the initial presentation.

### **The essential components of the assessment phase:**

- Developing a Rapport
- Medical Assessment
- Psychiatric Assessment
- Treatment Options

## **Developing a Rapport**

It is essential to develop a collaborative approach to the issues at the outset.

Remember that in some cases, the patient has not sought help voluntarily and is likely to be defensive, evasive, resistant and even hostile. Even when the patient has initiated contact, it is likely that the eating disorder performs an important function in his/her life and ambivalence will be a critical feature of his/her willingness or ability to give it up.

Developing trust, listening to the patients story without expressing disgust or surprise, discussing treatment options in a non-threatening manner and including the patient in the decision making processes will reassure that patient that you will support them through the recovery process and beyond. Aligning yourself WITH the patient AGAINST the disorder will help to empower the patient to change. The relationship between the patient and clinician is a core factor in assisting patient recovery. Using a BATHE structure was a useful technique for a 10 minute counselling session for an eating disordered patient (See page 7).

The first few sessions are crucial for establishing an appropriate rapport and also gathering information about the severity and pattern of the person's thoughts and behaviours. After taking a psychiatric history and mental state examination, it will be helpful to initiate a discussion of eating and dieting behaviours. Approaching weight and shape issues in a sensitive way will assist in the development of a trusting relationship.

At times the patients will be secretive about various illness behaviours. Their secretiveness or guardedness may stem from a desire to keep their dieting behaviours undiscovered, or from embarrassment about specific behaviours. Inaccurate information giving may also be due to poor recall or distortions in recall. A patient who appears guarded will not necessarily have the intention of withholding information or misleading the general practitioner. It is therefore important to be accepting, non-judgemental, honest, and tolerant.

It is also important to accept as genuine the fact that some people with anorexia nervosa have a distortion in body image perception – that is, they feel fat or overweight even though everyone else considers them to be very thin.

Motivating a patient to accept, or contemplate, a different way of managing themselves is a difficult task. The establishment of a quality therapeutic relationship between a GP and their patient is an important component of treatment. All people with eating disorders will experience a range of physical and psychological problems that may cause severe distress and discomfort. Identifying these can help to establish cooperation. Such problems may include:

- severe hunger pangs and abdominal pains
- extreme but unrequited desire for food
- guilt about eating
- guilt or shame about specific dieting behaviours
- excessive fear of weight gain
- dissatisfaction with body weight or shape
- difficulty sleeping
- inability to concentrate
- increasing difficulties with study or work
- depression and possible suicidal indication
- fatigue and general loss of energy or interest
- fear about what is happening to one's body or mind
- low self esteem, and
- deteriorating social relationships

The problems listed above may be only a few of the distressing emotional and physical discomforts experienced. By acknowledging the patient's distress and by attempting to understand his/her view of the problem, an appropriate rapport with the patient may be enhanced. Pointing out that the symptoms are unpleasant but common among people who have dieting disturbances may help the patient accept that he or she has a recognised problem for which treatment is available.

At times, people with eating disorders may not associate the problems they are experiencing with their dieting behaviours. The tendency to deny symptoms may be a protective mechanism or a manifestation of neurological changes secondary to starvation. Eating disorders are experienced as effective coping mechanisms and it is wise for the general practitioner to acknowledge and respect what an important part of the patient's life the disorder has become. Reassuring the patient that there are less harmful coping mechanisms, and that as their primary clinician you will assist them to identify these, will assist in developing rapport with the patient.

Asking the right questions, in the right way, can help to develop a trusting relationship. Similarly, asking the patient about their experiences can be beneficial. For instance, asking:

- What do you see as being the major issues? (Avoid using the word 'problems' – the patient may not perceive that there are any.)
- What is your attitude toward body weight and shape?
  - How important are weight/shape to your self-evaluation?
  - What is your desired weight and what effect do you think that achieving this weight will have on your life?
  - What is the most, least you have weighed and when?
- Do you experience a feeling of fatness globally (eg. all over the body) or locally (eg. stomach, thighs)?
- How do you feel about yourself generally?
- What are the positives about the eating disorder? Are there any negatives?
- Can you describe your eating habits and/or exercise behaviours?
- Have you had a major life stress such as divorce or death of a loved one?
- Do you have any family members with depression, obesity, eating disorders, or substance abuse?

The aim of a medical assessment is to assess the degree of malnutrition and medical compromise requiring hospital admission, urgent medical attention or routine management.

The medical assessment should include:

- I. General history and physical examination
  - II. Specific signs and symptoms – physiological, psychological and behavioural manifestations as well as complications of the disorder
- I. Investigations
  - II. Nutritional assessment
    - Weight and weight history
    - Eating habits
    - Activity

### I. General History and Physical Examination

Includes:

- general state (eg. well/unwell)
- alertness/somnolence
- height and weight history
- disproportion in weight for height (>1standard deviation apart)
- menstruation pattern/menstrual history
- hydration (tongue, lips, skin, sunken eyes)
- ketones on breath
- deep, irregular, sighing, breathing seen in ketoacidosis
- temperature <36°C
- pulse rate <60 beats per min, regular or irregular
- BP – lying and standing (postural drop in BP > 20mmHg)
- limbs – peripheral circulation, cold peripheries, ankle oedema
- abdomen scaphoid
- symptoms of electrolyte disturbance (thirst, dizziness, fluid retention, swelling of arms and legs, weakness and lethargy, muscle twitches and spasms)
- alkaline urinary pH

## II. Specific Signs and Symptoms

**Starvation Effects - see Appendix J on 'The Effects of Starvation on Behaviour'.**

### **General Appearance**

- gaunt, emaciated appearance
- pale complexion due to underlying anaemia

### **Dermatological Changes**

- dry, cracking skin related to dehydration, malnutrition and loss of subcutaneous fat
- scalp hair thinned and may be dull and lustreless, brittle
- fine, downy hair (lanugo) on face, neck and trunk
- fingernails and toenails brittle
- hands and feet a dusky, bluish colour due to cyanosis
- breast tissue reduced
- yellowish discolouration in the skin (carotene pigmentation)

### **Cardiovascular Changes**

- bradycardia (heart rate <60 beats/min)
- orthostatic hypotension
- oedema
- arrhythmias which may result in palpitations

### **Gastrointestinal Changes**

- reduction in the activity of the bowel causing delays in stomach emptying (thus prolonging a sense of fullness after a meal)
- may proceed to ileus (total paralysis of bowel)
- constipation or diarrhoea
- postprandial symptoms such as abdominal pain, bloating, and early satiety

### **Endocrine Changes**

- menstrual irregularities including amenorrhoea
- hypothermia

### **Musculoskeletal Changes**

- generalised muscular weakness due to secondary destruction of muscle tissue needed for nutrients and also to electrolyte abnormalities especially hypokalaemia
- reduced stature and delayed bone maturation (in young patients)
- bone abnormalities with osteoporosis and pathological fractures

### **Behavioural changes**

- extreme preoccupation with food (spending hours planning how to deal with their day's tiny allotment of food); reading cook books, collecting recipes and cooking
- increased gum chewing, smoking and nail biting
- drinking large amounts of coffee, water, or diet drinks
- odd food combinations and heavy use of spices and condiments
- extreme dawdling over minute meals
- specific rituals attached to eating eg. eating alone or eating in the dark
- binge eating
- hoarding of food and nonfood items

### **Sleep and Libido Changes**

- marked insomnia despite feelings of tiredness and lethargy
- loss of libido; marked decrease in sexual interest and activity



### **Mood and Personality Changes**

- extreme lability of mood, with rapid changes from depression to exaltation
- irritability and rigidity
- ambivalence at times
- self mutilation/self harming behaviours in some patients
- exaggeration of premorbid personality traits such as obsessiveness, compulsivity, hypochondriasis, indecisiveness, negative self-talk

### **Cognitive Changes**

- impaired concentration and alertness
- easily distracted, apathetic, and lethargic
- intrusive thoughts of food

Note: For many patients, restrictive practices represent being in control, and the starvation-induced impairment in concentration is so distressing that they further starve to feel more in control, thus worsening cognitive symptoms

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## **Bingeing and Purging Effects**

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### **Dermatological changes**

- callus on the back of the hand from abrasion secondary to self induced vomiting
- skin around the mouth, cracked, red and irritated

### **Gastrointestinal changes**

- parotid and sub mandibular glands enlargement
- elevated levels of serum amylase
- tooth enamel erosion and dental caries
- abdominal pain, gastro oesophageal reflux
- oesophageal or gastric dilation or even rupture
- bloody diarrhea, flaccid and nonresponsive bowel in cases of chronic laxative abuse

### **Metabolic Changes**

- generalised muscular weakness (usually due to hypokalemia)
- amenorrhoea or irregular menses related to chaotic nutrient intake
- peripheral oedema
- cardiomyopathy in patients who abuse ipecac
- electrolyte abnormalities (hypokalemia, hyponatremia)
- renal damage, dehydration

Many of the signs and symptoms of *anorexia nervosa* or *bulimia nervosa* are not pathognomonic to the eating disorder but are secondary to starvation. It is well recognised that a return to normal weight (*anorexia nervosa*) and nutritional balance (*anorexia nervosa* and *bulimia nervosa*) are essential but not sufficient conditions for long-term recovery. Psychological treatments that deal with underlying issues or conflicts without addressing specific attitudes toward weight, body shape, and eating do not lead to weight gain and the resolution of starvation symptoms.

Although it has been suggested that virtually every organ system is affected by eating disorders, in practice it is important to know the most common medical consequences and complications of these disorders. Also there may be legal implications in regard to the timely recognition of medical problems and prompt treatment and referral. Two areas of interest are gastrointestinal (GI) symptoms and osteoporosis. Generally the GI consequences of uncomplicated food-restricting *anorexia nervosa* may be very uncomfortable for patients but generally improve with conservative treatment. In contrast, osteoporosis may have no subjective discomfort but may present a serious, less obvious risk. Most physical complications (apart from dental enamel erosion, osteoporosis) related to eating disorders are reversed by the restoration of normal eating habits.

### III. Investigations

Essential Monitoring (25,26,27)

Assessment	Patient Indication
<p><b>Basic analyses</b></p> <p>Blood chemistry studies            Serum electrolyte level including Magnesium and Phosphate            Blood urea nitrogen level            Creatinine level            Glucose and Cholesterol -(Note if low)            Thyroid function test            Full blood count</p>	<p><b>Consider for all patients with eating disorders</b></p>
<p><b>Additional analyses</b></p> <p>Blood chemistry studies            Ionised Calcium level            Zinc, Manganese, Iron level &amp; stores            Vitamin B12 &amp; folate            ESR            Liver function tests            Chest X-Ray            Electrocardiogram            Urinalysis            If amenorrhoea - T4, T3, TSH, FSH, LH, Oestradiol            Coeliac Antibodies            Special Investigations:            Urinary metabolic screen</p>	<p><b>Consider for malnourished and severely symptomatic patients</b></p>
<p><b>Osteopenia and osteoporosis assessments</b></p> <p>Dual-energy X-ray            Absorptiometry            Oestradiol level            Testosterone level in males</p>	<p><b>Consider for patients underweight for more than 6 months</b></p>
<p><b>Nonroutine assessments</b></p> <p>Serum amylase level</p> <p>Brain magnetic resonance imaging and computerised tomography</p> <p>Stool</p>	<p><b>Consider only for specific unusual indications</b></p> <p>Possible indicator of persistent or recurrent vomiting</p> <p>For ventricular enlargement correlated with degree of malnutrition, exclude pituitary tumour</p> <p>For blood</p>

Weekly reviews are required for:

- vital signs – temperature, pulse, blood pressure
- weight – energy expenditure dietary intake
- assessment of binge/purge severity

If deterioration in the above:

- repeat electrolytes and cardiograph
- reassess need for hospitalisation

To facilitate the continuation of care, alert specialist of admission and prepare patient and family

## Additional Points Regarding Investigations

The most important investigation in those who purge is the serum potassium, as hypokalaemia increases the potential for cardiac arrhythmias and the risk of sudden death. A low finding requires immediate correction. Low  $K^+$  ( $<3.5\text{mmols/L}$ )

Phosphate and Magnesium needs to be monitored in the malnourished patient at risk of refeeding syndrome. Appendix C outlines key issues on refeeding.

- Abnormalities in electrolytes can result from caloric restriction, bingeing, or purging. Examples include:
  - Low  $Na^+$  ( $<135\text{mmols/L}$  if drinking large volumes)
  - Elevated  $Na^+$  ( $>145\text{mmols/L}$  if dehydrated)
  - Elevated Urea and creatinine if dehydrated or if in kidney failure
  - Elevated  $HCO_3^-$  and low  $Na^+$  and  $Cl^-$  if vomiting
  - Low  $K^+$  if taking diuretics, laxatives or vomiting
  - Low  $HCO_3^-$  and  $K^+$  if taking laxatives
- It is important to note that, because of the body's adaptation to starvation, laboratory values are often normal in people even with severe eating disorders particularly where dehydration and hypovolaemia mask abnormal levels of serum electrolytes.
- Patients should be reminded that test results help indicate problems that need to be corrected expediently, and that normal results do not indicate the absence of an eating disorder or physical ill health. (Explaining this is important as it can mitigate denial of an eating disorder in the presence of test results in the normal range, a common occurrence in both patients and families.)
- No laboratory investigation will confirm diagnosis. Diagnosis of eating disorders is a clinical judgement.
- Generally, those patients with physical stigmata or abnormalities in biochemistry are in the severe group and probably have an entrenched disorder.

### 1. Weight and Weight History

Chronicity of malnutrition is related to how far weight is from the norm and how long the patient has been engaging in restrictive food and excessive exercise behaviours. The weight loss velocity will also impact on the level of malnutrition and likelihood of medical complications. If weight loss has been more than 1.0kg/week or BMI is < 15, assess for refeeding syndrome.

(See Appendix C)

Useful questions include

Has there been a recent weight loss?

What is the most ever weighed and when, the least weighed and when?

What is the patient's ideal weight?

Body Mass Index (BMI) can also be calculated for those 18+ years only (For adolescents under 18 years, paediatric tables apply):

BMI < 16	consider immediate referral to specialist
BMI < 17.5	in the presence of other diagnostic criteria indicates <i>anorexia nervosa</i>
BMI < 18	very underweight
BMI 18-20	underweight
BMI 20-25(27)	normal weight range
BMI 27-30	overweight
BMI > 30	obese

### 2. Eating Habits

Suggested questions are as follows:

- What have you eaten over the last 24 hours?
- What size portions of each item did you eat?
- Do you skip breakfast, lunch, or dinner?
- Do you avoid any 'taboo' foods?
- Are you restricting or eliminating any food groups?
- What diets have you tried? Examples may be vegetarian or low fat diet. Often misapplication of health/nutritional information eg. fat is bad and then patient eliminates all fat from their diet.
- Have you used laxatives, diuretics, caffeine or diet pills? Ascertain the frequency, duration of use, and day of last use. (Inform patients that vomiting and laxative use which result in diarrhoea counter the effectiveness of oral contraceptives and advise on an appropriate regime and precautions.)
- Have you ever 'binged', and if so, what constitutes a 'binge'?
- How much and what kinds of foods are consumed?
- Are there any triggers?
- How often do 'binges' occur?
- Do you vomit after eating?

Self-monitoring eating could be encouraged for bulimia nervosa or binge eating disorder patients as described in appendix F. This will provide useful baseline information and may enhance the patients' level of insight and understanding about the disorder, and their willingness to participate in treatment. Often the patient loses the blue print of what is normal eating (See appendix G).

### 3. Activity

The amount of exercise is often difficult to quantify. What might be a healthy exercise program in a state of adequate nutrition may be excessive if food intake is restricted. When calculating the type and amount of exercise consider also the time taken to exercise. Suggested questions are as follows:

- Do you try to control weight or shape through exercise?
- What type of exercise do you use for this purpose?
- How much, how often, what levels of competition, and how much stress do you feel if a work out is missed?

*(Extreme distress over missed exercise is a warning sign of a potential eating disorder)*

- Do you exercise alone or with others? Do they enjoy exercise or is it a chore?
- Have you changed behaviours to increase incidental exercise? That is, walk instead of drive/catch a bus? stand instead of sitting?, excessive fidgeting or movement, pacing?

If the patient is within the normal weight range and exercising excessively (i.e. more than 8 hours per week without a specific purpose, for example an elite athlete) advise a modification of exercise behaviour. Exercise should be enjoyable, varied and social.

If the patient is underweight (BMI < 17.5), purging, exercising excessively, or there is cardiovascular or electrolyte abnormalities or significant musculoskeletal overuse symptoms advise stopping all exercise. There may be protests but in many cases the person will be relieved to have an excuse to stop.

Depending upon the individual a light program of weight training and stretching may be acceptable. This should be done in consultation with an exercise specialist who has a knowledge and understanding of eating disorders. Exercise should be prohibited if BMI is <15.

$$BMI = \frac{weight[kg]}{height[m]^2}$$

It is necessary to conduct a psychiatric assessment on people with eating disorders. At the end of that assessment, you may decide to refer the patient for specialist psychiatric care, or to manage the patient yourself within a multidisciplinary framework.

### Comorbid Conditions

High rates of comorbid psychiatric illness are found in people with eating disorders seeking treatment at tertiary psychiatric treatment centres and include:

- Major depression – reported in 50%-75% of patients with *anorexia nervosa* and *bulimia nervosa* ( could be starvation effect).
- Anxiety disorders particularly social phobia –are common in AN and BN
- Substance abuse/dependence – found in 30%-37% of patients with BN 12%-18% with AN
- Obsessive and compulsive symptoms – lifetime prevalence of obsessive compulsive disorder among AN cases has been reported as high as 25%; also common among patients with BN
- Personality disorders – commonly found among patients with eating disorders, particularly *bulimia nervosa* with estimates ranging from 42%-75%

When assessing a person with an eating disorder from a psychiatric perspective, consider the starvation effects before making an additional psychiatric diagnosis. Consultation with a psychiatrist should be arranged if the psychiatric illness appears significant or is of chronic duration.

Obsessionality and depression are features of the anorexic syndrome and usually do not require or respond to specific medication. Delay using antidepressant until observing the effects of starting in treatment and regaining weight. Remember always avoid tricyclic antidepressant which are dangerous in anorexia nervosa because of their potential cardiovascular side effects. If antidepressants medication is necessary, one of the newer ones (such as SSRI or SNRI) should be used.

Depressed mood can best be assessed using a mental state exam and patient presentation and their description of their mood. The most important aspect of depression that needs to be assessed is suicidal thoughts and/or actions.

Suicide risk can be assessed using a series of questions as follows

- \* Have you thought about committing suicide?
- \* Have you made any plans to commit suicide?
- \* Do you have the means at your disposal?
- \*Have you made an attempt?

While occasional thoughts about suicide are fairly common, plans to commit suicide are to be treated seriously. If a patient has a plan to commit suicide it is important to make a verbal contract with him/her agreeing not to undertake the plan. If this is not achieved then liaising with the community mental health team will be necessary, with a view to hospital admission.

A comprehensive psychiatric assessment includes a mental state examination. A full mental state exam is beyond the scope of this package. For further information refer to the references located at the end of this resource. Appendix D identifies the key features of the mental state exam.



### Childhood and school

- \* Ask where the patient was born, who were their care providers and what was the quality of care. What was it like growing up in their family? Where there any difficulties?
- \* Determine the level of schooling and if there were any difficulties with teachers or other students.

### Family relationships

Describe names, ages, occupations of family members

Describe any important family events (eg. major relationship changes, losses and achievements or other triggers)

Establish the quality of relationship between the patient and other member of the family

Identify who in the family is aware of the eating disorder and how the family is coping

Obtain a family history of an eating disorder, affective disorder, substance abuse, anxiety or other mental illness and history of treatment

### Employment history

Age at first job

Number, duration and type of jobs

Length of employment and why

Current job and feeling about it

Long term ambitions and goals for work

### Marital and relationships history

Describe his/her current relationship and partner. Any problems should be probed, including the quality of the patient's sexual relationship. Is the partner aware of the eating disorder or not and if so, how are they dealing with it?

Describe any previous relationships- how long they lasted, why they did not work?

History of sexual abuse/assault

### Social relationships

Assess the level of support the patient has and the effect the eating disorder has had on their social relationships

### Risk-taking behaviours

Assess sexual activity and whether the patient smokes or uses drugs or alcohol. Patients with bulimia nervosa can be particularly at risk for nicotine addiction, binge drinking, sexual risk-taking, and other high-risk behaviours

### Forensic history

A history of arrest, stealing, assault or violence should be followed up. People with eating disorders are rarely violent but a history of violence may suggest a personality disorder and a potential for future violence

Appendix E provides a comprehensive checklist that could be used at consultation.

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### Changes to Better Access

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Under the changes to Better Access, the number of one-on-one sessions has been reduced to 6 up front, with a further 4 after a review, and 10 group therapy sessions instead. An additional 6 allied mental health services sessions under 'exceptional circumstances' will be offered to people who are eligible until the 31st of December 2012.

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### Options under ATAPS

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While funding has been cut from the Better Access program, the Better Outcomes in Mental Health Care program has been given funds to expand their ATAPS (Access to Allied Psychological Services) program. Under ATAPS, the person is eligible for 6 sessions, with a further 6 if necessary, and a further 6 in exceptional circumstances (up to 18). GP's can access this funding in certain circumstances, such as where a person is experiencing financial hardship and cannot afford the Medicare gap, where they are at risk of suicide or self-harm, where they are homeless or at risk of homelessness, or live in a rural or regional area, among other vulnerability factors. This funding is distributed to divisions of general practice, according to each area's need. GP's will need to 'broker' funding from their particular division of general practice – sometimes by filling in a form requesting that funding be released to the patient for their recovery, or sometimes by referring them directly to an ATAPS provider, depending on the division of general practice. People can only be referred to psychologists who have been approved for the ATAPS program in that division of general practice.

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### The Mental Health Nurse Incentive Program

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The Mental Health Nurse Incentive Program funds community based general practices, private psychiatric practices and other appropriate organisations to engage mental health nurses to assist in the provision of coordinated clinical care for people with severe and persistent mental health disorders.

Mental Health Nurses will work in collaboration with psychiatrists and general practitioners to provide services such as monitoring a patient's mental state, medication management and improving links to other health professionals and clinical service providers.

These services will be provided in a range of settings such as clinics or patient's homes and are to be provided at little or no cost to the patient.

More information on funding and criteria can be found at <http://www.health.gov.au/internet/main/publishing.nsf/Content/work-pr-mhnip>

## Medicare Benefits Schedule

### ENHANCED PRIMARY CARE PLAN AND TEAM CARE ( ITEMS 721 AND 723)

Dietician – 5 per calendar year – Allied Health Referral Form

### MENTAL HEALTH CARE PLAN ( ITEM 2710)

GP's will be required to have undertaken Level One Mental Health Training to claim this item.

6 + 6 + 6 visits per calendar year.

Review – item 2712 – after each 6 visits.

Third 6 items only available under “exceptional circumstances” until December 2012

Referral to psychologist or other registered mental health worker including social workers and can be used for focused psychological strategies and counselling including specialist Eating Disorder Treatment such as Maudsley Family Based Treatment for Adolescents, Cognitive Behaviour Therapy, Interpersonal Therapy, Motivational Interviewing, Skills training, Relaxation strategies, Psycho- education and Relapse Prevention.

SERVICES ELIGIBLE FOR “SAFETY NET” – ensure family is registered

Full schedule fee plus 80% of gaps for remainder of calendar year reduces out of pocket expenses.

The item numbers for mental health plans are -

2700	20-39 min if GP hasn't undertaken GP training
2701	>40 min if GP hasn't undertaken training
2715	20-39 min if GP has undertaken training
2717	>40 min if GP has undertaken training
2712	Review of plan

## The Brisbane MIND program for Northside GP's

The Brisbane MIND program for Northside GPs, allows GP's to refer to psychologists listed with the Northside Medicare Local at no cost to the patient so long as patients fit certain criteria - including being homeless, at risk of suicide, post partum , ATSI or UNDER 25.

For further information on this program please see

[http://www.mnbml.com.au/page/Programs/mental\\_health/](http://www.mnbml.com.au/page/Programs/mental_health/)

## Treatment Options

Assess the needs of the patient in regard to the type of service they require. Many patients will be treated in primary care. Consider management in primary care if the patient's eating habits are only moderately disordered and management with dietary education, diary keeping (containing food eaten during the day, purging, and thoughts & feelings to be discussed at follow-up sessions), & frequent follow up is possible. The treatment options to consider and discuss include:

Type of Treatment	Aims of intervention
Nutritional Rehabilitation	Restore weight (AN); reduce binge eating and purging (BN); normalise eating patterns; achieve normal perceptions of hunger and satiety; correct biological and psychological complications of malnutrition.
Psychosocial Treatments	Enhance motivation; increase self-esteem; teach assertion skills and anxiety management techniques; improve interpersonal and social functioning; treat comorbid conditions/clinical features associated with eating disorders.
Cognitive Behavioural Therapy (CBT)	Reduce binge-eating and purging behaviours(BN); improve attitudes related to eating disorders; minimise food restriction; increase variety of foods eaten; encourage healthy but not excessive exercise patterns; address, body image concerns, self-esteem; affect regulation, coping styles, and problem solving.
Family Therapy	Teach families how to ventilate emotion, set limits, resolve arguments and solve problems more effectively; increase parents' understanding of the difficulties of the affected child; avoid a view of the world where success or failure is measured in terms of weight, food and self-control.
Maudsley Method: A Family Based Approach	Considers the parents as a resource and essential in successful treatment for AN. Can mostly be construed as an intensive outpatient treatment where parents play an active and positive role in order to: Help restore their child's weight to normal levels expected given their adolescent's age and height; hand the control over eating back to the adolescent and; encourage normal adolescent development through an in-depth discussion of these crucial developmental issues as they pertain to their child. ( Referenced from <a href="http://www.maudsleyparents.org">www.maudsleyparents.org</a> )
Feminist therapies	Address role conflicts, identity confusion, sexual abuse, and other forms of victimisation in the development, maintenance, and treatment of eating disorders; emphasise the importance of women's interpersonal relationships.
Interpersonal Psychotherapy (IPT)	Help to identify and modify current interpersonal problems; identify and improve underlying difficulties for which eating disorders constitute a maladaptive solution; improve insight into interpersonal difficulties and motivation.
Group therapy/ Peer Based Support	As above for CBT, IPT and feminist therapy depending on approach taken; provide information, support and help for individuals to more effectively deal with the shame surrounding their problem, as well as provide additional peer-based feedback and support. ( Refer to <a href="http://www.eda.org.au">www.eda.org.au</a> and <a href="http://www.isis.org.au">www.isis.org.au</a> )
Self-Help and Guided Self-Help	As for CBT (BN) ie improve eating, reduce bingeing and inappropriate compensatory behaviours, reduce shape and weight concerns, and improve general psychological outlook which can be a valuable adjunct to most forms of treatment.
Medications	Treat other psychiatric problems associated with eating disorders - after weight restoration (AN), or in combination with psychological approaches (BN), such as depression.

On average, the course of eating disorders can vary from 4 years to 7.5 years, but some patients are ill for more than 20 years. *Anorexia nervosa* in particular is a potentially fatal condition with significant mortality levels and a high morbidity (Almost 20% mortality rate over 20 years)

Because of the enduring nature of many features of *anorexia nervosa* and the need for support during recovery, ongoing treatment with a range of psychotherapeutic interventions is frequently required for at least a year and may take 5-6 years. Communication among professionals is important throughout the entire course of care for each patient.

While there is a paucity of evidence based medicine about the optimal management of eating disorder problems, broad areas of agreement in treatment do exist and include the need for:

- an open, honest, and collaborative relationship
- multidisciplinary treatment, including nutritional rehabilitation and psychological change, behavioural re-learning, and occasionally individualised psychopharmacology
- the reversal of starvation symptoms as an early treatment goal
- treatment that begins with the least intrusive, least costly, but most effective form, and then moves to more intensive interventions only as warranted by the clinical situation
- psychotherapies aimed at the predisposing, precipitating, and perpetuating factors of the disorder, taking into account all the problems that the person may have
- inpatient care if necessary (admission to hospital is an important life event for any patient and should never be taken lightly) and
- psychosocial interventions chosen on the basis of a comprehensive evaluation of the individual person, considering cognitive and psychological development, psychodynamic issues, comorbid problems, individual preferences, and family or living situation.

## Stepped Care Treatment

The stepped care treatment approach involves patients with eating disorders moving from a minimal approach such as supervised self help and psycho-educational group therapy, to the specialized and intensive inpatient therapies. The patient can progress stepping up or down these levels depending on individual needs. Ideally optimal care for people with eating disorders would probably be provided by a committed general practitioner working in collaboration with a multidisciplinary team with easy access to dedicated eating disorder units providing a stepped care approach.

Unfortunately, treatment services are very limited and specialised teams are rarely available for all patients. To compensate for this lack of available specialised teams it is best to ensure that where possible professionals with as many of the required skills as possible are involved and continuous reassessment of the patients needs and responses to interventions is made.

### Stepped Care Treatment Approach

<b>Inpatient Care</b> Weight restoration Medical stabilisation
<b>Outpatient Management</b> Rehabilitation Cognitive behaviour therapy Interpersonal psychotherapy Psychodynamic psychotherapy Pharmacotherapy Day patient programs and group work Family therapy/Family skills-based group
<b>Community/Primary Care</b> Detection and assessment, supported self-help with GP, health professional, family information and support, community support group, bibliotherapy/psychoeducation and support from non-government Eating Disorders Services

## GP Rapport

Given their special skills in communicating with patients, deductive reasoning and habits of inquiry, GPs are ideally placed to recognise and respond to people affected by eating disorders. However, working with patients with eating disorders may present particular difficulties due to the:

- difficulty the GP may have in dealing with the patients' denial of illness and their reluctance for any intervention (anorexia nervosa)
  - patient being viewed as untrustworthy, obstinate, demanding, bothersome, manipulative, and likely to polarise people, both family and professionals. (All of which can produce feelings of helplessness in the middle of a power struggle)
  - fact that these patients may challenge the medical knowledge or authority of doctors
  - attitude on behalf of the GP that implies that the patient's resistance to eat could be controlled with adequate exercise of will on their part
- frustration being felt by GPs who may regard patients as imposters because they do not have a "genuine illness", deliberately harm themselves, or refuse to co-operate in treatment.

However, the scientific underpinnings of eating disorders, including brain imaging findings and genetic contributions, increasingly demonstrate that this is a real disease, and that it is clearly not “a posture of affliction by young, jaded individuals”.

Strategies for dealing with these possible problems include:

- trying to view the hesitancy of eating disorder patients to disclose their behaviours, thoughts and feelings as part of the problem of having an eating disorder.
- complimenting the courage of the patient to discuss the eating disorder, even when they only reveal a small part of it
- realising that the first contacts may be the most difficult as these patients often ‘test’ whether the clinician can be trusted
- avoiding a battle over ‘who is in control here’, which implies that one may have to accept for a while feeling helpless or manipulated
- being aware that the patient’s denial of being ill, secretiveness of eating habits and pseudo-happiness are only a camouflage for their own helplessness and lack of basic trust
- understanding that the resistance to eat is not a deliberate decision of the patient; moreover, starvation by itself leads to narrowed consciousness and cognitive dysfunction.

The development of a sound therapeutic relationship is therefore a critical aim when working with people affected by eating disorders. To further this goal:

- accept a patient’s beliefs and values as genuine for her/him
- use a collaborative, rather than a dictatorial, approach (allowing the patient to influence those goals she/he feels ready to work on)
- identify the advantages and disadvantages of change (from the patient’s point of view)
- encourage the patient to see the eating disorder as a separate entity and to focus on beating the disorder
- describe therapy/treatment as an experimental process in which various treatment strategies are explored to identify which will be most effective for him/her
- be empathetic with their struggles as the shared goal of preserving/improving his or her life can help tip the scale toward the patient’s recovery

It is important to remember that the GP is a patient-selected health care professional and as such can play a special role in being able to help the patient realise the seriousness of the problem and in enhancing motivation and/or improving readiness for specialist treatment. It may also be possible and/or desirable to directly tackle eating disorder problems in the general practice setting given that:

- the GP has special skills in differentiating somatic and psychic aspects of symptomatology
- the GP has a valuable historical knowledge of the patient and their family

There are several advantages with maintaining people with eating disorders in primary care including:

- early recognition and treatment by GPs may result in quick recovery
- the patient is treated locally and there is no delay in treatment
- it is convenient and cheaper for the patient
- it allows the patient to maintain confidentiality
- it avoids the stigma of psychiatric referral



There is limited evidence based research about psychological treatment of *anorexia nervosa*. There is a need for treatment alternatives to exist in the community as it is becoming clear that hospitalisation for *anorexia nervosa* should be avoided unless it is needed to save life. Attempts to conduct formal psychotherapy with individuals who are starving – who are often negativistic, obsessional, or mildly cognitively impaired – may often be ineffective. Therefore, it is essential to first undertake nutritional rehabilitation in order, to assist psychotherapy. Hospital inpatient and outpatient programs increasingly emphasise self-responsibility and a collaborative approach to treatment (preferable to the authoritarian treatment regimes of the past). Although there have been many different forms of treatment advocated for *anorexia nervosa*, several areas of consensus have been identified.

### **It is generally agreed that:**

- psychological treatment/psychotherapy is the treatment of choice (whether on an inpatient or outpatient basis). However, the philosophical background and treatment school of the therapist appear to be less important than his or her competence and experience in treating eating disorders
- the patient will gain little benefit from psychotherapy when body weight is very low. Therefore weight gain should be an early goal
- where appropriate, it is usually helpful to involve significant others (parents, partner) in the treatment process
- treatment must be adapted to suit the patient's needs. Family therapy and couples psychotherapy can be useful for both symptom reduction and dealing with family relationship problems
- there should be as much continuity of care as possible

### **Treatment for *anorexia nervosa* would therefore ideally involve:**

- Treatment as an outpatient with the general practitioner involved in assessment and monitoring of progress. This involves collaborative work with a team of other specialists from several disciplines such as a dietitian, psychologist and/or psychiatrist.
- Intensive outpatient programs with hospital backup or partial hospitalisation.
- Short to medium term hospital admissions (eg. 6-8 weeks) for supervised weight restoration, followed by steps above.

### **The most widely used approaches for anorexia nervosa in hospital and outpatient settings include:**

- medical and nutritional interventions
- motivational enhancement
- family therapy (for patients <18 yrs)
- psychodynamic psychotherapy
- interpersonal therapy
- psychoeducation and
- perhaps, cognitive behavioural therapy

### **Therapeutic efforts usually involve:**

- developing an open, honest and collaborative relationship
- reversing starvation symptoms and correcting the physical complications of starvation
- rehabilitating nutritionally and returning the patient to a normal weight whilst maintaining vigilance for the development of refeeding syndrome as described in Appendix C.
- engaging the patient in psychological therapies to enhance self esteem and self confidence, improve interpersonal skills, increase the person's ability to cope with life's demands, and change attitudes towards eating and body image

- identifying the effect of the eating disorder on family functioning, and the impact of family functioning on the eating disorder
- identifying and treating other psychiatric conditions where necessary
- ongoing monitoring and follow-up including psychoeducation

**Once malnutrition has been corrected and weight gain has started, psychotherapy can be helpful for patients to understand:**

- what they have been through
- what developmental, family, and cultural issues occurred before their illness
- how their illness may have been a maladaptive attempt to cope and deal with their emotions
- how to avoid or minimise risks of relapse, and
- how to better deal with such life issues in the future.

### **Special Notes**

- Patients who are restricting their food intake will often suffer from constipation. The most appropriate treatment is food. If the constipation does not respond to dietary changes a cautious and time-limited prescription of laxatives may be used and the risk of abuse considered.
- Oestrogen alone does not generally appear to reverse osteoporosis or osteopenia, and unless there is weight gain, it does not prevent further bone loss. Before offering oestrogen, efforts should first be made to increase weight and achieve resumption of normal menses. Importantly, resumption of normal menses is an important “non-weight based” goal for therapy and hence supply of the oral contraceptive pill is usually not indicated. However, recent evidence indicates a possible benefit in patients with Bulimia.

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## *Bulimia Nervosa*

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In comparison to anorexia nervosa, there is considerable evidence based research regarding the treatment of bulimia nervosa. Cognitive behavioural therapy has been shown to be the most effective approach for bulimia nervosa. There is also empirical support for the effectiveness of interpersonal psychotherapy. The most widely used approaches in hospital and out patient settings for bulimia nervosa include:

- Cognitive behavioural therapy
- Interpersonal psychotherapy
- Psychodynamic psychotherapy
- Psychoeducation
- Nutritional management
- Drug treatments if indicated

Therapeutic efforts generally focus on:

- Open, honest and collaborative relationship
- Educating the patient about the disorder
- Restoring normal eating and regular eating patterns
- Teaching skills to help the individual cope better with the circumstances that precipitate a binge
- Correcting inaccurate/distorted beliefs about eating, weight and shape
- Exploring other psychological, social and family problems
- Developing a relapse plan

For women with eating disorders who are mothers, parenting help and interventions aimed at assessing and, if necessary, aiding their children, should be included. Support groups led by professionals or by advocacy organisations are available and provide patients and their families with mutual support, advice, and education about eating disorders. See referral sections.

## Binge Eating Disorder

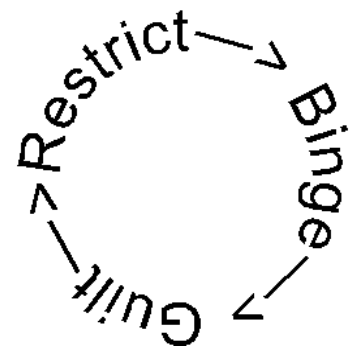
For many people, Binge Eating Disorder, also known as, Compulsive Eating, involves eating food for a variety of reasons when we aren't feeling physically hungry, consuming large amounts of food usually to the point of feeling overly full, and at a faster rate than usual. Binge Eating Disorder is similar to Bulimia except without compensation for the food after eating by purging or compulsively exercising.

Binge Eating Disorder can also be described as an out of control relationship with food, an inability stop eating when you choose, often feeling compelled to eat until you physically can't eat anymore. Negative thoughts about oneself can often follow, (I am weak, I have no willpower), and about our body, (I am fat and unattractive). This cycle of restriction, bingeing, and guilt, fuels compulsive eating behavior.

The following is a brief checklist of some common compulsive eating behaviors:

- Feel a sense of lack of control over food while you are eating?
- Eat rapidly?
- Eat until you feel uncomfortably full?
- Eat large amounts of food when you are not physically hungry?
- Eat alone out of embarrassment about what or how much you are eating?
- Feel disgusted, depressed, or very guilty after overeating?
- Plan secret over-indulgences in advance?
- Feel excited thinking about time alone with food?
- Hide the "evidence" of your binges?
- Get strong cravings for specific foods?
- Find that eating makes you feel better?
- Feel hurt and trapped when others suggest that you use a little will power?
- Eat to escape worry or trouble?

If you answered yes to three or more of the above and your binges have occurred, on average, at least two days a week for the past six months, you are eating compulsively(1) and could explore individually tailored referral options, share this information with someone you trust and together make a treatment action plan for beginning recovery.



### How Common is Binge Eating Disorder?

Binge Eating Disorder is probably the most common eating disorder. About 50% of people with this problem are above or a long way above their most healthy weight. People at their most healthy weight also can have the disorder.

### What Causes Binge Eating Disorder?

Binge eating is caused by a number of factors that often affect one another. These include physiological factors (such as our brain chemistry), social and cultural factors (including the thin body ideal), dieting, and negative mood states .

Dieting is a common cause of binge eating. Research cited by Kausman (2009) indicates that adolescent girls who diet only moderately, are 5 times more likely to develop an eating disorder than those who don't diet, and those who diet severely are 18 times more likely to develop an eating disorder. Dieting involves setting rules about what to eat and when. If those rules are occasionally broken, for example, by eating a food you are not allowed or eating more than you should, some people think that their diet is ruined. As a consequence, they eat in an out of control way and plan to start their diet again the next day.

Negative emotions are also common causes of binge eating. People often overeat as a way to make themselves feel better or to distract themselves from their problems.

When eating compulsively, it is hard to see that binge eating is serving a very useful purpose. While eating, you are able to focus solely on food. For that brief moment you don't have to worry about any feelings or experiences in life that are scary, overwhelming, or out of your control. It may feel foreign to acknowledge that the painful and frustrating relationship you have with food really is serving a purpose, however, many people with Binge Eating Disorder assert that until individuals find an alternative method of addressing life's stresses and their need for comfort, they will often come back to food.

### **What are the Treatment Options for Binge Eating Disorder?**

The EDA provides referral details of treatment options and specialists to a multidisciplinary team consisting of a GP, dietician and a therapist (counselor, psychologist, psychiatrist etc) and use resources like EDA support groups, newsletter and library books to begin the recovery journey.

#### Online Resources

<http://www.ifnotdieting.com.au>

<http://www.oabrisbane.org/>

#### Literature

*If Not Dieting, Then What?* by Dr Rick Kausman

*Feeding the Hungry Heart: The Experience of Compulsive Eating* by **Geneen Roth**.

*Fat is a Feminist Issue*. by Susie Orbach

#### References:

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Bodywise. 'Frequently Asked Questions About Compulsive Eating and Binge Eating Disorder (BED)' [accessed online 06.01.11 <http://www.stopcompulsiveeating.com/faq.php> ]

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Fairburn C. *Overcoming Binge Eating*. The Guilford Press, New York, 1995;96.

Adami G, Gandolfo P, Scopinari N. Binge Eating in Obesity. *International Journal of Obesity*; August 1996; vol. 20, (8): 793-794.

Hsu L. Can Dieting Cause an Eating Disorder? *Psychological Medicine*; 1997; vol.27: 511.

### **Criteria for immediate specialised medical intervention**

- Rapid or consistent weight loss
- Marked orthostatic hypotension with an increase in pulse of >20bpm or a
- Drop in blood pressure of >20mmHg/min standing
- Bradycardia below 40bpm
- Tachycardia over 100bpm or
- Inability to sustain body core temperature ie. <36°C
- Electrolyte imbalance (Potassium, Phosphate, Magnesium)

### **Referral to inpatient care would also be considered for:**

- Severe relapse in a patient who had previously recovered or
- Decline in weight despite intensive outpatient interventions or treatment in the community
- Severe, persistent and disabling cycle of bingeing and vomiting (anorexia and bulimia nervosa)
- Evidence of rapid or persistent decline in oral intake
- Indications of extreme family distress
- Comorbid psychiatric problems that require hospital care
- Severe concurrent alcohol or drug abuse
- Severe depression, with or without suicidal ideation
- Suicidal behaviour
  
- Special considerations :
- Diabetes (where the risk of blindness and kidney damage is increased)
- Pregnancy after 24 weeks

On rare occasions legal interventions, including involuntary hospitalisation, may be necessary to ensure the safety of treatment-reluctant individuals whose general medical conditions are life threatening. However, the general principle, and practice, in most specialist eating disorder treatment facilities is, if at all possible, to enable the person to take control of their own eating and to take responsibility for maintaining a reasonable healthy weight.

## Treatment Components

Diagnosis	Nutritional rehabilitation	Psychosocial interventions	Medications
Anorexia Nervosa	Nutritional rehabilitation and weight restoration Resumption of normal eating behaviours, eating meals, reducing binge eating, purging and dietary restriction and increasing food variety Consider hospital-based program for those who are markedly underweight or for children and adolescents	Any individual or group psychotherapy that incorporates an understanding of: psychodynamic issues, cognitive development, psychological defenses, family relationships, other psychiatric disorders Family therapy for children and adolescents Marital counseling if necessary Support groups beneficial as adjuncts to other psychosocial treatment	Psychotropic medications should not be used as the sole or primary treatment Should not be used routinely during the weight restoration period The role of antidepressants is best assessed after weight gain, when the psychological effects of malnutrition are resolving Consider (if normal weight) to prevent relapse or to treat depression or obsessive-compulsive problems
Bulimia Nervosa	Most are normal weight so nutritional restoration not a central focus of treatment Nutritional counselling useful for minimising food restriction, increasing the variety of foods eaten, and encouraging healthy but not excessive exercise patterns	Cognitive behavioural therapy is the treatment of choice with the most evidence of efficacy Interpersonal psychotherapy also effective Psychodynamic and psychoanalytic approaches useful once bingeing and purging are improving Group therapy may help deal with shame surrounding ED as well as provide peer support Marriage/Family therapy if appropriate	A combination of psychosocial interventions and medications must be considered Antidepressants can be effective as one component of a treatment program; SSRIs are safest Avoid prescribing tricyclics to patients who may be suicidal and MAOIs to patients who chronically binge eat and purge
Eating Disorder Not Otherwise Specified	A heterogeneous group of patients, mainly subsyndromal cases of anorexia nervosa or bulimia nervosa. In general, the nature and intensity of treatment depends on the symptom profile and severity of impairment, not the diagnosis		
Binge Eating Disorder	Therapies using a non-diet approach focusing on normal nutrition and health, increased physical movement, and not on weight loss	Cognitive behavioural therapy, behaviour therapy, and interpersonal therapy associated with binge reductions and abstinence during active treatment Follow up is important Self-help programs using self-guided professionally designed manuals may also be effective in reducing symptoms Aim to improve self acceptance and body image	Antidepressants have been used but studies generally report very high placebo responses rates In addition, patients tend to relapse after medication is discontinued

The basic tasks for primary care professionals working with people with eating disorders include:

### 1. Early detection & establishment of seriousness of the condition

- If the patient raises the possibility of an eating disorder, acknowledge the difficulty they may have felt disclosing the problem and ask in an empathic manner about more specific topics, level of symptoms and the person's own understanding of the issue
- If you suspect an eating disorder, a non-judgemental confrontation, in the context of understanding the patient's extreme fears losing control, feelings of shame and embarrassment and other relevant dynamics, may be needed
- An empathic and informed response is critical to the treatment alliance and outcome
- Use the SCOFF questionnaire (p15) 'You may not think that you have anorexia nervosa, but your score indicates you have a high risk for anorexia nervosa'. Further assessment is necessary to establish a diagnosis

### 2. Undertake an assessment and provide regular medical monitoring of physical status

- Psychiatric/psychological and medical assessment and monitoring should include electrolytes, laxative use, hydration and cardiac function
- Give brief information about the physical effects of starvation, particularly regarding loss of muscle mass, fertility, osteoporosis, and growth retardation (many girls do not realise that they will not only be slimmer but also shorter)
- Provide a basic explanation of the consequences of self-starvation
- Undertake simple nutritional counselling (+/- dietitian)
- Correct deficiencies (commonly including Fe<sup>++</sup>, K<sup>+</sup>, Mg<sup>++</sup>, Ca<sup>++</sup>, Zn<sup>++</sup> & vitamins)
- Vaccination for influenza and pneumonia
- Dental care (important medically and psychologically)

### 3. Treat uncomplicated cases in primary care if possible

- An initial agreement to stop losing weight and to achieve a stable low weight rather than introducing the idea of weight gain may be more beneficial at an early stage
- Provide supportive counselling with discussion of adolescent or interpersonal concerns
- Facilitate the education, support and involvement of the family
- Attempt abbreviated forms of specialised treatment (for bulimia nervosa) if possible
- Consider referral to psychologist and/or psychiatrist
- Consider pharmacotherapy if indicated

### 4. Decide if and when hospitalisation is necessary

- Be aware of local network of specialists and service providers
- Be familiar with the indications for inpatient care and medical emergencies. Most medical problems can be anticipated and prevented rather than dealt with on an emergent basis

### 5. Provide primary care support of outpatient specialist treatment

- Consolidation, interpretation and regular review are important
- Maintain regular communication with others involved in care of the patient
- Consider the possibility of shared care where appropriate
- Follow up after inpatient care is critical and should include regular monitoring of physical status
- When chronic or recurring problems exist, one role may be to provide a line of continuity between various medical and psychiatric services
- Use of enhanced primary care items can improve access to treatment (see schedule)



## 6. Serve as a support and health educator for the patient and family.

- Discuss with the family the possibility that the disorder will run a chronic course. It is essential that they are realistic in their perception of treatment goals and that they try to maintain a tolerant, supportive approach when relapses occur. Appropriate topics for discussion include general health, nutrition, fertility, and the need or desirability of medication if applicable. Survival suggestions for families and recommended reading are outlined in Appendix B.
- Underlying all educational efforts should be the thought that the condition, though dangerous, is reversible with appropriate treatment and with a lot of hard work and support
- Discuss with the parents the importance of maintaining their child's safety, despite entreaties by the child that they will best recover by being left alone
- Educational intervention and support can be augmented with referral to consumer organisations such as the Eating Disorders Association of Queensland as outlined on page 50

## 7. Prevention/Health Promotion

- The role in secondary prevention strategies, such as the early identification of sufferers, is very important because early identification & intervention improve outcomes by reducing morbidity & severity of illness
- GPs are in an ideal position to increase public awareness about the risks of restrictive dieting promoting healthier attitudes towards weight and shape, and providing sound nutritional advice in waiting rooms and surgeries

## 8. Management of chronic patients

- See Managing Chronicity.

### GP Role:

- Detection and diagnosis
- Monitoring of physical health
- Treatment (both pharmacological and non-pharmacological)
- Acting as case manager where appropriate or secondary referral
- Continuity of Care for the patient and family and carers where possible
- Collaborating with self-help groups and community agencies
- Managing chronic patients

Most people with an eating disorder have some understanding of the consequences of their actions but feel unable to prevent themselves from carrying them out.

One expert has described eating disorders as analogous to the process of getting into a canoe some distance above Niagara Falls and then proceeding downstream. Initially the behaviour of the individual in the canoe is voluntary, but after a time (variable), it clearly is no longer voluntary. This analogy suggests, also, that additional, later, secondary, supplemental mechanisms may be associated with perpetuating the behaviour and should be examined separately from the primary instrumental, voluntary causal mechanism.

An eating disorders can therefore be seen to begin by normal voluntary dieting behaviour but change into a behavioural disorder when it is no longer under personal control and/or has significant adverse psychological, social and physical consequences.

It is therefore important to remember that patients:

- may not realise they have a problem in the beginning of an eating disorder
- may feel quite well because their dieting behaviour is 'successful' and seems to be the 'solution' for other problems they are facing
- are usually not willing to see a doctor because they don't see themselves as being ill
- may feel ashamed to reveal their eating and slimming behaviour; for most patients with eating disorders it is very difficult to tell their doctor directly about their eating behaviour
- may fear they have to give up their way of weight loss, and hence will become fat
- are afraid to be sent to a hospital or to be labelled as mentally ill and admitted to a psychiatric hospital, and
- may hide their 'real' problem by only mentioning secondary complaints (such as menstrual irregularities, loss of hair, fatigue, weakness and dizziness, dental problems, abdominal pain and constipation); but many, especially those with bulimia nervosa, hope that their doctor will ask more questions about their eating problems

### Working with the patient

- A diagnostic label may not always be helpful initially, as many patients and families carry misconceptions about eating disorders.
- Once an eating disorder has been diagnosed, medical visits should focus mainly on identifying health risks posed by the unhealthy behaviours and creating a treatment plan to work with the patient towards health.
- Denial can be addressed gradually if the patient's medical status is stable. If the patient continues to deny having a problem, use the patient's signs and symptoms to emphasise that he or she suffers from a defined illness that is treatable but, if left untreated, has potentially life-threatening complications, including risk of sudden cardiac death.
- Acknowledging the patient's distress over body image conveys empathy for the dilemma: dissatisfaction with her body versus the need for better nutrition.
- Try to establish an alliance with the patient to work towards health; health professionals rarely win power struggles with patients with an eating disorder.
- Discuss hospitalisation criteria, and reiterate the long-term goals, including preventing osteoporosis, preserving fertility, and eventually leading a normal life.

Eating disorders impose substantial burdens on families. Although most carers are supportive of loved one's recovery, some carers avoid recognising that there is any problem and may have difficulties in accepting the seriousness of an eating disorder. Many parents also struggle with the belief that they have themselves caused the illness and need help overcoming their guilt so that they can face their children's needs.

Although the individual experiences symptoms of eating disorders, the effects of these disorders go far beyond that of the sufferer's own life. Relatives and friends can be drawn into a painful downward spiral, some more than others. Many relatives and friends who know of a loved one with an eating disorder struggle with a range of emotions:

**Anger** – one of the main emotions that carers experience is anger. The anger can be directed at the person with the eating disorder. It could be directed at themselves for their inability to fix the problem. At times, they may feel angry with the health professionals for not helping the individual to recover earlier.

**Distress** – relatives and friends often experience a deep concern for the person with the eating disorder as they watch her/him go down a road of self-destruction. They also feel distressed for not knowing how to help.

**Guilt** – many carers also experience guilt, wondering what they have done to contribute to the problem. The guilt is further accentuated when well meaning friends and neighbours begin to imply that they must have done something wrong to bring this eating disorder about.

**Fear** – there is also fear of losing the sufferer altogether, as the disorder takes over more and more of the person's life.

**Mistrust** – of all of the above, mistrust may be the most damaging effect the disorder has on relationships. The person with an eating disorder may have lied repeatedly to cover up her/his habit. Relatives and friends may have felt compelled to spy or catch her/him red-handed or tried to out-smart them. This leads to mistrust and resentment from both sides.

### Working with the Family

- Be aware of the effects, both long and short term, an eating disorder can have on a family
- Recognise the paralysing guilt, fear, and distress that can result
- Act as a resource, of both information about eating disorders (important to dispel the many myths that exist around these disorders) and emotional support during difficult times
- Provide information about support groups, for both the sufferer and those caring for them
- Discuss the availability of treatment options and the suitability of different therapeutic approaches
- Follow up with both the family and the person affected. Both may need support for a considerable period of time

When an eating disorder has become established for a few years it appears to become almost self-perpetuating. Many reasons may account for this and probably different combinations of several factors apply in each case:

- the body adapts to a starvation state
- there is increasing obsessionality and intrusive thinking that accompanies starvation
- as body weight decreases the body image disturbance becomes more powerful
- some people may become addicted to the positive feelings of starvation and have marked dysphoric feelings when they eat
- as the disorder progresses behavioural and personal changes occur within the family which may reward and perpetuate the disorder

The person with anorexia nervosa or bulimia nervosa, or binge eating disorder, often wants to get better/get rid of the problem/get back to having a normal life. However, the insidious and insistent nature of eating disorders can also produce a deep and often difficult to deal with reluctance to breaking the cycle.

This means the person with the eating disorder is often as angry and annoyed with herself or himself as are those around her or him. On top of this the person also feels guilt and shame at their inability to overcome, or even want to overcome, the problem.

Like those around them, the patient often does not understand why they should want to hold on to something that is so problematic for them. And yet they cannot stop. It is important to understand that this situation is a result of the complex physiological, psychological and behavioural effects of the disorder and not a personal deficit on behalf of the patient.

Managing these types of patients in primary care is similar to managing any chronic illness in that:  
Knowledge that the professional 'cares' and 'understands' underpins management  
Rapport building and forging therapeutic alliance underpins the consultation

After physical examination and basic investigations, the GP role revolves around maintaining the patients physical status as well as making decisions about when and whom to refer to

Small progressive gains and fewer relapses may be the goal of interventions with those with chronic eating disorders. More frequent contact and other support may sometimes help prevent further hospitalisations. Expectations for weight gain with hospitalisation may be more modest for those with longstanding anorexia nervosa.

Despite their low weight many appear able to maintain jobs and some sort of lifestyle outside hospital. They experience feelings of ambivalence towards change. This can be intensely frustrating for the GP involved. It is however, also very disabling and frustrating for the individual involved.

Management, therefore, should be aimed at enabling them to:

- maintain a maximum tolerable weight
- deal with stresses without resorting to further weight loss, and
- focus on quality of life issues, rather than change in weight or normalisation of eating

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## Referrals

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There are a few absolutes as to when referral is appropriate in eating disorders, but people with anorexia nervosa should almost always have a specialist opinion. This should be contemplated even in those individuals whose weight loss is not yet marked. For those with bulimia nervosa, binge eating disorder or EDNOS, the need for referral will depend on the experience, skill and interest of the GP, the availability of specialist services (usually outpatient/community), and the severity of the problems.

- To assist health professionals in the management of people affected by eating disorders in either public or private setting contact: The Eating Disorders Outreach Service on 07 3114 0809
- To assist health professionals in the management of Children and Adolescence affected by eating disorders contact: The Child Youth and Mental Health Service (CHYMS) on 1800177279 (for local number)
- To assist health professionals in the management of young adults 12-25years, affected by eating disorders contact: Headspace [www.headspace.org.au](http://www.headspace.org.au) (for your local number)

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### Outpatient/Community Care

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Outpatient care or management in the community is appropriate for individuals with:

- motivation to participate in treatment
- support system/family
- brief symptom duration
- weight no less than 20% below healthy body weight

Remember, people affected by eating disorders may deny they have a problem, may minimize the eating disorder symptoms, may be reluctant to be treated, and may drop out of contact with health professionals. This makes establishing a strong therapeutic alliance, undertaking adequate assessment, making accurate and timely referral, and pursuing optimal treatment programs for these patients when they do present

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### For Referral to a Specialist Contact the Eating Disorders Association on 07 33943661

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Deciding when and where to refer could simply depend on the time, interest and level of expertise of the general practitioner. In some areas it may depend on the level of specialist services available and geographical and financial access to these services. There are also the family considerations, motivation of the patient and/or comorbid issues including the physical and mental state of the patient.

Referral to a specialist service may be appropriate where:

- self-help or first-line treatments seem to be failing
- weight loss and dehydration persist despite treatment
- disturbed eating behaviour is becoming entrenched or increasingly out of control
- there is evidence or suspicion of concurrent psychiatric disturbance, such as depression, obsessive-compulsive disorder or personality disorder
- family dysfunction or distress is evident
- clarification of diagnosis or treatment advice are needed
- there are other complicating factors such as pregnancy or diabetes

Eating Disorder Association  
07 3394 3661  
[admin@eda.org.au](mailto:admin@eda.org.au)  
[www.eda.org.au](http://www.eda.org.au)

1. Recent, specific training and experience in treating people with eating disorders.
2. Willingness to discuss professional qualifications and management approach.
3. At least rudimentary and regular evaluation of the person's physical condition, nutritional habits, psychological problems and strengths, and social situation (family, school, employment).
4. Basic nutritional counseling designed to restore healthy eating habits and maintain a body weight that is normal for that person.
5. Cognitive behavioral therapy and/or interpersonal psychotherapy that, at a minimum, address starving, bingeing and vomiting patterns, concern about body weight and shape, the urge to diet, problem-solving, and problematic relationships, both within and outside the family.
6. Some form of individual and group therapy that helps the person develop interpersonal skills, new coping strategies and broader, more sustaining interests.
7. The opportunity to participate in or referral to a support group as a useful adjunct to therapy.
8. Where it has been deemed appropriate and necessary by a careful psychiatric evaluation, judicious use of medication.
9. Some form of education, support, and/or therapy that helps family and friends understand and assist in the processes of recovery and future development.
10. Willingness of the treatment professionals to collaborate with the general practitioner, school staff, family, friends, and the person with the eating disorder in designing a comprehensive program including aftercare.

**For Recommended Reading for Family and Friends contact the EDA**

The Eating Disorder Association has a specialist library for people with eating disorders and their families. Please refer to the Eating for the most current recommended readings for all people affected by Eating Disorders.

EDA 07 3394 3661  
admin@eda.org.au  
Www.eda.org.au

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## Appendix B: Survival Suggestions for Families

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- Do realise there is no quick and easy solution.
- Do show a united front with other carers.
- Do inform yourself about the disorders and their treatment.
- Do understand that your relative may be ambivalent about getting well, and takes comfort in the control and rituals of the disorder.
- Do encourage the person to get an assessment from a practitioner experienced in eating disorders. In the case of a child, insist on an assessment.
- Do seek life saving treatment for anyone who is acutely in danger.
- Do allow the person with the eating disorder to be in charge of his or her routines of daily life.
- Do encourage decision making and being responsible for those decisions, at a level appropriate to the persons age.
- Do attend support groups, they can help.
- Do maintain the relationship with your child or friend as normally as possible, don't let it become all about whether or not they have eaten or lost weight.
- Do express honest love, by physical and verbal expression.
- Do examine your feelings and thoughts about *anorexia* and *bulimia nervosa*, and your own body image or fear of fat issues.
- Do make time for yourself, spouse, friends, and other family members. Remember to provide for yourself with rest, freedom from worry, and fun.
- Do get help for yourself. The disorder disrupts the family too, & families needs help coping with it.
- Do remember to do fun things with the person with the eating disorder.
- Don't force anyone to eat. In cases of children and young adolescents adults should be in charge. Use firmness and confidence, but not force. Consult a treatment team for advice.
- Don't spend an unusual amount of time trying to persuade someone to eat, or going out of your way to arrange special foods or meals.
- Don't make your love or approval a condition of the individual's appearance, health, weight, achievement, or any other attribute.
- Don't assume the person knows what they need or how you can help, but it doesn't hurt to ask.
- Don't comment - positively or negatively - on appearance or weight.
- Don't impose rules except those which are necessary for the individual's or the family's safety and well-being, and avoid power struggles.
- Don't dwell on feelings of guilt or expect yourself to be a perfect parent



Refeeding syndrome describes an imbalance of electrolytes and fluid shifts that can occur when refeeding an anorexic patient. A number of fatalities have been noted due to over-zealous feeding and not immediately correcting abnormal electrolyte and/or hydration. Refeeding syndrome occurs because of the significant losses of phosphate, potassium, magnesium and zinc from lean body mass during weight loss.

On refeeding, phosphate, potassium, magnesium and zinc are incorporated into rebuilding lean body mass. There is an exceptionally high demand for phosphate to make ATP, phospholipids, glycogen and synthesis of protein. Phosphate levels can significantly plummet on refeeding, which can lead to cardiac and respiratory failure, usually in the first week of refeeding. Low levels of magnesium, potassium and zinc can also have fatal implications.

### **Patients at risk of refeeding syndrome may have:**

- A BMI less than 13
- Lost weight very rapidly
- Low prealbumin levels
- Abnormal cardiac presentation
- Abnormal electrolytes: electrolyte and hydration levels should be reviewed before refeeding. Monitor: zinc, phosphate, potassium, magnesium

### **Caveats:**

- Correct any abnormalities immediately. Hospitalisation for refeeding is strongly recommended if phosphate is low.
- Do not hydrate/supplement with dextrose solutions.
- Prophylactically supplement with multivitamin, phosphate ( for first 2 weeks at least) and thiamine (first week)
- Monitor electrolyte routinely in the initial period of refeeding. Monitor pulse rate and ECG. If there is a prolonged QTc interval, consider hospitalisation.
- Increase nutrient delivery slowly.
- Promote nutrient increase from protein and fat
- Do not promote a high carbohydrate diet i.e. sports drinks, glucose/cordial drinks if the diet is missing other macronutrients.

Source: Ms Alison Wakefield Dietitian Royal Prince Alfred Hospital Central Sydney Area Health Service.

	<b>APPEARANCE AND BEHAVIOUR</b> Physical Appearance:  Reaction to Situation:
	<b>SPEECH</b> Rate, volume and quantity of information:
	<b>MOOD AND AFFECT</b> Mood:  Affect:
	<b>FORM OF THOUGHT</b> Amount and rate of thought:  Continuity of ideas:
	<b>PERCEPTION</b> Hallucinations:  Other disturbances:
	<b>SENSORIUM AND COGNITION</b> Level of consciousness:  Memory:  Orientation:  Concentration:  Abstract thoughts:
	<b>INSIGHT</b>

Source: Treatment Protocol Project (1997) Management of Mental Disorders World Health Organisation Collaborating Centre for Mental Health and Substance Abuse, Darlinghurst, NSW Australian 2010.

*Appendix E : Identifying Information*

Name:			
Age:			
DOB:			
Sex			
Permanent Address:			
Home Phone:			
Work Address:			
Work Phone:			
Parents/ Other Contact Address:			
Phone:			
Religion:			
Residence:			
Referred by:			
Marital Status:			
Education:			
Current: Occupation:			
Language spoken:			
Ethnic Background:	Primary: (years)	Secondary:	Tertiary:

*Identifying Information Continued*

<b>Presenting Problem:</b> Patient's own account of the problem:		
What patient would like to change during the course of treatment:		
<b>History of Presenting Problems:</b>		
<b>Onset:</b>		
<b>Course:</b>		
<b>Timeline and Duration of various problems:</b>		
<b>Weight History</b>		
Weight: (Current)		BMI:
Height: (Current)		
Lowest weight as an adult:		Year:
Highest weight as an adult:		Year:
Regular weight as an adult:		Year:
Ideal weight:		
<b>Dieting Behaviours:</b>		
<b>Bingeing:</b>		
<b>Laxatives:</b>		
<b>Vomiting:</b>		
<b>Exercise:</b>		
<b>Diet Pills &amp; Diuretics:</b>		
<b>Other Compensatory measures:</b>		

<p>Source: Beumont, P.V.J., Marks, P., (Eds) 2000, The NSW Eating and Dieting Disorder Shared Care Project 'Curriculum – Diploma in Shared Care Psychiatry (Eating and Dieting Disorders)', The University of Sydney, Department of Psychological Medicine, Sydney, NSW, Australia, 2006.</p>	<p><b>Example of a typical eating day:</b></p> <p>Breakfast:</p> <p>Lunch:</p> <p>Dinner:</p> <p>Snacks:</p>
	<p><b>Menstruation Current:</b></p>
	<p><b>Menstrual History:</b></p>
	<p><b>Weight and Shape Concerns:</b></p>
	<p><b>Self Esteem:</b></p>
	<p><b>Drug, Alcohol, Cigarette use:</b></p>
	<p><b>Present Psychiatric Treatment and Medication:</b></p>
	<p><b>Past Psychiatric Treatment and Medication:</b></p>
	<p><b>Previous Psychiatric Problem:</b></p>
	<p><b>Current General Medical Problems:</b></p>
	<p><b>History of General Medical Problem:</b></p>
	<p><b>Personal and Social History:</b></p> <p><b>Employment:</b></p> <p><b>Childhood &amp; School:</b></p> <p><b>Family relationships:</b></p>

## Appendix F: Self - Monitoring for Bulimia Nervosa or Binge Eating Disorder Only

Having the patient monitor their eating habits helps develop insight into their behaviours and triggers that may have caused them. Keeping a record can be very revealing and it is essential to ensure the patients' willingness to undertake this exercise otherwise it would be futile. Keeping a record might seem both tedious and pointless for the patient. However, for the patient to begin to change it is necessary the they become aware of exactly what is happening with their eating and it will soon become apparent that the record is an invaluable aid in this process.

### Guide for monitoring

Use a standard form

Use a separate sheet for each day

Record everything you eat and do not abandon monitoring when your eating goes wrong

Write down what you have eaten immediately after having done so, rather than trying to remember everything at the end of the day.

### Key questions to ask after a week of monitoring

Are there particular times when binges seem more likely to occur?

Are there particular situations which tend to trigger binges?

Are there times when eating is relatively easy to control?

What types of food have you been eating during binges?

Are these food different from the types you eat at other times?

Are there long periods of time when you eat nothing at all?

Are these periods often followed by binges?

Are days of strict dieting often followed by days when you binge?

These questions, continually reviewed, will provide a clearer understanding of the nature of the eating problem which is crucial to further attempts to stop binge-eating and restore eating habits to 'normal'. **Source:** Bulimia Nervosa and Binge-Eating. A Guide to Recovery. Peter J. Cooper (2000)

<b>TIME</b>	<b>FOOD + DRINK (Quantity)</b>	<b>Place</b>	<b>Binge</b>	<b>Compensation Vomiting, laxatives or diuretics</b>	<b>Context of Overeating What happened during the day? Mood? Food related thoughts?</b>

<b>FOR BULIMIA NERVOSA, BINGE EATING DISORDER AND LATER STAGE ANOREXIA NERVOSA</b>	
<b>AIM</b>	<b>To stop dieting and 'normalise' eating. That is, to be able to eat a wide variety of food in moderate amounts and in a relaxed and flexible manner.</b>
	Avoid weighing yourself.
	Plan to eat 3 meals + 2 - 3 snacks/day.
	It is important to go no longer than 3 - 4 hours without eating.
	Plan your next meal or snack (when and what it will be).
	Aim to eat balanced main meals with a combination of protein foods (such as meat, fish, poultry, cheese, eggs, pulses), starch (potato, rice, pasta, pastry, bread) and vegetables/fruit.
	Choose to serve yourself meals that you would be happy to serve to others (with respect to the type and quantity of food).
	Before you start eating your meal or snack plan what you are going to do after eating.
	When possible, sit down and eat in a relaxed atmosphere.
	Remember in the early stages, even if you're not hungry doesn't mean your body doesn't need food - you need to eat regular meals and snacks for a few weeks or months before your body will send out normal signals.

Source: Department of Nutrition and Dietetics, Royal Prince Alfred Hospital



**Fruit and Vegetables**

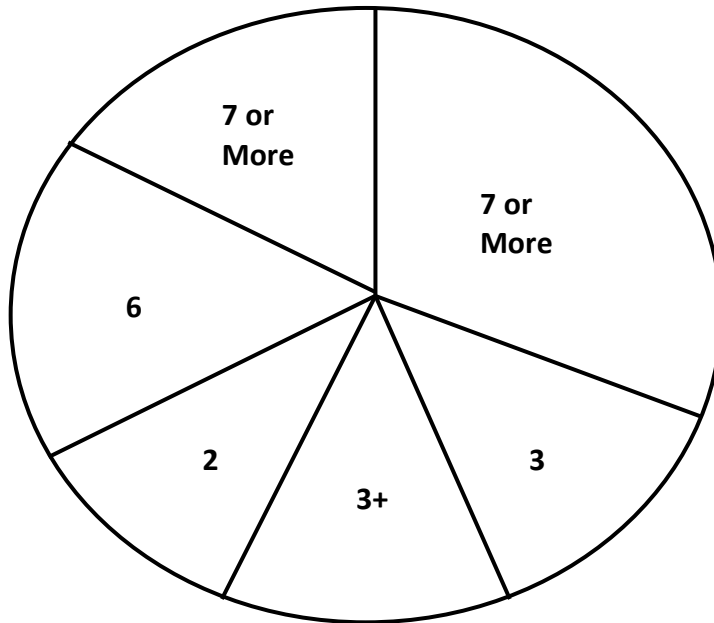
Aim for 7 per day

**Bread, cereals and potato**

Use these foods at each meal time and each snack. 7 per day.

**Fluid**

Aim for at least 6 cups per day. More if you are active or the weather is hot.



**Milk, cheese, yoghurt.**

Aim for 3 serves

**Meat, poultry, fish, nuts, beans, eggs.** Aim for an average serve at lunch and dinner. One should include an iron containing protein. Aim for 2 serves a day.

**Food containing fat or sugar.**

Aim for 3 serves per day

### NUTRITION AND RECOVERY

The establishment of a regular, structured eating pattern that provides adequate nutrition is an important part of achieving nutritional rehabilitation and recovery from an eating disorder. However, for sustainability of recovery in the long term it is fundamental to develop a positive relationship with food. This involves the ability to eat a wider variety of foods, to eat in social situations, and to have flexibility in food choices incorporated into the eating plan. With this in mind, the process of RAVES provides a format for how to develop an eating pattern that helps support a sustainable recovery. So what is RAVES? RAVES is an acronym that highlights the key aspects of nutritional recovery and the process for working through them, and is as follows:

#### Regularity, Adequacy, Variety, Eating Socially, Spontaneity (RAVES)

Regularity is the foundation of a structured eating pattern as it lays the base on which the other aspects of having a positive relationship with food are built. A regular eating pattern will consist of eating every three hours or so, and include three main meals and two to three snacks (Breakfast, Morning Tea, Lunch, Afternoon Tea, Dinner and Supper). Adopting and maintaining a regular eating pattern will assist in providing structure to your daily routine

minimizing grazing and preventing bingeing

improving your metabolism and your body's ability to 'burn' food

strengthening your digestive muscles and improving bowel regularity

maintaining stable blood sugar levels throughout the day and evening

developing regular hunger and satiety signals that coincide with meal/snack times

providing an opportunity to spread your nutrition through the day so that you are able to eat an amount of food to meet your nutritional requirements

Once regularity has been established, the next nutritional goal is adequacy.

Adequacy means getting enough food and nutrition to meet your nutritional requirements and achieve medical stabilization, nutritional rehabilitation, and an appropriate goal weight range. Achieving nutritional adequacy consists of including all food groups in your eating pattern in a way that provides adequate protein, carbohydrate and fat to support nutritional balance and ongoing good nutrition. This will usually mean increasing the amount of food eaten across the three main meals and snacks, and will form the basis for long term weight maintenance and health in recovery.

Variety is important because it plays an important role in the development of a positive relationship with food and lays the foundation for more social eating. It is possible to reach your goal weight by eating the same foods each day, or by using nutritional supplements or nasogastric feeding, but the key to sustainability is in having a variety of food that you feel safe with. Having variety in the foods you eat makes food interesting, stimulates the taste buds, allows for eating opportunities with family and friends, and so really helps in the development of a positive relationship with food. Variety also helps challenge the notion of good and bad foods as it provides an opportunity for you to trust many different foods and is the stepping stone to further social eating opportunities with family and friends.

Eating Socially and the ability to eat with others is an important part of working towards, and maintaining recovery. As the ability to eat in social situations develops further, opportunities exist to develop social networks that help distract from the eating disorder thoughts. This is because your mind is often more engaged in conversations with those around you rather than the eating disorder thoughts. Social eating is also an important part of recovery as it supports eating with family members, eating in the workplace or school, and eating with friends.

Spontaneity is important in nutritional recovery because it allows your relationship with food to be more natural. Spontaneity means eating foods that you have not planned for or doing things unexpectedly. For example if you plan to have a specific meal for dinner and you get invited out for dinner, you can make the decision to go out for dinner even though that is not what was planned. What spontaneity brings to the eating pattern is a greater ability to be socially integrated from a food perspective and a greater ability to respond to unforeseen situations, which help in sustaining recovery for the long term.

It must be remembered that these five aspects of RAVES can't be put in place all at once, and that the process of developing your eating pattern will take time, courage, trust and lots of ups and downs. However by gradually developing your eating pattern using the principles of RAVES, you are laying the foundation for developing a more positive relationship with food. Remember you can definitely take steps towards establishing a quality of life consistent with your individual values and a greater level independence through improved nutrition.

Thanks to Dietitian Shane Jeffery for this article

*Appendix H : Treatment Recommendations for Osteoporosis in Anorexia Nervosa*

Drs Lucy Serpell and Janet Treasure, of the Institute of Psychiatry, London, suggest the following steps for managing osteoporosis in patients with chronic anorexia nervosa:

<b>Patient Characteristics</b>	<b>Comment</b>	<b>Recommendations</b>
Children with premenarchal onset of <i>anorexia nervosa</i>	Risk of stunting and irreversible osteoporosis in this group; thus, oestrogen is not recommended for it may cause premature fusion of bones and exacerbate stunting.	Concentrate on good nutrition and weight gain.
Women with <i>anorexia nervosa</i> for less than 3 years	This group has a good prognosis.	Oestrogen replacement not indicated. Consider increasing calcium supplements and weight gain.
Women with <i>anorexia nervosa</i> for 3-10 years	Intermediate prognosis; depends on other factors, such as comorbidity.	Consider increasing dietary calcium and calcium supplements.
Women with <i>anorexia nervosa</i> for >10 years	This group has a poor prognosis and is likely to remain chronically ill.	Oestrogen replacement may be appropriate.
Men with <i>anorexia nervosa</i>	Little knowledge about risk, but reduced testosterone/low dietary calcium may be important.	Appropriate treatment is unclear, further research is needed.

**(Eur. Eat. Dis. Rev. September 1997)**

**Reprinted from Tami Lyon Eating Disorders Review 1998.**

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## **Changes to Better Access**

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Under the changes to Better Access, the number of one-on-one sessions has been reduced to 6 up front, with a further 4 after a review, and 10 group therapy sessions instead. An additional 6 allied mental health services sessions under 'exceptional circumstances' will be offered to people who are eligible until the 31st of December 2012.

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## **Options under ATAPS**

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While funding has been cut from the Better Access program, the Better Outcomes in Mental Health Care program has been given funds to expand their ATAPS (Access to Allied Psychological Services) program. Under ATAPS, the person is eligible for 6 sessions, with a further 6 if necessary, and a further 6 in exceptional circumstances (up to 18). GP's can access this funding in certain circumstances, such as where a person is experiencing financial hardship and cannot afford the Medicare gap, where they are at risk of suicide or self-harm, where they are homeless or at risk of homelessness, or live in a rural or regional area, among other vulnerability factors. This funding is distributed to divisions of general practice, according to each area's need. GP's will need to 'broker' funding from their particular division of general practice – sometimes by filling in a form requesting that funding be released to the patient for their recovery, or sometimes by referring them directly to an ATAPS provider, depending on the division of general practice. People can only be referred to psychologists who have been approved for the ATAPS program in that division of general practice.

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## **The Mental Health Nurse Incentive Program**

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The Mental Health Nurse Incentive Program funds community based general practices, private psychiatric practices and other appropriate organisations to engage mental health nurses to assist in the provision of coordinated clinical care for people with severe and persistent mental health disorders.

Mental Health Nurses will work in collaboration with psychiatrists and general practitioners to provide services such as monitoring a patient's mental state, medication management and improving links to other health professionals and clinical service providers.

These services will be provided in a range of settings such as clinics or patient's homes and are to be provided at little or no cost to the patient.

More information on funding and criteria can be found at <http://www.health.gov.au/internet/main/publishing.nsf/Content/work-pr-mhnip>

### ENHANCED PRIMARY CARE PLAN AND TEAM CARE ( ITEMS 721 AND 723)

Dietician – 5 per calendar year – Allied Health Referral Form

### MENTAL HEALTH CARE PLAN ( ITEM 2710)

GP's will be required to have undertaken Level One Mental Health Training to claim this item.

6 + 6 + 6 visits per calendar year.

Review – item 2712 – after each 6 visits.

Third 6 items only available under “exceptional circumstances” until December 2012

Referral to psychologist or other registered mental health worker including social workers and can be used for focused psychological strategies and counselling including specialist Eating Disorder Treatment such as Maudsley Family Based Treatment for Adolescents, Cognitive Behaviour Therapy, Interpersonal Therapy, Motivational Interviewing, Skills training, Relaxation strategies, Psycho- education and Relapse Prevention.

SERVICES ELIGIBLE FOR “SAFETY NET” – ensure family is registered

Full schedule fee plus 80% of gaps for remainder of calendar year reduces out of pocket expenses.

The item numbers for mental health plans are -

2700	20-39 min if GP hasn't undertaken GP training
2701	>40 min if GP hasn't undertaken training
2715	20-39 min if GP has undertaken training
2717	>40 min if GP has undertaken training
2712	Review of plan

## The Brisbane MIND program for Northside GP's

The Brisbane MIND program for Northside GPs, allows GP's to refer to psychologists listed with the Northside Medicare Local at no cost to the patient so long as patients fit certain criteria - including being homeless, at risk of suicide, post partum , ATSI or UNDER 25.

For more information about this program:

[http://www.mnbml.com.au/page/Programs/mental\\_health/](http://www.mnbml.com.au/page/Programs/mental_health/)

One of the most important advancements in the understanding of eating disorders is the recognition that severe and prolonged dietary restriction can lead to serious physical and psychological complications. Many of the symptoms once thought to be primary features of anorexia nervosa are actually symptoms of starvation.

Given what we know about the biology of weight regulation, what is the impact of weight suppression on the individual? This is particularly relevant for those with anorexia nervosa, but is also important for people with eating disorders who have lost significant amounts of body weight. Perhaps the most powerful illustration of the effects of restrictive dieting and weight loss on behaviour is an experimental study conducted almost 50 years ago and published in 1950 by Ancel Keys and his colleagues at the University of Minnesota (Keys et al., 1950). The experiment involved carefully studying 36 young, healthy, psychologically normal men while restricting their caloric intake for 6 months. More than 100 men volunteered for the study as an alternative to military service; the 36 selected had the highest levels of physical and psychological health, as well as the most commitment to the objectives of the experiment.

During the first 3 months of the experiment, the volunteers ate normally while their behaviour, personality, and eating patterns were studied in detail. During the next 6 months, the men were restricted to approximately half of their former food intake and lost, on average, approximately 25% of their former weight. The 6 months of weight loss were followed by 3 months of rehabilitation, during which the men were gradually refed. A sub-group was followed for almost 9 months after the refeeding began. Most of the results were reported for only 32 men, since 4 men were withdrawn either during or at the end of the semistarvation phase. Although the individual responses to weight loss varied considerably, the men experienced dramatic physical, psychological, and social changes. In most cases, these changes persisted during the rehabilitation or renourishment phase.

What makes the “starvation study” (as it is commonly known) so important is that many of the experiences observed in the volunteers are the same as those experienced by patients with eating disorders. This section of this chapter is a summary of the changes observed in the Minnesota study. All quotations followed by page numbers in parentheses are from the original report by Keys et al (1950).

### Attitudes and Behaviour Related to Food and Eating:

One of the most striking changes that occurred in the volunteers was a dramatic increase in food preoccupations. The men found concentration on their usual activities increasingly difficult, because they became plagued by incessant thoughts of food and eating. Food became a principal topic of conversation, reading, and daydreams. As starvation progressed, the number of men who toyed with their food increased. They made what under normal conditions would be weird and distasteful concoctions, (p. 832)... Those who ate in the common dining room smuggled out bits of food and consumed them on their bunks in a long-drawn-out ritual, (p.833). Cookbooks, menus, and information bulletins on food production became intensely interesting to many of the men who previously had little or no interest in dietetics or agriculture, (p. 833)... “[The volunteers] often reported that they got a vivid vicarious pleasure from watching other persons eat or from just smelling food,” (p. 834).

In addition to cookbooks and collecting recipes, some of the men even began collecting coffeepots, hot plates, and other kitchen utensils. According to the original report, hoarding even extended to non-food-related items, such as: “old books, unnecessary second-hand clothes, knick knacks, and other ‘junk.’ Often after making such purchases, which could be afforded only with sacrifice, the men would be puzzled as to why they had bought such more or less useless articles” (p. 837). One man even began rummaging through garbage cans. This general tendency to hoard has been observed in starved anorexic patients (Crisp, Hsu, & Harding, 1980) and even in rats deprived of food (Fantino & Cabanac, 1980). Despite little interest in culinary matters prior to the experiment, almost 40% of the men mentioned cook-

ing as part of their postexperiment plans. For some, the fascination was so great that they actually changed occupations after the experiment; three became chefs, and one went into agriculture!

During semistarvation, the volunteers' eating habits underwent remarkable changes. The men spent much of the day planning how they would eat their allotment of food. Much of their behaviour served the purpose of prolonging ingestion and increasing the appeal or salience of food. The men often ate in silence and devoted total attention to food consumption.

The Minnesota subjects were often caught between conflicting desires to gulp their food down ravenously and consume it slowly so that the taste and odor of each morsel would be fully appreciated. Toward the end of starvation some of the men would dawdle for almost two hours over a meal which previously they would have consumed in a matter of minutes.... They did much planning as to how they would handle their day's allotment of food. (p. 833).

The men demanded that their food be served hot, and they made unusual concoctions by mixing foods together, as noted above. There was also a marked increase in the use of salt and spices. The consumption of coffee and tea increased so dramatically that the men had to be limited to 9 cups per day; similarly, gum chewing became excessive and had to be limited after it was discovered that one man was chewing as many as 40 packages of gum a day and "developed a sore mouth from such continuous exercise". (p. 835).

During the 12-week refeeding phase of the experiment, most of the abnormal attitudes and behaviours in regard to food persisted. A small number of men found that their difficulties in this area were quite severe during the first 6 weeks of refeeding.

In many cases the men were not content to eat "normal" menus but persevered in their habits of making fantastic concoctions and combinations. The free choice of ingredients, moreover, stimulated "creative" and "experimental" playing with food licking of plates and neglect of table manners persisted. (p. 843).

#### Binge Eating:

During the restrictive dieting phase of the experiment, all of the volunteers reported increased hunger. Some appeared able to tolerate the experience fairly well, but for others it created intense concern and led to a complete breakdown in control. Several men were unable to adhere to their diets and reported episodes of binge eating followed by self-reproach. During the eighth week of starvation, one volunteer "flagrantly broke the dietary rules, eating several sundaes and malted milks; he even stole some penny candies. He promptly confessed the whole episode, [and] became self-deprecatory" (p. 884). While working in a grocery store, another man suffered a complete loss of will power and ate several cookies, a sack of popcorn, and two overripe bananas before he could "regain control" of himself. He immediately suffered a severe emotional upset, with nausea, and upon returning to the laboratory he vomited....He was self-deprecatory, expressing disgust and self-criticism. (p. 887).

One man was released from the experiment at the end of the semistarvation period because of suspicions that he was unable to adhere to the diet. He experienced serious difficulties when confronted with unlimited access to food: "He repeatedly went through the cycle of eating tremendous quantities of food, becoming sick, and then starting all over again" (p. 890).

After about 5 months of refeeding, the majority of the men reported some normalization of their eating patterns, but for some the overconsumption persisted: "No. 108 would eat and eat until he could hardly swallow any more and then he felt like eating half an hour later" (p. 847). More than 8 months after renourishment began, most men had returned to normal eating patterns; however, a few were still eating abnormal amounts: "No. 9 ate about 25 percent more than his pre-starvation amount' once he started to reduce but got so hungry he could not stand it" (p. 847). Factors distinguishing men who rapidly normalized their eating from those who continued to eat prodigious amounts were not identified. Nevertheless, the main findings here are as follows: Serious binge eating developed in a subgroup of men, and this tendency persisted in some cases for months after free access to food was reintroduced; however, the majority of men reported gradually returning to eating normal amounts of food after about 5 months of refeeding. Thus, the fact that binge eating was experimentally produced in some of these normal young men should temper speculations about primary psychological disturbances as the cause of binge eating in patients with eating disorders. These findings are supported by a large body of research indicating that habitual dieters display marked overcompensation in eating behaviour that is similar to the binge eating observed in eating disorders (Polivy & Herman, 1985, 1987; Wardle & Beinart, 1981).



## Emotional and Personality Changes:

The experimental procedures involved selecting volunteers who were the most physically and psychologically robust: “The psychobiological ‘stamina’ of the subjects was unquestionably superior to that likely to be found in any random or more generally representative sample of the population” (pp. 915-916). Although the subjects were psychologically healthy prior to the experiment, most experienced significant emotional deterioration as a result of semistarvation. Most of the subjects experienced periods during which their emotional distress was quite severe; almost 20% experienced extreme emotional deterioration that markedly interfered with their functioning.

Depression became more severe during the course of the experiment. Elation was observed occasionally, but this was inevitably followed by “low periods”. Mood swings were extreme for some of the volunteers.

[One subject] experienced a number of periods in which his spirits were definitely high....These elated periods alternated with times in which he suffered “a deep dark depression.” [He] felt that he had reached the end of his rope [and] expressed the fear that he was going crazy....[and] losing his inhibitions. (p. 903).

Irritability and frequent outbursts of anger were common, although the men had quite tolerant dispositions prior to starvation. For most subjects, anxiety became more evident. As the experiment progressed, many of the formerly even-tempered men began biting their nails or smoking because they felt nervous. Apathy also became common, and some men who had been quite fastidious neglected various aspects of personal hygiene.

During semistarvation, two subjects developed disturbances of “psychotic” proportions. One of these was unable to adhere to the diet and developed alarming symptoms: [He exhibited] a compulsive attraction to refuse and a strong, almost compelling, desire to root in garbage cans [for food to eat]. He became emotionally disturbed enough to seek admission voluntarily to the psychiatric ward of the University Hospitals, (p. 890).

After 9 weeks of starvation, another subject also exhibited serious signs of disturbance:

[He went on a] spree of shoplifting, stealing trinkets that had little or no intrinsic value.....He developed a violent emotional outburst with flight of ideas, weeping, talk of suicide and threats of violence. Because of the alarming nature of his symptoms, he was released from the experiment and admitted to the psychiatric ward of the University Hospitals. (p. 885).

During the refeeding period, emotional disturbance did not vanish immediately but persisted for several weeks, with some men actually becoming more depressed, irritable, argumentative, and negativistic than they had been during semistarvation. After two weeks of refeeding, one man reported his extreme reaction in his diary: I have been more depressed than ever in my life I thought that there was only one thing that would pull me out of the doldrums, that is release from C.P.S. [the experiment] I decided to get rid of some fingers. Ten days ago, I jacked up my car and let the car fall on these fingers....It was premeditated, (pp. 894-895). Several days later, this man actually did chop off three fingers of one hand in response to the stress.

Standardized personality testing with the Minnesota Multiphasic Personality Inventory (MMPI) revealed that semistarvation resulted in significant increases on the Depression, Hysteria, and Hypochondriasis scales. This profile has been referred to as the “neurotic triad” and is observed among different groups of disturbed individuals (Greene, 1980). The MMPI profiles for a small minority of subjects confirmed the clinical impression of incredible deterioration as a result of semistarvation. Figure 8.8 illustrates one man’s personality profile: Initially it was well within normal limits, but after 10 weeks of semistarvation and a weight loss of only about 4.5 kg. (10 pounds, or approximately 7% of his original body weight), gross personality disturbances were evident. On the second testing, all of the MMPI scales were elevated, indicating severe personality disturbance on scales reflecting neurotic as well as psychotic traits. Depression and general disorganization were particularly striking consequences of starvation for several of the men who became the most emotionally disturbed.

### Social and Sexual Changes:

The extraordinary impact of semistarvation was reflected in the social changes experienced by most of the volunteers. Although originally quite gregarious, the men became progressively more withdrawn and isolated. Humor and the sense of comradeship diminished amidst growing feelings of social inadequacy:

Social initiative especially, and sociability in general, underwent a remarkable change. The men became reluctant to plan activities, to make decisions, and to participate in group activities.....They spent more and more time alone. It became "too much trouble" or "too tiring" to have contact with other people, (pp. 836-837).

The volunteers' social contacts with women also declined sharply during semistarvation. Those who continued to see women socially found that the relationships became strained. These changes are illustrated in the account from one man's diary: I am one of about three or four who still go out with girls. I fell in love with a girl during the control period but I see her only occasionally now. It's almost too much trouble to see her even when she visits me in the lab. It requires effort to hold her hand. Entertainment must be tame. If we see a show, the most interesting part of it is contained in scenes where people are eating, (p. 853).

Sexual interests were likewise drastically reduced (see Figure 8.7). Keys et al. observed that "many of the men welcomed the freedom from sexual tensions and frustrations normally present in young adult men" (p. 840). The fact that starvation perceptibly altered sexual urges and associated conflicts is of particular interest, since it has been hypothesized that this process is the driving force behind the dieting of many anorexia nervosa patients. According to Crisp (1980), anorexia nervosa is an adaptive disorder in the sense that it curtails sexual concerns for which the adolescent feels unprepared.

During rehabilitation, sexual interest was slow to return. Even after 3 months, the men judged themselves to be far from normal in this area. However, after 8 months of renourishment, virtually all of the men had recovered their interest in sex.

### Cognitive Changes:

The volunteers reported impaired concentration, alertness, comprehension, and judgment during semistarvation; however, formal intellectual testing revealed no signs of diminished intellectual abilities.

### Physical Changes:

As the 6 months of semistarvation progressed, the volunteers exhibited many physical changes, including gastrointestinal discomfort; decreased need for sleep; dizziness; headaches; hypersensitivity to noise and light; reduced strength; poor motor control; edema (an excess of fluid causing swelling); hair loss; decreased tolerance for cold temperatures (cold hands and feet); visual disturbances (i.e., inability to focus, eye aches, "spots" in the visual fields); auditory disturbances (i.e., ringing noise in the ears); and paresthesias (i.e., abnormal tingling or prickling sensations, especially in the hands or feet).

Various changes reflected an overall slowing of the body's physiological processes. There were decreases in body temperature, heart rate, and respiration, as well as in basal metabolic rate (BMR). BMR is the amount of energy (in calories) that the body requires at rest (i.e., no physical activity) in order to carry out normal physiological processes. It accounts for about two-thirds of the body's total energy needs, with the remainder being used during physical activity. At the end of semistarvation, the men's BMR's had dropped by about 40% from normal levels. This drop, as well as other physical changes, reflects the body's extraordinary ability to adapt to low caloric intake by reducing its need for energy. As one volunteer described it, he felt as if his "body flame [were] burning as low as possible to conserve precious fuel and still maintain life process" (p. 852). Recent research has shown that metabolic rate is markedly reduced even among dieters who do not have a history of dramatic weight loss (Platte, Wurmser, Wade, Mecheril, & Pirke, 1996). During refeeding, Keys et al. found that metabolism speeded up, with those consuming the greatest number of calories experiencing the largest rise in BMR.

The group of volunteers who received a relatively small increment in calories during refeeding (400 calories more than during semistarvation) had no rise in BMR for the first 3 weeks. Consuming larger amounts of food caused a sharp increase in the energy burned through metabolic processes.

How did the men feel about their weight gain during rehabilitation?

“Those subjects who gained the most weight became concerned about their increased sluggishness, general flabbiness, and the tendency of fat to accumulate in the abdomen and buttocks” (p. 828). These complaints are similar to those of many eating disorder patients as they gain weight. Besides their typical fear of weight gain, they often report “feeling fat” and are worried about acquiring distended stomachs. However, the body weight and relative body fat of the Minnesota volunteers was at the pre-experiment levels after about 9 months of rehabilitation.

Physical Activity:

In general, the men responded to semistarvation with reduced physical activity. They became tired, weak, listless, and apathetic, and complained of lack of energy. Voluntary movements became noticeably slower. However, according to Keyes et al., “some men exercised deliberately at times. Some of them attempted to lose weight by driving themselves through periods of excessive expenditure of energy in order either to obtain increased bread rations.....or to avoid reduction in rations” (p. 828). This is similar to the practice of some eating disorder patients, who feel that if they exercise strenuously, they can allow themselves a bit more to eat. The difference is that for those with eating disorders, the caloric limitations are self-imposed.

Significance of the “Starvation Study”

As is readily apparent from the preceding description of the Minnesota experiment, many of the symptoms that might have been thought to be specific to anorexia nervosa and bulimia nervosa are actually the results of starvation (Pirke & Ploog, 1987). These are not limited to food and weight, but extend to virtually all areas of psychological and social functioning. Since many of the symptoms that have been postulated to cause these disorders may actually result from undernutrition, it is absolutely essential that weight be returned to “normal” levels so that psychological functioning can be accurately assessed.

The profound effects of starvation also illustrate the tremendous adaptive capacity of the human body and the intense biological pressure on the organism to maintain a relatively consistent body weight. This makes complete evolutionary sense. Over hundreds of thousands of years of human evolution, a major threat to the survival of the organism was starvation. If weight had not been carefully modulated and controlled internally, early humans most certainly would simply have died when food was scarce or when their interest was captured by countless other aspects of living. The Keys et al, “starvation study” illustrates how the human being becomes more oriented toward food when starved and how other pursuits important to the survival of the species (e.g., social and sexual functioning) become subordinate to the primary drive toward food.

One of the most notable implications of the Minnesota experiment is that it challenges the popular notion that body weight is easily altered if one simply exercises a bit of “willpower.” It also demonstrates that the body is not simply “reprogrammed” at a lower set point once weight loss has been achieved. The volunteers’ experimental diet was unsuccessful in overriding their bodies’ strong propensity to defend a particular weight level. Again, it is important to emphasize that following the months of refeeding, the Minnesota volunteers did not skyrocket into obesity. On the average, they gained back their original weight plus about 10%; then, over the next 6 months, their weight gradually declined. By the end of the follow-up period, they were approaching their pre-experiment weight levels.

Modified from: Garner D.M. & Garfinkel P.E. , Handbook of Treatment for Eating Disorders, 1997, The Guilford Press.

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## *Appendix K : The Eating Disorder Outreach Service (EDOS)*

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EDOS operates from Monday to Friday during office hours. The multi-disciplinary team consists of a consultant psychiatrist specialising in eating disorders, a psychiatric registrar, a team manager, two full time health professionals and a part time dietician.

EDOS has three basic functions.

The first is to act as an intake service and process all adult Eating Disorders referrals to the Royal Brisbane Hospital Mental Health Centre both in-patient and out-patient services . Adolescent patients are referred through the Mental Health Centre Royal Brisbane Hospital on F-floor

The second is State-wide education

The third is to provide a liaison role between District Mental Health Services, referring agencies and the Eating Disorders Team at the Royal Brisbane Hospital.

Outpatient treatment – CBT-e clinic.

### 1. Intake

A medical doctor or psychiatrist should refer all patients to the service.

PLEASE NOTE- Urgent referrals for treatment should be dealt with through the nearest Local Department of Emergency Medicine or District Mental Health Service

Self-referrals will need to either contact a medical practitioner or District Mental Health Service to complete the assessment.

Referrals are made by ringing 07 3114 0809 and leaving contact details for the EDOS staff. The staff will contact the referral agency within 24 hours of contact in office hours.

After establishing contact the EDOS staff will fax the agency a medical referral form for completion. Referrals will be discussed at the Clinical Liaison Team review and decisions on treatment options, for example: review in Out-patient Clinics, admissions or review in other services will be relayed to the referring agency.

Catchment area for the EDOS:

The EDOS service is a state-wide service and therefore available to all District Mental Health Services, Hospitals and non-government agencies for education and liaison services. The adult in-patient service provides tertiary referral beds for statewide District Mental Health Services if their interventions have not been successful following involvement with EDOS. The adolescent inpatient service provides secondary referral beds for the adolescents residing in central and northern health zones.

### 2. Education role

EDOS will be responsible for providing both education and support to staff of all disciplines throughout the state in mental health services, in order to promote increased knowledge and improvement of assessment and management skills in dealing with people with an eating disorder.

### 3. Consultation Liaison

EDOS will liaise with the Eating Disorders Team at the RBH Mental Health Centre and referring agencies to provide consultation on assessment and management of patients with eating disorders.

EDOS will liaise with referring agencies and Statewide District Mental Health Services including the RBH to ensure easy access to treatment for patients with eating disorders.

EDOS will provide interim case management between inpatient services and District Mental Health Services to provide continuity of care through an integrated service approach for patients with eating disorders.

CONTACT DETAILS: Ph: 07 3114 0809, Fax: 07 3114 0806

Post: Eating Disorders Outreach Service, Building 14 Cartwright St, Windsor Q 4030



Royal Brisbane and Women's Hospital  
Health Service District (RBWH)

Enquiries to: EDOS  
Phone: 3114 0809  
Fax: 3114 0806

Dear Referrer

Thank you for your referral to the Eating Disorders Outreach Service (EDOS). Please ensure that you have completed the attached referral form and in particular, include the latest blood results as soon as they become available. Any incomplete referrals will be sent back and this will delay us providing your client with an initial appointment.

**Emergency services are not within the scope of EDOS and you are encouraged to direct all patients assessed as high risk, or medically unstable to the nearest Department of Emergency Medicine. Patients meeting the following criteria generally need inpatient treatment:**

**HR < 40**

**BP < 90 or postural drop > 20  
60**

**Electrolyte abnormalities (esp. low K<sup>+</sup>)**

**BMI <14**

**Rapid weight loss**

**Failure of outpatient treatment**

**(Ref: RANZCP Clinical Practice Guidelines Team for Anorexia Nervosa, 2004)**

To identify how we can best support you, please record on EDOS referral form which of the following services you are requesting (N.B. your patient must meet criteria outlined below to be eligible).

### **1. Statewide - all Patients in Queensland**

1. Consultation Liaison (C/L) – EDOS staff will assess inpatients in their district and provide treatment recommendations and ongoing C/L support to treating team at your service with transfer to RBWH at discretion of C/L and referring team.

2. One-off Outpatient Assessment at RBWH with Treatment Recommendations to referrer.

***N.B. Dr Warren Ward has started a new bulk-billing clinic for patients suitable for one-off Assessment. This clinic will not incur any "out-of-pocket" costs to the patient when presenting with a Medicare Card. If you would like your patient to receive an assessment by Dr Warren Ward please indicate by ticking the appropriate box on the top of referral form, recording your provider number and signing the referral.***

### **2. Central Area - for patients residing north of the Brisbane River to Rockhampton.**

Cognitive Behavioural Therapy Outpatient Treatment.

***N.B. These therapies are time-limited and subject to patient's suitability to the program.***

### **3. RBWH District – for patients residing north of the Brisbane River to Kedron Brook**

Assessment and ongoing outpatient or inpatient treatment subject to individual patient needs.

Please call EDOS on 3114 0809 for any further queries or fax the completed referral to 3114 0806.

Yours sincerely  
Dr Warren Ward  
Director – RBWH Eating Disorders Service

Appendix L : RBH Eating Disorders Outreach Service Referral Form

<b>I request the below stated patient be assessed by:</b> <input type="checkbox"/> Dr Warren Ward at the private bulk-billing clinic <input type="checkbox"/> Public EDOS clinic <input type="checkbox"/> Inpatient – Assessed by Consultation Liaison Team		
<b>Client Details &amp; Demographics:</b>		
Name		D.O.B.:
Address:		Pcode:
Phone H:	W.	Mob.
Marital Status:	Country of Birth:	Indigenous Status:
Medicare No.:      Exp:	Year of Arrival:	
Occupation or Benefit/Pension:	Employment Status:	
	Education Level:	
Living Situation:	Accommodation Type:	
Name: Next of kin or sig other:		Ph.:
R'ship to Pt :	Address:	
Diagnosis & reason for referral:		
<b>Initial Risk Assessment:</b>		
Suicidal thoughts/intent/plan      Self-harming Type:      Access to Weapons		
Ht: _____ m	Wt: _____ kg	BMI: _____      Rapid weight loss
Physical complications:    Fainting      Dizziness      Chest pain      Dehydration		
Other (give details):		
<b>Medical Assessment:</b>		
BP:	PR:	RR:      Temp:      °C
Medical History & Medications: Amenorrhea: Y/N		
Bloods Taken (FBC, U&E) date: ___/___/___      N.B. <b>Blood results must be</b> included with referral form		
<b>Eating D/O Behaviours: e.g. frequency, severity etc.</b>		Past Psychiatric History: Y/N
Oral restriction	Exercise	Details:
Vomiting	Diuretic	<b>Drug and Alcohol Issues:</b> Y/N
Bingeing	Laxatives	Details:
Is client aware of referral?    Y/N	Does client agree?    Y/N	
Referrer's Name: _____	Date: ___/___/___	
Position: _____	Phone no.:	
GP's Name (if not referrer) _____	Contact No:	
Referring Dr Sig _____	Provider No _____	

The Eating Disorders Clinic offers the Maudsley Model for the treatment of adolescent anorexia nervosa to eligible children and young people. It is located at the North West Child and Youth Mental Health Service, RCH,CHSD, Corrigan Street, Keperra.

This specialist clinic operates on Wednesdays and has the capacity to provide treatment for up to 8 families at any point in time. The treatment service is provided by allied health staff who specialise in family based treatment interventions. The families are reviewed by a Consultant Psychiatrist every four weeks.

Eligibility for access to this service is based on a number of criteria

- geographical – the young person must reside within the geographical boundaries of the RCH, CHSD – or be eligible for service at the Nundah, Keperra or Pine Rivers Child and Youth Service Community Clinics.
- Age - up to 18 years
- The young person must have their physical status assessed and be medically safe (see attached criteria for referral to Department of Emergency Medicine)
- The young person’s presentation includes restriction of eating and possible compensatory behaviours including exercise or purging consistent with the diagnostic criteria for Anorexia Nervosa, Eating Disorder Not Otherwise Specified.

Due to the limited number of treatment places offered by the clinic entry into the program is based on service capacity at the time of referral. Young people with restrictive and other eating disorders are offered other treatment in CYMHS community clinics. Treatment places in the Eating Disorders Clinic (Maudsley Model) may also be offered to young people with diagnosed restrictive eating disorders, who are current clients of the CYMHS RCH, CHSD, the Child and Family Therapy Unit, Royal Children’s Hospital and the Adolescent Inpatient Unit, Royal Brisbane and Women’s Hospital based on the treating clinician’s referral and the family’s agreement to enter the treatment program.

Other Child Youth and Mental Health Services that offer the Maudsley Family Based Treatment Approach Include:

Gold Coast CYMHS Robine	: 07 5667 1714
Royal Children’s CYMHS North Brisbane	: 07 3310 9444
Mater CYMHS South Brisbane	: 07 3163 8188
Cairns CYMHS	: 07 4081 7888
Mackay CYMHS	: 07 4968 3893
For your local CHYMS	: 1800 177 279



### Treatment 1

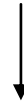
- HOSPITAL ASSESSMENT IF REQUIRED
- PR < 40
- TEMP < 35.5
- BP < 80/40
- Severe hypokalaemia
- Arrhythmia, other ecg abnormality

### Treatment 2

- Discuss results and medical concerns with patient and family
- Label and acknowledge illness
- Referrals – EDOS, Dietician, psychologist/mental health worker, psychiatrist, The Eating Disorders association, ISIS The Eating Issues Centre
- Limit activities to ensure safety but maintain social contacts  
Letters/contact to school/work

### Treatment 3

- REGULAR MEDICAL MONITORING
  - Avoid refeeding syndrome
  - Weekly initially with ELFTS
  - BP, postural drop, PR, Temp
  - ECG
  - Wt, Ht, BMI
  - Urinary pH, SG
- Vaccination – pneumovax (SP), fluvax



### Treatment 4 - HOME CARE

- Diet – increase intake with attention to specific foods under dietician/doctor guidance
  - Temperature – keep warm. Use as objective tool. Goal 36.5-37.
  - Sun, sheepskin underlay, warm vests/clothing
  - Restrict exercise. Alcohol
- Aim for “return to health”

### Treatment 5 – Supplements

- Thiamine ( B1) 100mg daily
- Phosphate ( Sandoz) – adjust
- Potassium
- Zinc powder – ½ teaspoon daily
- Calcium/ Vitamin D
- Multivitamin ( ensure high B vitamin content)



Eating disorders such as anorexia nervosa, bulimia nervosa & binge eating disorder are prevalent, and serious problems with high morbidity and mortality rates. They are among the most common psychiatric disorders in young women and also occur in men and boys. Eating disorders have a significant impact on psychological, physical & social health and can be complex and difficult to identify and manage. Early detection and treatment improve prognosis. Presentation in primary care is common. **A simple 5 question screening tool, the SCOFF (Morgan et al 1999), reliably identifies patient who are likely to have an eating disorder:**

### SCOFF Questionnaire

The SCOFF reliably identifies people who are likely to have an eating disorder.

The SCOFF five-question screening tool:

S – Do you make yourself **S**ick because you feel uncomfortably full?

C – Do you worry you have lost **C**ontrol over how much you eat?

O – Have you recently lost more than **O**ne stone (6.35kgs) in a three-month period?

F – Do you believe yourself to be **F**at when others say you are too thin?

F – Would you say **F**ood dominates you life?

One point for every 'yes' and a score of  $\geq 2$  indicates a high sensitivity for anorexia nervosa or bulimia nervosa and further questioning is warranted. A further two questions have been shown to have a high sensitivity and specificity to bulimia nervosa. These questions are not diagnostic but would indicate further questioning and discussion is required.

Are you satisfied with your eating patterns? ("no")

Do you ever eat in secret? ("yes")

### Refer on when...

- Self-help or first-line treatments seem to be failing
- Persistent weight loss and dehydration
- Eating behaviour is entrenched/out of control
- Other complicating factors eg pregnancy or diabetes
- Concurrent psychiatric disturbance is present
- Severe family dysfunction or distress is evident
- Clarification of diagnosis, specialist assessment, or treatment advice are needed
- The patient's physical and/or mental health is of concern (urgent if there are physical or laboratory signs of serious medical complications)

### If Yes ...

- Establish the seriousness of the condition
- Establish a differential diagnosis
- Evaluate and treat nutritional deficits
- Treat uncomplicated cases in primary care
- Provide regular monitoring of physical status
- Help to decide if and when hospitalisation is necessary
- Interpret the course of therapy and influence specialist referral
- Serve as a support and educator for the patient and family
- Provide primary care support of outpatient specialist treatment
- Support and medically manage the chronically ill ED patient

### Is the patient in serious physical danger?

Indications for immediate medical intervention:

- Rapid or consistent weight loss.
- Marked orthostatic hypotension with an increase in pulse of  $>20$ bpm or a
- Drop in blood pressure of  $>20$ mm Hg/min standing
- Bradycardia below 40 bpm
- Tachycardia over 100 bpm or
- Inability to sustain body core temperature ie.  $<36^{\circ}\text{C}$
- Electrolyte imbalance (potassium, phosphate, magnesium)

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*Appendix P :*

*Access Pathways to Queensland Health Adult Inpatient Beds for  
Patients With Eating Disorders*

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## Access pathways to Queensland Health Adult inpatient beds for patients with eating disorders

### Endorsement

These Access Pathways have been formally endorsed by the following:

- General Practice Queensland
- Statewide Mental Health Network
- Statewide General Medicine Clinical Network

### Background

Eating disorders are associated with significant psychiatric and medical morbidity. Effective management of affected patients requires close collaboration between clinicians working in psychiatric and medical settings. The overarching principle that guides the management of patients with eating disorders within Queensland Health (QH) is that patients have access to the level of health service they require as determined by their medical and mental health needs. In practical terms this means that patients have a right to access medical and mental health services across the continuum of care including community, inpatient and specialist services.

### Access Pathways

These Access Pathways were developed following a review of the relevant literature (I-XIII) by the QH Statewide Eating Disorders Outreach Service (EDOS) in conjunction with the following key stakeholders: Nurse Unit Managers within QH mental health services; the Eating Disorders Sub Network of the Statewide Mental Health Network (a statewide advisory group); General Practice Queensland; and a focus group of psychiatrists and physicians who trialled successive versions of the Access Pathways. Further consultation also occurred with all Qld Directors of Medicine, Emergency Medicine and Mental Health.

The aims of the Access Pathways are to provide clear guidance to assist treating teams to manage the medical and psychological risks and needs of patients with eating disorders; to encourage consistency in treatment protocols; and to promote coordinated care with a smooth transition across medical, mental health and specialist services.

### EDOS

EDOS is available to provide assessment and support for treating teams using treatment protocols developed jointly by EDOS and the specialist adult eating disorders inpatient team at the Royal Brisbane

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and Women's Hospital (RBWH). EDOS can also facilitate access to specialist beds at the RBWH if a trial of local treatment with EDOS input has not been able to achieve treatment goals.

## Goals of Inpatient Treatment

The goals of inpatient treatment include (in the following order): medical stabilisation; prevention and treatment of re-feeding syndrome; weight restoration; and reversal of cognitive effects of starvation prior to outpatient psychotherapy.

## Physical indicators for admission to QH medical, mental health and RBWH specialist beds

Table 1 was developed following reviews of current literature and the guidelines utilised by EDOS for safe and effective treatment of adults with eating disorders, and further consultation with all Qld Directors of Medicine, Emergency Medicine and Mental Health. The table lists physical parameters that are relevant in considering whether psychiatric versus medical admission is indicated. If any parameter is met at the time of assessment, inpatient treatment is advised in accordance with the Royal Australian and New Zealand College of Psychiatrists guidelines (II). The list in the table is not exhaustive; therefore any other medical problems which are of concern should be discussed with the relevant medical team.

	Psychiatric admission indicated *	Medical admission indicated *
Weight	Body Mass Index (BMI) <14	BMI <12
<b>Weight loss</b>	Rapid weight loss (i.e. 1 kg/wk over several weeks) or grossly inadequate nutritional intake (<1000kCal daily)	
<b>Re-feeding risk</b>	Low	High
Systolic BP	<90 mmHg	<80 mmHg
Postural BP	>10 mmHg drop with standing	>20 mmHg drop with standing
Heart rate		≤40 bpm or > 120 bpm or significant postural tachycardia
Temp	<35.5°C	<35°C
12-lead ECG	Normal sinus rhythm	Any arrhythmia including QTc prolongation, or non-specific ST or T-wave changes including inversion or biphasic waves
Blood sugar	<3.5 mmol/L	< 2.5 mmol/L
Sodium	<130 mmol/L*	<125 mmol/L
Potassium	<3.5 mmol/L*	<3.0 mmol/L
Magnesium		<0.7 mmol/L (below normal range)
Phosphate		<0.8 mmol/L (below normal range)
eGFR	>60 <sup>estimated, range</sup> and stable	<60 <sup>estimated, range</sup> or rapidly dropping (25% drop within a week)
Albumin	<35 g/L	<30 g/L
Liver enzymes	Mildly elevated	Markedly elevated (AST or ALT >500)
Neutrophils	Below normal range	<1.0 x 10 <sup>9</sup> /L
Other	Not responding to outpatient treatment	
* Please note, any biochemical abnormality which has not responded to adequate replacement within the first 24 hours of admission should be reviewed by a Medical Registrar urgently		

Table 1: Physical indicators for psychiatric and medical inpatient admission of adults with an eating disorder

<sup>a</sup> Psychiatric admission is indicated if BMI <14 or there are other abnormalities of physical parameters that are not of sufficient severity to warrant medical admission.

<sup>b</sup> In some cases, as indicated in the column of indicators under the 'Medical admission' heading, an initial medical admission is indicated. Generally speaking, this is recommended if BMI <12 or there are significant abnormalities of physical parameters.

## Guidelines for transfer from medical ward to mental health ward

If a patient with an eating disorder requires a medical admission, the following criteria should be met before transfer from that ward:

### 1. The risk of refeeding syndrome has passed (up to 2 weeks from the commencement of refeeding)

The first two weeks of refeeding pose the greatest risk to the patient with an eating disorder. Potential biochemical abnormalities include hypokalaemia, hypophosphataemia, hypomagnesaemia and hypocalcaemia; thus patients must be monitored for electrolyte disturbance on a daily basis and urgent replacement instituted if indicated. A cardiovascular review and ECG should also be performed regularly to detect cardiovascular manifestations of refeeding syndrome. A routine daily thiamine injection (100mg IM) in the first three days of treatment is essential.

Some patients rapidly develop peripheral oedema and cardiac failure, and this should be suspected in the presence of rapid weight gain. The risk of heart failure in refeeding syndrome is reduced by gradual realimentation. The Eating Disorders Outreach Service is also able to provide written guidelines (see attached appendix: inpatient treatment guidelines) and weekly advice and support to the treating team in all aspects of treatment including management of re-feeding syndrome.

### 2. All patients should be medically stable for a minimum of 24 hours prior to transfer.

Electrolyte disturbances such as hyponatraemia, hypokalaemia, hypocalcaemia, and hypochloreaemia may reflect ongoing vomiting or laxative abuse, water-loading, or a total body deficit due to chronic starvation. Although phosphate and magnesium levels may initially present within the normal range, they often drop precipitously during refeeding. Thiamine deficiency is common and can be expected to worsen during refeeding, and requires replacement from the time of admission (See Appendix: Initial Management Guidelines). Despite prolonged starvation, hypoalbuminaemia is rare in anorexia, and should prompt a search for occult infection. Haematological complications result from bone marrow suppression, and include anaemia, neutropenia (relatively common in anorexia), and thrombocytopenia.

Cardiovascular complications include sinus bradycardia, hypotension, impaired myocardial performance, mitral valve prolapse and sudden death. ECG abnormalities in eating disorders (particularly anorexia) include bradycardia, low QRS, P and T wave voltages, ventricular tachyarrhythmias, non-specific ST-T changes, presence of U waves, and prolongation of the QTc interval. QTc interval prolongation has been suggested to increase risk of sudden cardiac death, and ventricular arrhythmias are a major cause of death in anorexic patients. QTc interval prolongation does not necessarily reflect underlying biochemical derangement, and studies have demonstrated QTc interval prolongation in individuals with normal electrolyte levels and demonstrated no correlation between BMI and QTc interval.



Orthostatic pulse or blood pressure changes suggest significant intravascular depletion and place patients at significant risk of syncope. Severely malnourished patients are typically unable to mount an adequate immune response, and thus findings of tachycardia, pyrexia or clear localising signs may be absent on clinical examination.

3. **Patients should ideally be at a BMI of 14 before transfer to a mental health ward**, though transfer can occur with BMI between 12 and 14 if there is agreement between the medical and mental health units, and the patient has been medically stable for 2 weeks as evidenced by:

- Systolic BP 90mm or above
- Heart Rate >50 and < 100 bpm
- No significant postural tachycardia or hypotension
- Normal ECG
- Normal electrolytes

4. **All patients admitted to medical wards should receive assessment by the local Consultation Liaison Psychiatry team, and EDOS or local eating disorder specialists where appropriate, with these teams providing ongoing advice and support to the treating medical team as required.**

The **local mental health consultation-liaison team** should ensure adequate, regular and frequent (up to daily if required) support is provided to the medical team to assist them with behavioural and psychological management. The mental health C/L team can interview patient and family for collateral information and support; provide advice and support to medical staff on how to manage challenging behaviours, and can coordinate attendance of EDOS staff at team reviews either in person or via video-link up.

EDOS will consult with the medical and mental c-l team at least weekly face-to-face or by teleconference. Specialised eating disorders support and training can also be accessed via EDOS either in person or via video-link up.

## **Guidelines for admissions to, and discharge from, QH mental health inpatient units**

1. The receiving inpatient mental health treatment team should be consulted, and have input into the treatment plan prior to admission.
2. The mental health treating team should have timely access to advice and support from the local department of medicine, including transfer back to a medical bed if indicated.
3. All treating teams can access EDOS for advice throughout treatment.
4. If the patient is admitted directly to a mental health unit, monitoring and treatment of refeeding syndrome should be undertaken in the first two weeks as per the guidelines for medical admission.
5. Patients should be at a BMI of 17-20 before discharge.
6. All patients should be linked in to appropriate medical and mental health follow up with a discharge summary provided to the receiving service, and a documented individualised treatment plan developed in consultation with the consumer and the follow up agencies. Please note that EDOS can help to facilitate referral to appropriate services.
7. Patients are to be transferred to a specialist eating disorders bed at the RBWH if the criteria below are met, and a bed is available.

## Criteria and guidelines for transfer to QH adult specialist eating disorders beds at the RBWH

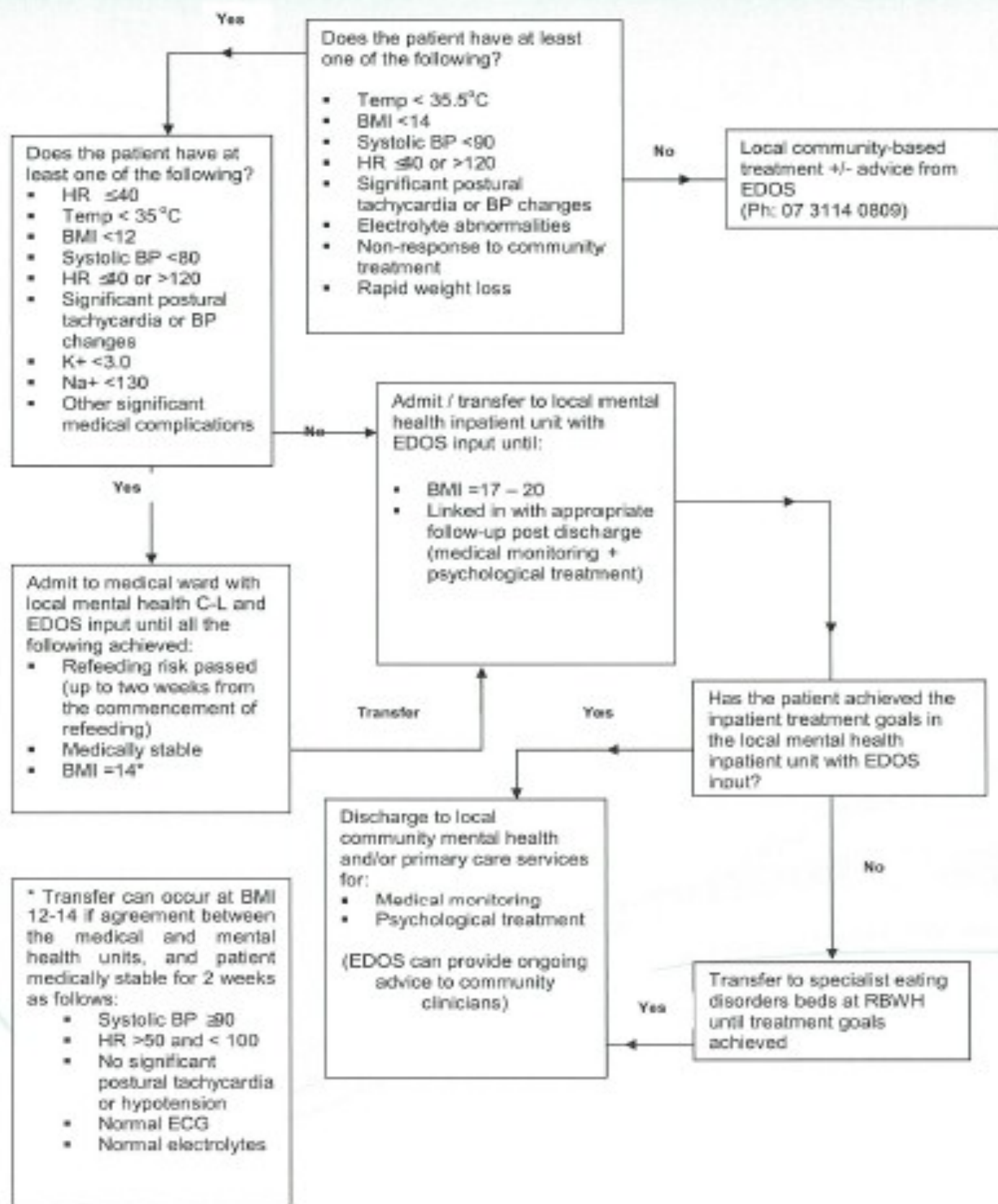
1. The patient has been offered a trial of treatment in their local mental health inpatient unit with input from EDOS.
2. Despite EDOS support, the goals of inpatient treatment have not been met.
3. EDOS agrees to the transfer to a specialist eating disorders bed at the RBWH, and has developed a written treatment plan in consultation with the consumer, family and referring team.
4. The local service agrees to maintain ongoing contact with the patient during the admission, and provides follow up treatment on discharge.
5. If the local service has two or more patients admitted with an eating disorder on any one ward, high priority will be given to transfer.

Further copies of this document can be found at

[http://hi.bns.health.qld.gov.au/mental\\_health/eating\\_disorder/documents/access-path.pdf](http://hi.bns.health.qld.gov.au/mental_health/eating_disorder/documents/access-path.pdf)



## Flowchart of QH access pathways for adult patients with eating disorders



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## APPENDIX

## Royal Brisbane and Women's Hospital Eating Disorder Outreach Service Initial Management Guidelines

Thank you for your referral. The Eating Disorders Outreach Service (EDOS) provides a consultation liaison service to Queensland hospitals with the goal of increasing the capacity of local services to manage patients with eating disorders and who are considered to be at risk of re-feeding syndrome. A time will be arranged to meet with your team to provide assessment and treatment recommendations as soon as possible.

**TO MINIMISE THE RISK OF RE-FEEDING SYNDROME IT IS RECOMMENDED YOUR TEAM COMMENCE THESE INSTRUCTIONS IMMEDIATELY**

### Medical Management

- Commence supplemental thiamine (100mg daily IMI first 3 days, then oral) and multivitamins prior to nutrient delivery.
- It is strongly advised that this patient have medical monitoring for at least the first 7 – 10 days of re-feeding
- Immediately - FBC, E/LFTs, phosphate, Mg, ECG, B12/folate, transketolase, TFTS and other investigations as indicated by clinical findings
- Daily E/LFTs, phosphate, Mg, ECG are necessary until goal energy intake is reached. Immediately replace K, PO<sub>4</sub>, Mg if these are found to be deficient
- BSL QID – early morning, and 1 – 2 hrs after meals, as low glycogen stores and an abnormal insulin response may lead to post-meal low BSLs, and low BSLs in the morning/overnight.
- **Hypoglycaemic episodes often occur in the early re-feeding stage of severely malnourished clients. Low BGLs (<4.0mmol/l) should be managed according to the document 'Insulin Subcutaneous Order and Blood Glucose Record Adult (that include Guidelines for Medical Officer responding to Blood Glucose Alerts and Hypoglycaemia Management in Diabetes: BGL less than 4 mmol/L'. However, in view of the risk of excess simple carbohydrate precipitating re-feeding syndrome and rebound hypoglycaemia in these patients secondary to inadequate glycogen stores, wherever the above document recommends giving a fast acting carbohydrate, a slow acting carbohydrate (eg. one of the following: Tetrapak or Resource Plus/Ensure Plus Fortisip/glass milk and crackers), should be given in addition at the same time.**

### Nutritional Management

- The patient should consume 4,000kJ (no more or less) in the first 4 - 7 days of re-feeding (liquid supplements, orally or via N/G, can be used if hospital meal plan is unsuccessful).
- A 4000kJ default re-feeding meal plan is attached to assist with safe nutritional management prior to dietitian review
- Ensure the current meal plan is clearly written out and copies available for staff and patient

- It is essential that only food on the meal plan is consumed ie. NO food to be brought in from outside, & NO diet foods/lollies/chewing gum as these can be used to diminish appetite and/or may have a laxative effect
- Weight progress should not be discussed with patient at this stage

**Clinical practice guidelines** for re-feeding are available. RBWH guidelines are located at: <http://hi.bns.health.qld.gov.au/rbh/policies/guidelines/09407guid.pdf> Titled: Identification and management of patients at risk of re-feeding syndrome.

Further information is available on line at: [http://www.ranzcp.org/images/stories/ranzcp-attachments/Resources/Publications/CPG/Clinician/CPG\\_Clinician\\_Full\\_Anorexia.pdf](http://www.ranzcp.org/images/stories/ranzcp-attachments/Resources/Publications/CPG/Clinician/CPG_Clinician_Full_Anorexia.pdf)

## Nursing Management

- No leave off the ward due to medical risk
- Observations
  - QID lying & standing blood pressure. Staff should notify RMO if:
    - Pulse is below 60bpm,
    - Temp below 35.5c, and/or;
    - Systolic BP below 90, or if;
    - Significant postural drop of more than 10mmHg
- BSL QID – 1 – 2 hrs after meals, as low glycogen stores and an abnormal insulin response may lead to post-meal low BSLs, and low BSLs in the morning/overnight. Suggested times are 0400, and 1 – 2 hrs post each main meal. Treat blood glucose levels of <4.0mmol/l as per Medical Management point f.
- Daily ECG
- Patient may require full bed rest if medically unstable
- Accurate assessment of the patient's nutritional status and eating behaviours
  - Weight:
    - Measure and record, weight, height & urine specific gravity the morning after admission at 6.30am after voiding, and repeat each Monday and Thursday
  - Height:
    - Should be measured in early morning, check patient is standing at full height
  - Bowel chart:
    - Record bowel activity (or lack of) daily as patient will have reduced gut motility
  - Intake:
    - Record all offered food & fluids as well as all consumed intake including fluids.
    - Check all meals against the meal plan, patient should not be allowed to choose meal from the meal plan at this stage see nutritional management plan/page1)
- Request family members to assist with the management plan, by NOT bringing in food and medications (laxatives) from home or allowing patient to exercise.

- Monitor and contain eating disorder behaviours
  - Visual observations minimum frequency 15 minute intervals
  - It is often more effective particularly on medical wards to provide 1:1 constant supervision.
  - Shared room (rather than single room)
  - Exercise
    - Limit physical activity (may require bed rest to reduce energy expenditure)
  - Vomiting /chewing spitting
    - Support at meals and post meals
    - All toilet needs need to be attended prior to meals
    - When risk is high supervise in toilet and shower
  - Laxatives/diuretics
    - Manage constipation as clinically indicated with stool softeners
    - No laxatives from home
    - Supervise toilet use
  - Inappropriate fluid intake
    - Monitor fluid intake for under or over drinking
  - Restriction
    - If possible provide supervision during and after meals to observe and record intake.

Enquires regarding the Access Pathways or the Initial Management Guidelines should be directed to EDOS on 07 31140809.



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*Appendix Q :*

*Access Pathways Quick Reference Guides for the Assessment and Management of  
Children and Adolescents with Eating Disorders in Queensland*

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# Access Pathways and Quick Reference Guides for the Assessment and Management of Children and Adolescents with Eating Disorders in Queensland

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## Acknowledgements

These access pathways were developed by a working group of mental health professionals, including representatives from specialist eating disorder services, child and adolescent mental health services, paediatricians, dietetics and carers. The working group was established under both the Statewide Mental Health Network (SWMHN) Child and Youth Mental Health Advisory Group and the SWMHN Eating Disorders Advisory Group. In developing these access pathways a review of current literature and broad Statewide consultation was undertaken.



## Background

Eating disorders are associated with significant psychiatric and medical morbidity. Appropriate management of affected patients requires close collaboration between clinicians working in psychiatric and medical settings. The overarching principle that guides the management of patients with eating disorders within Queensland Health (QH) is that patients have access to the level of health service they require as determined by their medical and mental health needs. In practical terms this means that patients have a right to access medical and mental health services across the continuum of care including community, inpatient and specialist services.

The Access Pathways for Children and Adolescents with Eating Disorders (The Access Pathways) were developed to address those circumstances where a child or adolescent with an Eating Disorder requires admission to hospital.

## Scope and Purpose

The aim of The Access Pathways are to assist staff within acute Child and Youth Mental Health Services (CYMHS), Departments of Emergency Medicine and Paediatric Departments when deciding the most appropriate placement and management of a child or adolescent with an Eating Disorder. This decision is based around a number of safety issues and will need to be made on a case by case basis.

The Access Pathways are not designed to be a prescriptive model of care, as no one model would cater for the heterogeneity of presentations seen throughout the state. They are to provide principles and minimum standards to enhance safe service delivery and assist practitioners in their decision making when a child or adolescent is requiring admission to hospital.

It is recommended that these guidelines facilitate discussions at a local level within each district to formulate their own protocols and work instructions around clinical admission options, management of medical risks, governance issues and communication pathways. It is recognised that there are variations in local resources, and each case should be assessed on an individual basis depending on risk.

## Guiding Principles

- All treatment decisions should be made in consultation with the child / adolescent and their carers. Clear and open communication incorporating relevant information and support should be provided for the child / adolescent and their family and/or carers. This includes psychoeducation, collaborative development of recovery plans, relapse prevention and discharge planning, and providing the child / adolescent and their families and/or carers an opportunity to provide feedback.
- Effective collaboration is required between all relevant services and clinicians to optimise decision-making and implementation of treatment and care.
- The least restrictive safe treatment alternative should be provided. However the Guardianship and Administration Act 2000, Mental Health Act 2000 and other relevant legislation may be used where applicable to best meet individual needs.
- The cultural and social diversity of the child / adolescent and their family and/or carers is acknowledged and their needs are considered throughout all phases of care.

## Triage Guidelines for assisting decision making regarding admission for medical or psychiatric treatment of children and adolescents with an eating disorder.

The Child and Youth and the Eating Disorders Advisory Groups to the Statewide Mental Health Network established a child and youth eating disorders working group to compile these documents for the use of practitioners in medical and mental health settings as **guidelines** for the assessment of these patients. They are based on the most recent literature and available evidence. They are designed to be used alongside clinical judgement, local policies and service provision allowances when deciding upon the need for admission.

Assessment	Thresholds indicative of a need for immediate specialist consultation (may meet one or more of the following, assessment of whole picture is required)
Temperature	<ul style="list-style-type: none"> <li>• Temperature <math>&lt;35.5^{\circ}\text{C}</math></li> <li>• Extremities look cold/blue</li> </ul>
Blood pressure	<ul style="list-style-type: none"> <li>• BP <math>&lt; 80/50\text{mm}</math> or postural drop <math>&gt; 10\text{mmHg}</math></li> <li>• Episodes of syncope</li> </ul>
Pulse	<ul style="list-style-type: none"> <li>• HR <math>&lt; 50\text{ bpm}</math>, <math>&gt;100\text{bpm}</math> or <math>&gt;20\text{bpm}</math> <math>\uparrow</math> in HR lying to standing</li> <li>• Check for regularity as well as rate</li> </ul>
Height, weight, weight history Calculate BMI and Centile	<ul style="list-style-type: none"> <li>• IBW <math>&lt;75\%</math> / BMI Centile <math>&lt;5</math></li> <li>• Rapid weight loss (<math>&gt; 1\text{kg/week}</math> over several weeks)</li> </ul>
Bloods (UEC, FBC, LFTs, magnesium and phosphate)	<ul style="list-style-type: none"> <li>• Serum potassium; serum phosphate or glucose outside of normal ranges</li> <li>• Inability to maintain stable levels of electrolytes</li> <li>• Other significant electrolyte disturbance</li> <li>• Neutropenia</li> </ul>
ECG	<ul style="list-style-type: none"> <li>• Prolonged QTc interval <math>&gt;450\text{msec}</math></li> <li>• Arrhythmia</li> </ul>
Other medical criteria	<ul style="list-style-type: none"> <li>• Moderate-severe dehydration (as indicated by postural hypotension or and/or tachycardia); ceased fluid intake</li> <li>• Ketosis</li> <li>• Other physical conditions e.g., pregnancy, diabetes</li> </ul>
Requiring more intensive treatment than community services able to provide	For example <ul style="list-style-type: none"> <li>• Severe family stress or strain</li> <li>• Behaviours relating to eating disorder impacting on functioning</li> </ul>
Assess psychiatric comorbidity, e.g., depression, OCD, psychosis Comprehensive risk assessment	<ul style="list-style-type: none"> <li>• Level of risk will determine level of observation and/or placement</li> </ul> Refer to Mental Health Visual Observations on QHEPS



## Guideline for Assessment of a child or adolescent presenting with a possible eating disorder

### If first presentation rule out organic cause for malnutrition

#### Physical

- Full examination, make sure you include:
  - T, HR, BP(lying and standing)
  - Ht / Wt / BMI(wt/ht<sup>2</sup>) all plot on percentile charts
  - Look for jaundice/carotenaemia
  - Signs of purging: cracked lips, dental hygiene, calluses on knuckles, enlarged parotid glands
  - Hydration state
  - Pubertal stage
  - CVS
- Look for signs of cardiomyopathy, cardiac failure
- Feel for displaced apex beat
- Listen for murmur
- Check for pulmonary oedema
  - Look for peripheral oedema
  - Hair, including lanugo
  - Bones, including carefully assessing for lumbar crush fractures
  - Bowel history/constipation
  - Urine output
  - Menstrual history
  - Fainting, altered conscious state –hypotension
  - Ketosis
  - Hypoglycaemia
  - Neutropenia (indicative of chronic malnutrition).

#### Eating Disorder Specific History

NB obtain collateral where possible from significant others and/or the local CYMHS service as the child / adolescent may not be an accurate historian.

- Premorbid weight and growth
- Rate of weight loss
- Dietary history
  - Current intake/last weeks' worth (NB this is often not accurate, and will require a full dietetic assessment)
- Purging – vomiting or exercising
- Water intake (Be concerned if <1L per day or >3L/day)
- Substance misuse
  - Laxatives, emetics, diuretics, appetite suppressants, over the counter herbal or complementary remedies
  - Alcohol or other drugs
- Binge eating
- Vitamin use
- Physical activity (often under-reported)
- Psycho social
- Impact on school / relationships
- Family understanding of the illness

#### Mental Health

- Mental state
  - Co-morbidity, self harm, suicidality

## Assessment and Management of Refeeding Syndrome

**Any child / adolescent requiring intensive refeeding will be at risk of refeeding syndrome and should be managed accordingly.**

Refeeding syndrome describes a range of reactions that may occur as the body reacts to the reintroduction of nutrition after an extended period of starvation. It involves a metabolic alteration in serum electrolytes, vitamin deficiencies and sodium retention, along with associated fluid shifts.

### Possible Outcomes of Refeeding Syndrome:

- neurological and neuromuscular problems including weakness, seizures, delirium, loss of consciousness
- cardiac compromise, most commonly bradycardia and hypotension, can include long QT, arrhythmias, cardiomyopathy, cardiac arrest
- respiratory failure and pulmonary oedema
- abnormal electrolyte and FBC morphology
- sudden death

Whilst these generally occur within 3-4 days, they can present in the first two weeks regardless of the route of refeeding (oral or enteral).

The most important aspect of treating refeeding syndrome is recognising those who are at risk.

A child / adolescent is considered high risk if:

Child / Adolescent has one or more of:	Child / Adolescent has two or more of:
BMI between 3 <sup>rd</sup> & 5 <sup>th</sup> centile Weight loss of >15% within the previous 3-6 months Very little nutritional intake for 10 days Low serum levels of potassium, magnesium, calcium or phosphate prior to feeding	BMI <between 5th and 10th centile Weight loss of >10% within previous 3-6months Very little intake for >5-7 days

### Ongoing Monitoring

Hypophosphatemia is the hallmark of refeeding syndrome. This may be associated with hypokalemia, hypomagnesaemia, hypoglycaemia, sodium and fluid retention and thiamine deficiency. Monitoring of electrolyte imbalances is crucial – by blood tests but also by a range of physical signs and symptoms that may indicate deficiencies.

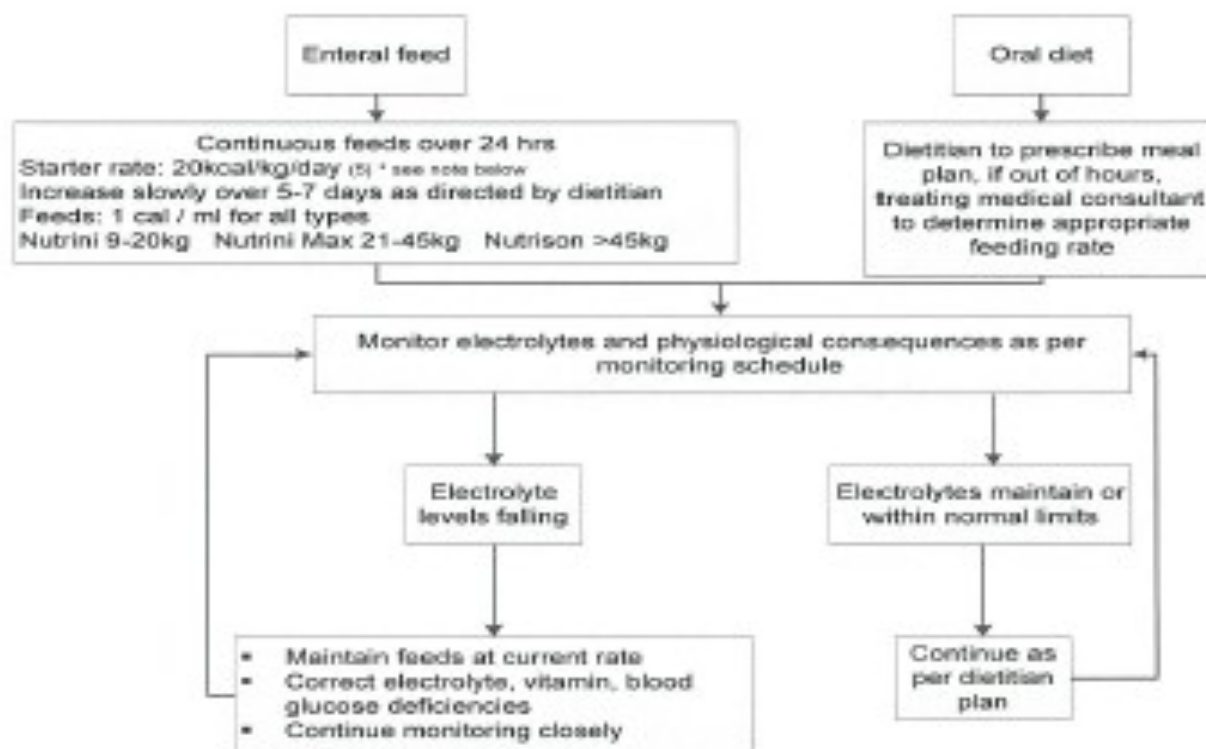
4 hourly observations	Critical Signs and Thresholds → Contact RMO Urgently
Blood pressure (sit and stand)	If postural changes of >10mm/Hg
Pulse (sit and stand)	If <50 bpm or if postural changes of >20 bpm or if irregular
Temperature	If <35.5 (day/evening) or <35 (nights)
Respiratory Rate	If any changes / shortness of breath
Blood Glucose (QID plus 2am)	If out of normal ranges

Daily	Critical Signs and Thresholds → Contact RMO Urgently
Electrolytes (potassium, phosphate, magnesium, calcium)	If pathology flag electrolytes out of normal ranges
ECG if clinically indicated	If indicates >0.45 QT interval, any indications of arrhythmia, or severe bradycardia
Monitor for signs of fluid overload	If any signs of pitting oedema either peripherally or parasacral
Monitor for signs of deterioration of muscle strength	e.g. Unable to stand from sitting
Monitor for signs of deterioration of mental state	e.g. confusion, vertigo, disorientation

## Assessment and Management of Refeeding Syndrome

Suggested Management Plan for use until involvement of specialist dietitian who can provide expert advice

- Alert paediatric team refer to dietitian
- Place on complete bed rest
- Check electrolytes with particular attention to K, PO<sub>4</sub>, Mg and Ca
- Commence phosphate supplements (dosage according to deficiency)
- Supplement with Thiamine 100mg orally and Multivitamin supplement daily
- Re-hydrate as necessary (dehydration should be corrected over days not hours due to the possible complications of rapid fluid shifts)
  - With Oral Rehydration Solution via NGT +/- Normal Saline if IV fluids necessary
  - With Normal Saline / Normal Saline with 5% Dextrose if IV fluids necessary
- Limit carbohydrate fluid (soft drinks, fruit juice, cordial - and high nutrient dense foods)
- Communicate extensively and supportively with family throughout process



\*Please note there is evidence that the starter rate can be higher when given with prophylactic phosphate supplements and with close monitoring – see Kohn, M et al (2011). Refeeding in Anorexia Nervosa: increased safety and efficiency through understanding the pathophysiology of protein calorie malnutrition. *Current Opinion in Pediatrics*, 23; 390-394

The Child and Youth and the Eating Disorders Advisory Groups to the Statewide Mental Health Network established a child and youth eating disorders working group to compile these documents for the use of practitioners in medical and mental health settings as **guidelines** for the assessment of these patients. They are based on the most recent literature and available evidence. They are designed to be used alongside clinical judgement, local policies and service provision allowances when deciding upon the need for admission.



## Guidelines for Nutritional Resuscitation (Management of the Medical Crisis)

This set of guidelines is for the child / adolescent in medical crisis where management of the medical risks is paramount. This care should therefore take place on a medical ward.

### Criteria – meets any of following:

- Moderate to high risk of refeeding syndrome
- In medical crisis as indicated by physical observations, ECG and/or blood electrolytes.

### Nutritional resuscitation should continue until the following parameters are met :

Observations are within acceptable limits for age, sex and height but may be at lower end of ranges

- Electrolytes and BGL return to normal ranges without supplementation
- No evidence of cardiac abnormalities (sinus rhythm and without need for cardiac monitoring)
- Assessed as low risk for refeeding syndrome
- Weight stabilising and/or increasing (depending on individual needs)
- Admission to CYMHS Inpatient Unit is arranged **OR** follow-up appointments with physician and mental health clinician are booked no longer than 72 hours after discharge, and earlier if possible
- Discharge plan discussed and clarified with child/ adolescent, family and treatment team (CYMHS CL and Medical)

### **For discharge home:**

Consistently tolerating prescribed oral feeding regime, with or without supplements. **ONLY** after assessment by local CYMHS team and a comprehensive discharge plan

### **For transfer to CYMHS inpatient unit:**

Tolerating prescribed feeding regime of either oral or NGT feeding and requiring nutritional rehabilitation or other mental health care.

### Leave:

No leave off ward unless for medical tests – should be in wheelchair with nurse escort

### Meal Plan:

- Prescribed by paediatric dietitian with specialist experience and/or guidance from EDOS
- No extra food to be given, with full rationale regarding refeeding syndrome and need for monitoring given to family
- Meal plan to be reviewed weekly by the treating team including the dietitian in collaboration with the child / adolescent and family.
- Consistency with meal times and plans is important.

### Suggested nursing interventions to manage the medical risks of a child / adolescent in this state presents:

- QJD physical observations, with a BGL also at 2am
- Food and fluid intake charts
- Weighing done as per local protocol for days, times and recording
- Constant bed rest as indicated by level of medical risk – must be sitting or lying at all times
- Needs appropriate clothing and bedcovers for the climate
- Assess for ripple mattress / sheepskin on bed for pressure area care
- 1 x 10 minute shower per day with appropriate supervision. NGT feed should not be taken into shower
- If on NG feed then disconnect pump before child/ adolescent goes into bathroom

- Refeeding will induce anxiety that the child/ adolescent may attempt to manage through behaviours such as high activity levels, purging or tampering with NG feed. Consideration should be given to appropriate support to manage medical risk as a consequence of such behaviours e.g.: Toilet supervision of the child/ adolescent to be done by nurse / parent / carer (as negotiated as appropriate to the individual's gender, age and risk) by maintaining constant conversation e.g. to ensure there is no vomiting, exercise or fluid loading
- Provision of supported eating and/or meal supervision as per local protocol and resource allowance (ideal is supported eating at all meals but this has training and resource implications)
- Provide post meal support (distraction / counselling and /or observation as appropriate to individual needs) if possible
- For NGT feeds tamper proof feeds and hourly feed checks.

### Suggested interventions that local CYMHS should deliver

Whilst the child / adolescent remains an inpatient on the medical ward, the paediatric team maintains the clinical governance of the patient. CYMHS will provide a consultation liaison role with regards to support, treatment planning and linkages to community supports. Collaboration must be maintained between the two services during the admission period and to facilitate discharge planning. Throughout the period of admission the care and treatment of the child/ adolescent and the appropriateness of the treatment setting will be monitored. If, after due consideration of the principles outlined within this document it is deemed that the child / adolescent requires a transfer to a more appropriate setting eg a CYMHS acute inpatient unit, CYMHS clinicians will endeavour to find a bed.

- Offer parental/carer support and psychoeducation about the disorder (aetiology, prognosis etc.) and treatment options.
- Provide support and training as required to staff implementing the care to explain rationale and assist them in the often emotionally challenging task of refeeding.

### Medical

#### Essential:

- Bloods and ECG as clinically indicated by refeeding syndrome risk assessment
- Supplemental Thiamine and multivitamins
- Electrolyte supplements as indicated.

#### Recommended:

- Muscle wastage assessment (SUSS test - see below \*) twice weekly
- TBK / REE or DEXA to be considered if available.

\*If constipated (NB will have reduced gut motility) consider stool softeners but not laxatives.

\*In cases of hypoglycaemia treat with combination of simple and complex carbohydrates (glucagon unlikely to be helpful due to lack of glycogen stores).

The Child and Youth and the Eating Disorders Advisory Groups to the Statewide Mental Health Network established a child and youth eating disorders working group to compile these documents for the use of practitioners in medical and mental health settings as guidelines for the assessment of these patients. They are based on the most recent literature and available evidence. They are designed to be used alongside clinical judgement, local policies and service provision allowances when deciding upon the need for admission.

#### \*SUSS (Sit Up Squat Stand) Test For Muscle Wastage

Robinson, P. H. (2006) Community Treatment of Eating Disorders. Wiley, London

Sit up: Patient lies down flat on the floor and sits up without, if possible, using their hands.

Squat-stand: patient squats down and rises without, if possible, using their hands.

Scoring (for sit up and Squat-stand tests separately)

0: Unable

1: Able only using hands to help

2: Able with noticeable difficulty

3: Able with no difficulty



## Guidelines for Nutritional Rehabilitation (Management of return to physical health and transfer to outpatient care)

As these guidelines are for the treatment of the child/ adolescent once medical crisis is resolved the setting will be either paediatric medical ward or CYMHS inpatient unit depending on local service policy and provision.

### Criteria which indicate need for nutritional rehabilitation following nutritional resuscitation – may meet one or more of following:

- Low risk of refeeding syndrome
- Medically stable as indicated by physical observations, ECG and/or blood electrolyte levels with deficiencies managed by supplements but remains unwell
- Compensatory behaviours evident and may or may not be being managed with support of staff and family
- Weight gain of 0.5 – 1 kg per week if required (NB patients with Bulimia Nervosa or EDNOS may be at 100% IBW but still physically compromised)
- Eating at least 50% of nutritional intake with supplementation or NG bolus.

### Goals for discharge home:

- Normalisation of physical observations and blood electrolytes indicating safe nutritional status
- Eating as per local outpatient protocols (e.g. those going into a Maudsley FBT service will have lower thresholds as there is an expectation that families can help the patient gain weight)
- Psychologically stable.

### Leave

All leave should be planned between family and case manager, with focus on meal support, activity management and strategies to help manage compensatory behaviours which may impact on weight restoration. A meeting between parents and dietician may be useful so advice on nutrition can be given.

A graduated leave plan could be negotiated between family and treatment plan to support transition home e.g.:

- Leave between meals and snacks daily
- Leave daily between main meals but to include a snack
- Leave daily to include a main meal
- Leave daily to include either one main meal and two snacks or two main meals and one snack Leave overnight at weekend
- Leave overnight midweek.

### Meal Plan

Prescribed by paediatric dietician with specialist experience and/or guidance from The Eating Disorder Outreach Service if specialist service not available.

Meal plan to be reviewed weekly by the treating team including the dietician in collaboration with the patient and family Consistency with meal times and plans is important.

### Nursing

- Physical observations as clinically indicated
- Food and fluid intake chart
- Twice weekly weighing (as per ward protocol)
- Meals should be in an appropriate dining room where possible with supportive meal therapy intervention
- Where possible provide post meal support and promote child / adolescent's independent use of strategies learnt, give consideration to an individual's own risks e.g. if at risk of purging consider supported use of bathrooms immediately after meals
- Negotiate return to school work and attendance at school as per local policy and individual needs.



### CYMHS

- Whilst the child / adolescent remains an inpatient on the medical ward, the paediatric team maintains the clinical governance. CYMHS will provide a consultation liaison role with regards to support, treatment planning and linkages to community supports. Collaboration must be maintained between the two services during the child/ adolescent's admission period and facilitate discharge planning. Throughout the period of admission the care and treatment of the adolescent and the appropriateness of the treatment setting will be monitored. If, after due consideration of the principles outlined within this document it is deemed that the child / adolescent requires a transfer to a more appropriate setting e.g. a CYMHS acute inpatient unit, CYMHS clinicians will endeavour to find a bed.

### Medical

- Bloods and ECG as clinically indicated
- Supplemental thiamine and multivitamins
- Electrolyte supplementation as indicated
- Muscle wastage assessment (SUSS test -see below \*) as required
- TBK / REE or DEXA to be considered if available
- Consider medication if anxiety at a level which is interfering with nutritional rehabilitation and other strategies are not proving effective
- Ensure weight chart and latest bloods sent to person responsible for medical monitoring in outpatients.

### Additional Interventions for preparation for discharge

Family should have adequate support and preparation for the return home including education on meal support, signs to look out for which indicate a relapse and managing the family anxiety.

- Discharge plan requires
  - medical monitoring
  - an appropriate family or individual therapy
  - clear plan for parameters for readmission.
- There should be a joint meeting between inpatient unit and outpatient treatment clinicians prior to discharge.

The Child and Youth and the Eating Disorders Advisory Groups to the Statewide Mental Health Network established a child and youth eating disorders working group to compile these documents for the use of practitioners in medical and mental health settings as **guidelines** for the assessment of these patients. They are based on the most recent literature and available evidence. They are designed to be used alongside clinical judgement, local policies and service provision allowances when deciding upon the need for admission.

#### \*SUSS (Sit Up Squat Stand) Test For Muscle Wastage

Robinson, P. H. (2006) Community Treatment of Eating Disorders. Wiley, London

Sit up: Patient lies down flat on the floor and sits up without, if possible, using their hands.

Squat-stand: patient squats down and rises without, if possible, using their hands.

Scoring (for sit up and Squat-stand tests separately)

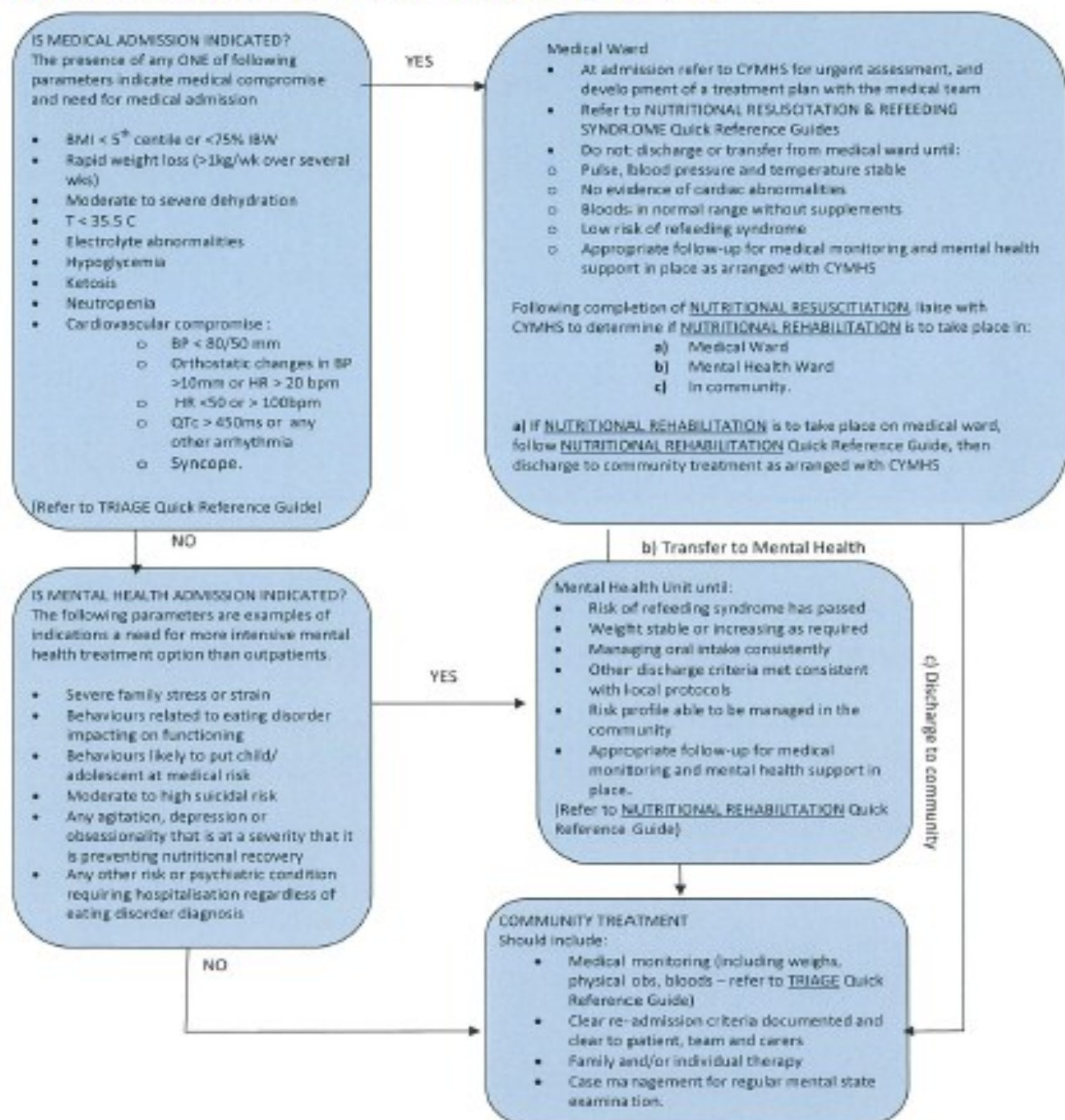
0: Unable

1: Able only using hands to help

2: Able with noticeable difficulty

3: Able with no difficulty

## Queensland Statewide Access Pathway for Management of Children and Adolescents with Eating Disorders



Local service arrangements will determine where nutritional rehabilitation will take place

N.B This is a guideline only and does not replace the need for clinical judgement based on individual circumstances.



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*Appendix R :*

*Academy for Eating Disorders Report 2012 2nd Edition  
Eating Disorders*

*Critical Points for Early Recognition and Medical Risk Management in the Care of Individuals with Eating Disorders*

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AED REPORT 2012

2<sup>nd</sup> EDITION

# EATING DISORDERS

Critical Points for Early  
Recognition and Medical  
Risk Management in the  
Care of Individuals with  
Eating Disorders



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**Disclaimer:** This document, created by the Academy for Eating Disorders' Medical Care Standards Task Force, is intended as a resource to promote recognition and prevention of medical morbidity and mortality associated with eating disorders. It is not a comprehensive clinical guide. Every attempt was made to provide information based on the best available research and current best practices.

For further resources, practice guidelines and bibliography visit:  
[www.aedweb.org](http://www.aedweb.org) and [www.aedweb.org/Medical\\_Care\\_Standards](http://www.aedweb.org/Medical_Care_Standards)

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## Key Guidelines

Eating disorders (EDs) are serious mental illnesses with significant, life-threatening medical and psychiatric morbidity and mortality, regardless of an individual's weight. Anorexia Nervosa (AN), in particular, has the highest mortality rate of any psychiatric disorder. Risk of premature death is 6-12 times higher in women with AN as compared to the general population, adjusting for age.

Early recognition and timely intervention, based on a developmentally appropriate, evidence-based, multidisciplinary team approach (medical, psychological & nutritional), is the ideal standard of care, wherever possible. Members of the multidisciplinary team may vary and will depend upon the needs of the patient and the availability of these team members in the patient's community. In communities where resources are lacking, clinicians, therapists, and dietitians, are encouraged to consult with the Academy for Eating Disorders (AED) and/or ED experts in their respective fields of practice.

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## Eating Disorders

For the purpose of this document, eating disorders (EDs) include:

- 1. Anorexia nervosa (AN), restrictive and binge/purge subtypes
- 2. Bulimia Nervosa (BN), purging and non-purging types
- 3. Eating Disorders Not Otherwise Specified (EDNOS), including Binge Eating Disorder (BED)
- Consult [www.aed.org](http://www.aed.org) or the current DSM or ICD-10 for full description.

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## Important Facts about Eating Disorders

- Eating disorders are serious disorders with life-threatening physical and psychological complications.
- In addition to girls and women, EDs can affect boys and men; children, adolescents and adults; people from all ethnicities and socioeconomic backgrounds; and people with a variety of body shapes, weights and sizes.
- Weight is not the only clinical marker of an ED. People who are at normal weight can have EDs.
- It is important to remember that EDs do not only affect females at low weight. All instances of precipitous weight loss in otherwise healthy individuals should be investigated for the possibility of an ED, including post-bariatric surgery patients. In addition, rapid weight gain or weight fluctuations can be a potential marker of an ED.
- Individuals at weights above their natural weight range may not be getting proper nutrition and patients within their natural weight range may be engaging in unhealthy weight control practices.
- In children and adolescents, failure to gain expected weight or height, and/or delayed/interrupted pubertal development, should be investigated for the possibility of an ED.
- The medical consequences of EDs can go unrecognized, even by experienced clinicians.
- Eating disorders (including BED) can be associated with serious medical complications. Eating disorders can be associated with significant compromise in every organ system of the body, including the cardiovascular, gastrointestinal, endocrine, dermatological, hematological, skeletal, and central nervous system.

## Presenting Signs and Symptoms

Individuals with EDs may present in a variety of ways. In addition to the cognitive and behavioral signs that characterize EDs, the following are possible physical signs and symptoms that can occur in patients with an ED as a consequence of nutritional deficiencies, binge-eating, and inappropriate compensatory behaviors, such as purging. However, an ED may occur without obvious physical signs or symptoms.

### GENERAL

- Marked weight loss, gain or fluctuations
- Weight loss, weight maintenance or failure to gain expected weight in a child and adolescent who is still growing and developing
- Cold intolerance
- Weakness
- Fatigue or lethargy
- Dizziness
- Syncope
- Hot flashes, sweating episodes

### ORAL AND DENTAL

- Oral trauma/lacerations
- Dental erosion and dental caries
- Parotiditis
- Parotid enlargement

### CARDIORESPIRATORY

- Chest pain
- Heart palpitations
- Arrhythmias
- Shortness of breath
- Edema

### GASTROINTESTINAL

- Epigastric discomfort
- Early satiety, delayed gastric emptying
- Gastroesophageal reflux
- Hematemesis
- Hemorrhoids and rectal prolapse
- Constipation

### ENDOCRINE

- Amenorrhea or irregular menses
- Loss of libido
- Low bone mineral density and increased risk for bone fractures and osteoporosis
- Infertility

### NEUROPSYCHIATRIC

- Seizures
- Memory loss/Poor concentration
- Insomnia
- Depression/Anxiety/Obsessive behavior
- Self-harm
- Suicidal ideation/suicide attempt

### DERMATOLOGIC

- Lanugo hair
- Hair loss
- Yellowish discoloration of skin
- Callus or scars on the dorsum of the hand (Russell's sign)
- Poor healing

---

## Early Recognition

Consider evaluating an individual for an ED who presents with any of the following:

- Precipitous weight loss/gain
- Weight loss or failure to gain expected weight/height in a child and adolescent who is still growing and developing
- Substantial weight fluctuations
- Electrolyte abnormalities (with or without ECG changes), especially hypokalemia, hypochloremia, or elevated CO<sub>2</sub>. High normal CO<sub>2</sub> in the presence of low normal chloride and/or urine pH of 8.0 – 8.5 can indicate recurrent vomiting. Hypoglycemia may accompany such electrolyte changes.
- Bradycardia
- Amenorrhea or menstrual irregularities
- Unexplained infertility
- Excessive exercise or involvement in extreme physical training
- Constipation in the setting of other inappropriate dieting and/or weight loss promoting behaviors
- Type 1 diabetes mellitus and unexplained weight loss and/or poor metabolic control or diabetic ketoacidosis (DKA). These patients are at increased risk of developing sub-threshold and full syndrome EDs. Intentionally changing insulin doses (under-dosing or omission) will lead to weight loss, poor glycemic control (higher hemoglobin A1c), hypoglycemia/hyperglycemia, DKA, and acceleration of diabetic complications.
- A history of using one or more compensatory behaviors to influence weight after eating or perceived overeating or binge eating, such as self-induced vomiting, dieting, fasting or excessive exercise
- A history of using/abusing appetite suppressants, excessive caffeine, diuretics, laxatives, enemas, ipecac, excessive hot or cold fluids, artificial sweeteners, sugar-free gum, prescription medications (i.e., insulin, thyroid medications), psychostimulants, street drugs, or a variety of complementary and alternative supplements.

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## Acute malnutrition is a medical emergency

Individuals with continued restrictive eating behaviors, binge eating or purging despite efforts to redirect their behavior require immediate intervention. Acute malnutrition is a medical emergency. Malnutrition can occur at any body weight, not just at a low weight.

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## A Comprehensive Assessment

### Complete History to Include...

#### *Assess:*

- Rate and amount of weight loss/change
- Nutritional status
- Methods of weight control

#### *Review:*

- Compensatory behaviors (vomiting, dieting, exercise, insulin misuse, and/or use of diet pills, over-the-counter supplements, laxatives, ipecac, diuretics etc.)
- Dietary intake and exercise
- Menstrual history in females (hormone replacement therapy including oral contraceptive pills)
- Comprehensive growth and development history, temperament, & personality traits



- 
- Family history including symptoms or diagnosis of EDs, obesity, mood & anxiety disorders, alcohol and substance use disorders
  - Psychiatric history including symptoms of mood disorders and anxiety disorders

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#### Physical examination to include...

- Supine and standing heart rate and blood pressure
- Respiratory rate
- Oral temperature (looking for hypothermia: body temperature < 96° F/35.6 °C).
- Measurement of height, weight, and determination of body mass index (BMI); record weight, height and BMI on growth charts for children and adolescents, noting changes from previous height(s) and weight(s) measurements.

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#### Initial laboratory Evaluation

- The laboratory and imaging studies recommended for consideration in an initial evaluation of a patient with an ED, along with the corresponding abnormalities that can be seen in patients with EDs, are outlined in the following chart.

Laboratory Studies	Potential abnormal findings in a patient with an eating disorder
Complete blood count	Leukopenia, anemia, or thrombocytopenia
Comprehensive serum metabolic profile, other electrolytes and enzymes	<p>Glucose: ↓ (poor nutrition), ↑ (insulin omission)</p> <p>Sodium: ↓ (water loading or laxatives)</p> <p>Potassium: ↓ (vomiting, laxatives, diuretics, refeeding)</p> <p>Chloride: ↓ (vomiting), ↑ (laxatives)</p> <p>Blood bicarbonate: ↑ (vomiting), ↓ (laxatives)</p> <p>Blood urea nitrogen: ↑ (dehydration)</p> <p>Creatinine: ↑ (dehydration, renal dysfunction), (poor muscle mass). Normal may be "relatively elevated" given low muscle mass.</p> <p>Calcium: slightly ↓ (poor nutrition at the expense of bone)</p> <p>Phosphate: ↓ (poor nutrition or refeeding)</p> <p>Magnesium: ↓ (poor nutrition, laxatives, refeeding)</p> <p>Total protein/albumin: ↑ (in early malnutrition at the expense of muscle mass), ↓ (in later malnutrition)</p> <p>Total bilirubin: ↑ (liver dysfunction), ↓ (poor RBC mass)</p> <p>Aspartate aminotransferase (AST), Alanine aminotransferase (ALT): ↑ (liver dysfunction)</p> <p>Amylase: ↑ (vomiting, pancreatitis)</p> <p>Lipase: ↑ (pancreatitis)</p>
Thyroid function tests	Low to normal thyrotropin (TSH), normal or slightly low thyroxine (T4) (sick euthyroid syndrome).

Laboratory Studies	Potential abnormal findings in a patient with an eating disorder
Gonadotropins and sex steroids	Low luteinizing hormone (LH) and follicle-stimulating hormone (FSH). Low estradiol in females, low testosterone in males.
Pregnancy test of women in childbearing years	Low weight females can ovulate and are therefore at risk for becoming pregnant if sexually active.
Lipid panel	This is not recommended as an initial laboratory test since cholesterol may be elevated in early malnutrition or low in advanced malnutrition.
Imaging Studies	Potential abnormal findings in a patient with an eating disorder
Bone mineral density study	Patients with EDs are at risk of low bone mineral density (BMD). There is no evidence that hormone replacement therapy (estrogen/progesterone in females or testosterone in males) improves BMD. Nutritional rehabilitation, weight recovery, and normalization of endogenous sex steroid production are the treatments of choice. A common technique for measuring BMD is dual energy x-ray absorptiometry (DXA), recommended in patients with amenorrhea for 6 months or longer.
Other Tests	Potential abnormal findings in a patient with an eating disorder
Electrocardiogram (ECG)	Bradycardia or other arrhythmias, low-voltage changes, prolonged QTc interval, T-wave inversions, and occasional ST-segment depression.

---

## Refeeding Syndrome

Refeeding syndrome describes a potentially fatal shift of fluid and electrolytes that can occur when refeeding (orally, enterally, or parenterally) a malnourished patient. Patients with refeeding syndrome may have a non-specific clinical presentation and therefore diagnosing this syndrome can be challenging. The serious consequences of refeeding syndrome include cardiac and/or respiratory failure, gastrointestinal problems, delirium and, in some cases, death. Refeeding syndrome is a potentially fatal condition requiring specialized care on an inpatient unit.

---

Risk factors for refeeding syndrome include:

- Patients who are chronically undernourished and those who have had little or no energy intake for more than 10 days.
- Patients with rapid or profound weight loss, including those patients who present at a normal weight after weight loss.
- Patients with anorexia nervosa.
- Patients with EDs who are malnourished, especially if there is significant alcohol intake.
- Patients with obesity and significant weight loss, including after bariatric surgery.
- Patients with prolonged fasting or low energy diet.
- Patients with a history of diuretic, laxative or insulin misuse.
- Patients with abnormal electrolytes, particularly hypophosphatemia, prior to refeeding.

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## Ways to Prevent Refeeding Syndrome in patients with an eating disorder

- Be informed about refeeding syndrome and aware of those patients who are potentially at risk.
- Be aware that refeeding syndrome can occur in patients of any age.
- Understand that those patients at risk for refeeding syndrome should be treated by physicians with expertise or special training in the area of EDs.
- Use an inpatient medical unit to treat and monitor patients who may have, or are at risk for, refeeding syndrome. Refeeding syndrome is an important cause of morbidity and mortality in malnourished patients with EDs.
- Refeed slowly, adjusting to the age, developmental stage, and degree of malnourishment.
- While treating a patient on an inpatient unit, monitor fluid replacement to avoid overload and check serum electrolytes, glucose, magnesium, and phosphorus prior to and closely during refeeding. Serum phosphorus levels are at their lowest point during the first week of refeeding in patients who are hospitalized.
- For those patients with electrolyte deficits, correct electrolyte and fluid imbalance alongside feeding. It is not necessary to correct fluid and electrolyte imbalance before feeding. With careful monitoring, this can be safely achieved simultaneously. For those patients who do not present with electrolyte deficits, carefully monitor on an inpatient unit as electrolyte abnormalities may occur with refeeding.
- Monitor vital signs and cardiac and mental status of all patients during refeeding.

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## Underfeeding

Underfeeding can lead to further weight loss and has been reported to be fatal in seriously malnourished patients.

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### Ways to prevent Underfeeding

- Avoid underfeeding caused by implementing overly cautious rates of refeeding.
- Frequently (12-24 hourly) reassess and increase calories as soon as it is deemed safe in patients who are hospitalized.
- Review electrolytes daily in the initial stages of refeeding.

---

## Goals of treatment

- Nutritional rehabilitation
- Weight restoration
- Medical stabilization and prevention of serious medical complications and death
- Resumption of menses (where appropriate)
- Cessation of binge eating and/or purging behaviors
- Cessation of eating disordered ideation including body image disturbance and dissatisfaction
- Restore meal patterns that promote health and social connections
- Re-establish social engagement

Full resolution of symptoms may take an extended period of time. Eating Disorders are not merely fads, phases, or lifestyle choices. People do not choose to have EDs, even though they may voluntarily engage in risk-associated behaviors such as dieting and/or exercise that may precipitate an ED.



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## Timely Interventions

**1. Patients with EDs may not recognize that they are ill and/or they may be ambivalent about accepting treatment.**

**This is a symptom of their illness.** In addition, patients may minimize, rationalize, or hide ED symptoms and/or behaviors. Their persuasive rationality and competence in other areas of life can disguise the severity of their illness. Outside support and assistance with decision-making will likely be necessary regardless of age.

**2. Parents/guardians are the frontline help-seekers for children and adolescents with EDs.**

**Trust their concerns.** Even a single consultation about a child's eating behavior or weight/shape concerns is a strong predictor of the presence or potential development of an ED.

**3. Help families understand that they did not cause the illness; neither did their child/family member choose to have it.**

This recognition facilitates acceptance of the diagnosis, treatment, referral, interventions, and minimizes undue stigma associated with having the illness.

**4. Monitor physical health including vital signs and laboratory tests.**

The overall observation of physical health in a patient with an ED should include regular monitoring of the orthostatic heart rate and blood pressure (lying pulse and blood pressure followed by standing pulse and BP). Results should be interpreted in the context of physiological adaptation to malnutrition and purging behavior. Laboratory test results can be normal even in the presence of a life-threatening ED. Minor abnormalities may indicate that compensatory mechanisms have reached critical limits.

Low weight patients or those patients who have significant weight loss may present with bradycardia (heart rate < 50 beats per minute). This should not be automatically attributed to an athlete's heart, even if the patient is an athlete.

**5. Always assess for psychiatric risk, including suicidal and self-harm thoughts, plans and/or intent.**

Up to 1/3 of deaths related to EDs are due to suicide.

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## Ongoing Management

Evidence-based treatment delivered by health professionals with expertise in the care of patients with ED is mandatory. Optimal care includes a multidisciplinary team approach by ED specialists including medical, psychological, nutritional, and psychopharmacologic services. Families & spouses should be included whenever possible.

Referral by primary providers is the most likely reason families/patients seek expert care. A detailed assessment and referral to an expert can, therefore, ensure the best treatment outcome for the patient.

Nutritional rehabilitation, weight restoration & stabilization, complete physiologic restoration, management of refeeding complications, and interruption of purging/compensatory behaviors should be the immediate goals of treatment for all patients with EDs. Additional psychological and other therapeutic goals can be addressed in parallel when possible.

Achievement of an individual's appropriate healthy weight will improve the physical, psychological, social, and emotional functioning of that patient.

Failure to fully restore weight correlates with worse outcomes, and maintenance of the weight restored strongly correlates with a good outcome. However, there is danger in thinking that a person with an ED is recovered once physical health and weight are restored. Distorted body image and/or ED thoughts may persist despite weight restoration and will likely require longer-term therapy.

For references and further information about the diagnosis and treatment of EDs visit: [www.aedweb.org](http://www.aedweb.org) and [www.aedweb.org/Medical\\_Care\\_Standards](http://www.aedweb.org/Medical_Care_Standards).

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## About the Academy for Eating Disorders (AED)

The AED is a global multidisciplinary professional association committed to leadership in promoting EDs research, education, treatment, and prevention.

The AED provides cutting-edge professional training and education, inspires new developments in the field of EDs, and is the international source for state-of-the-art information on EDs.

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## Join the AED

Become a member of a global community dedicated to ED research, treatment, education, and prevention. Join online at [www.aedweb.org](http://www.aedweb.org)

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Society for Adolescent Health and Medicine

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*Appendix S :*

*Academy for Eating Disorders Guidelines for Childhood Obesity Prevention Programs*

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Sigrún Daníelsdóttir, Cand.Psych., Deb Burgard, Ph.D., & Wendy Oliver-Pyatt, M.D.

Studies from around the world show that body weight in youth has increased over the past decades (Chinn & Rona, 2001; Kautiainen, Rimpelä, Vikat, & Virtanen, 2002; Tremblay & Willms, 2000; Troiano & Flegal, 1998), although the most recent evidence suggests that this increase may be leveling off, at least in the United States (Ogden, Carroll, & Flegal, 2008). Concern over rising weights has spurred various community and school-based interventions aimed at decreasing childhood “overweight.” These include the mandatory screening of children’s BMI, banning of “junk food” in school cafeterias, limiting vending machines in schools and promotional campaigns emphasizing the dangers of excess weight. Many health professionals have voiced concern about the safety and efficacy of these interventions, fearing that they have little positive effect and may inadvertently contribute to overconcern with weight and shape, unhealthy weight control practices, and weight bias (e.g. Berg, 2001; Cogan, Smith, & Maine, 2008; Ikeda, Crawford, & Woodward-Lopez, 2006; Neumark-Sztainer, Wall, Story & van den Berg, 2008).

A substantial body of evidence from the eating disorder literature demonstrates that a general emphasis on appearance and weight control can promote eating disordered behaviors. For example, when important agents in children’s social environment (e.g. parents and peers) endorse a preference for thinness and place an importance on weight control, this can contribute to body dissatisfaction, dieting, low self-esteem and weight bias among children and adolescents (Davison & Birch, 2001; Davison & Birch, 2004; Dohnt & Tiggemann, 2006; Smolak, Levine, & Schermer, 1999). Additionally, weight-control practices among young people reliably predict greater weight gain, regardless of baseline weight, than that of adolescents who do not engage in such practices (Neumark-Sztainer et al., 2006). Thus, it is important to evaluate the unintended consequences of “obesity prevention” programs, which may lead to unhealthy behaviors and weight displacements in both directions.

Unfortunately, few studies have examined the effects of “obesity prevention” efforts on risk-factors for eating disorders, such as body dissatisfaction and weight loss dieting. Those that have suggest that focusing on health, not weight, may be key to avoiding harm to body image and eating behaviors. For example, Austin, Field, Wiecha, Peterson & Gortmaker (2005) found lowered rates of disordered eating in a school-based intervention that focused on promoting healthy diet and activity patterns, rather than on weight per se. These findings emphasize the feasibility of simultaneously promoting body esteem and healthy lifestyle behaviors in youth, as others have suggested (Neumark-Sztainer, 2005). Expanding the vision of “obesity prevention” programs to include the prevention of eating disorders and related issues, may help to ensure that they promote overall health and safety.

Body weight cannot be evaluated in a vacuum. It is not a reliable proxy for eating behaviors and physical activity. Although statistical associations exist between body weight and risk for morbidity and mortality, being heavy or slender is not by definition pathological. Correlation does not imply causation and the middle of the weight spectrum can cloak a panoply of unhealthy practices. Since healthy living is important for children of all sizes, interventions should focus on lifestyle rather than weight.

The Academy for Eating Disorders applauds efforts to make children’s environments as healthy as possible. However, it is important that special care be taken in the construction and implementation of “obesity prevention” programs to minimize any harm that might result. To this end, the following guidelines have been developed for school-and community-based interventions addressing rising weights in youth.

Interventions should focus on health, not weight, so as to not contribute to the overvaluation of weight and shape and negative attitudes about fatness that are common among children and have harmful effects on their physical, social and psychological well-being.

The World Health Organization defines health as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. Consistent with this definition, interventions aimed at addressing weight concerns should be constructed from a holistic perspective, where equal consideration is given to social, emotional and physical aspects of children's health.

Interventions should focus not only on providing opportunities for appropriate levels of physical activity and healthy eating, but also promote self-esteem, body satisfaction, and respect for body size diversity. Prospective studies show that body dissatisfaction and weight-related teasing are associated with binge eating and other eating disordered behaviours, lower levels of physical activity and increased weight gain over time. Thus, constructing a social environment where all children are supported in feeling good about their bodies is essential to promoting health in youth.

Interventions should focus only on modifiable behaviours (e.g. physical activity, intake of sugar-sweetened beverages, teasing, time spent watching television), where there is evidence that such modification will improve children's health. Weight is not a behaviour and therefore not an appropriate target for behaviour modification. Children across the weight spectrum benefit from limiting time spent watching television and eating a healthy diet. Interventions should be weight-neutral, i.e. not have specific goals for weight change but aim to increase healthy living at any size.

It is unrealistic to expect all children to fit into the "normal weight" category. Thus, interventions should not be marketed as "obesity prevention." Rather, interventions should be referred to as "health promotion," as the ultimate goal is the health and well-being of all children, and health encompasses many factors besides weight. School-based interventions should avoid the language of "overweight" and "obesity" since these terms may promote weight-based stigma. Moreover, several of the most effective interventions have not focused on weight per se.

Interventions should focus on making children's environments healthier rather than focusing solely on personal responsibility. In the school setting, these include serving healthy meals, providing opportunities for fun physical activities, implementing a no-teasing policy, and providing students and school staff with educational sessions about body image, media literacy, and weight bias. In the community setting, these include making neighborhoods safer, providing access to nutritious foods, constructing sidewalks and bicycle lanes, building safe outside play areas, and encouraging parents to serve regular family meals, create a non-distracting eating environment, and provide more active alternatives to TV viewing.

Interventions should be careful not to use language that has implicit or explicit anti-fat messages, such as "fat is bad," "fat people eat too much", etc. Children of all sizes deserve a healthy environment and will benefit from a healthy lifestyle and positive self-image. School-based interventions should not target heavier children specifically with segregated programs aimed at lowering weights. However, this should not discourage efforts to provide physical activities tailored for larger bodies or to address the experiences that heavier children share as a group. Determining normal or abnormal growth in children should be dependent on the consistency of their growth over time and not just the percentile at which they are growing.



Childhood overweight should be defined as an upward weight divergence that is abnormal for an individual child, which can be determined only by comparing the child to him- or herself over time. This can be accomplished by consulting an individual growth chart, rather than an arbitrary BMI cutoff.

Interventions should aim for the maintenance of individually appropriate weights—that is, that children will continue to grow at their natural rate and follow their own growth curve—underscoring that a healthy weight is not a fixed number but varies for each individual.

A sudden shift away from the growth curve in either direction may indicate a problem, but further information about lifestyle habits, physical markers and psychological functioning is needed before a diagnosis can be made. Changes in weight are not always a sign of abnormal development. An increase in weight often precedes a growth spurt in children and some girls begin to gain body fat as part of normal adolescence at a very young age.

Weighing students should only be performed when there is a clear and compelling need for the information. The height and weight of a child should be measured in a sensitive, straightforward and friendly manner, in a private setting. Height and weight should be recorded without remark. Further, BMI assessment should be considered just one part of an overall health evaluation and not as the single marker for a student's health status.

Weight must be handled as carefully as any other individually identifiable health information. The ideal intervention is an integrated approach that addresses risk factors for the spectrum of weight-related problems, including screening for unhealthy weight control behaviors; and promotes protective behaviors, such as decreasing dieting, increasing balanced nutrition, encouraging mindful eating, increasing activity, promoting positive body image and decreasing weight-related teasing and harassment. Interventions should honor the role of parents in promoting children's health and help them support and model healthy behaviors at home without overemphasizing weight.

Interventions should provide diversity training for parents, teachers and school-staff for the purpose of recognizing and addressing weight-related stigma and harassment and constructing a size-friendly environment in and out of school.

Interventions should be created and led by qualified health care providers who acknowledge the importance of a health focus over a weight focus when targeting lifestyle and weight concerns in youth. Representatives of the community to be studied should be included in the planning process to ensure that interventions are sensitive to diverse norms, cultural traditions, and practices. In this spirit, it is important that interventions be pilot tested before implementation in order to collect quantitative and qualitative feedback from the participants themselves.

It is important that interventions be evaluated by qualified health care providers and/or researchers, who are familiar with the research on risk factors for eating disorders, as the interventions are being implemented in schools or communities. Ideally, the assessment should not only evaluate changes in eating and activity levels but also self-esteem, social functioning, weight bias and eating disorder risk factors, such as body dissatisfaction, dieting and thin-ideal internalization.

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