

# Eating Disorders



## An Information Pack for General Practitioners

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## INTRODUCTION

### What are eating disorders?

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. Another category, *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*.

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

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<sup>1</sup>**, 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.<sup>2 3 4</sup>

### What causes eating disorders?

Eating disorders are a complex interplay of biopsychosocial factors, including development issues, relationship and family factors, life events, biological vulnerability 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, 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) or 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. The documents are also be 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 suffers 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<sup>1</sup>

### **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 Consumers Voice

*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*

## DIAGNOSIS

### Diagnostic Features (DSM – IV 4<sup>th</sup> Edition 1994)<sup>5</sup>

#### 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 overeating;
- 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.

Both are serious psychiatric and physical disturbances. Eating disorders 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 is 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.<sup>6</sup>
- 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<sup>7</sup> 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 <math><17.5 \text{ kg/m}^2</math>. *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<sup>8</sup>. 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.<sup>9</sup>
- *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<sup>10</sup>.

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## 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<sup>11</sup>. 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.

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.

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### **Differential Diagnosis**

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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: <sup>12</sup>

- 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.

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.**'<sup>13</sup>

## Common Presentations

**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 & 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
- 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

## **❖ Psycho-social Signs**

### **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<sup>14</sup>:

- 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.**<sup>15</sup>

## 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.

### SCOFF Questionnaire<sup>16</sup>

The SCOFF (five-question screening tool) reliably identifies women who are likely to have an eating disorder.

The SCOFF questions\*:

*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'; a score of  $\geq 2$  indicates 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.

1. *Are you satisfied with your eating patterns?* ('no')
2. *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.

**If the person raises the eating disorder problem him/herself:<sup>17</sup>**

- 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

## **First Presentation**

Developing a rapport with a patient is essential to elicit quality information. A BATHE procedure<sup>18</sup> 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.

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) Outlined below are issues that should be covered in the initial interview<sup>19</sup>.

### **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
11. schedule a further appointment or longer consultation if necessary

## ASSESSMENT

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.<sup>20</sup>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:<sup>21</sup>

- 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?

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## **Medical Assessment**

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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
- III. Investigations
- IV. Nutritional assessment
  - Weight and weight history
  - Eating habits
  - Activity

## ***I. General History and Physical Examination***

- 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<sup>22</sup> - 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

### ***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

### ***Sleep and Libido Changes***

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

## ❖ Bingeing and Purging Effects

### ***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.<sup>23</sup>

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.<sup>24</sup> 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** <sup>25,26,27</sup>

<b>Assessment</b>	<b>Patient Indication</b>
<b>Basic analyses</b>  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	<b>Consider for all patients with eating disorders</b>
<b>Additional analyses</b>  Blood chemistry studies Ionised Calcium level Zinc, Manganese, Iron level & stores Vitamin B12 & 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	<b>Consider for malnourished and severely symptomatic patients</b>
<b>Osteopenia and osteoporosis assessments</b>  Dual-energy X-ray Absorptiometry Oestradiol level Testosterone level in males	<b>Consider for patients underweight for more than 6 months</b>
<b>Nonroutine assessments</b>  Serum amylase level  Brain magnetic resonance imaging and computerised tomography  Stool	<b>Consider only for specific unusual indications</b>  Possible indicator of persistent or recurrent vomiting  For ventricular enlargement correlated with degree of malnutrition, exclude pituitary tumour  For blood

**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.<sup>28</sup>

#### **IV Nutritional Assessment<sup>29</sup>**

##### ***I. 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> <sup>30</sup>	
BMI < 18	very underweight	
BMI 18-20	underweight	
BMI 20-25(27)	normal weight range	
BMI 27-30	overweight	
BMI > 30	obese	

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

##### ***II. 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).

### ***III. 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.

## Psychiatric Assessment

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*<sup>31</sup> and *bulimia nervosa*<sup>32 33</sup> ( could be starvation effect)
- Anxiety disorders particularly social phobia –are common in AN and BN<sup>34 35</sup>
- Substance abuse/dependence – found in 30%-37% of patients with BN 12%-18% with AN<sup>36</sup>
- 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<sup>37 38</sup>
- Personality disorders – commonly found among patients with eating disorders, particularly *bulimia nervosa* with estimates ranging from 42%-75%<sup>39</sup>

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. Appendix D identifies the key features of the mental state exam. 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.

## **Social and Behavioural Assessment**

### *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<sup>40</sup>

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

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## **Treatment Options**

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Finally, 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 and feelings to be discussed at follow-up sessions), and frequent follow up is possible.

The treatment options to consider & 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	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.
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.

## MANAGEMENT

On average, the course of eating disorders can vary from 4 years<sup>41</sup> to 7.5 years<sup>42</sup>, but some patients are ill for more than 20 years.<sup>43</sup> *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 relearning, 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

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<sup>44</sup>:

- 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".<sup>45</sup> Strategies for dealing with these possible problems include:<sup>46</sup>

- 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<sup>47</sup>:

- 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<sup>48</sup>:

- 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:<sup>49</sup>

- 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

## **Anorexia Nervosa**

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<sup>50</sup>. 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<sup>51</sup>:**

- 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<sup>52</sup>:**

- 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<sup>53</sup>:**

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

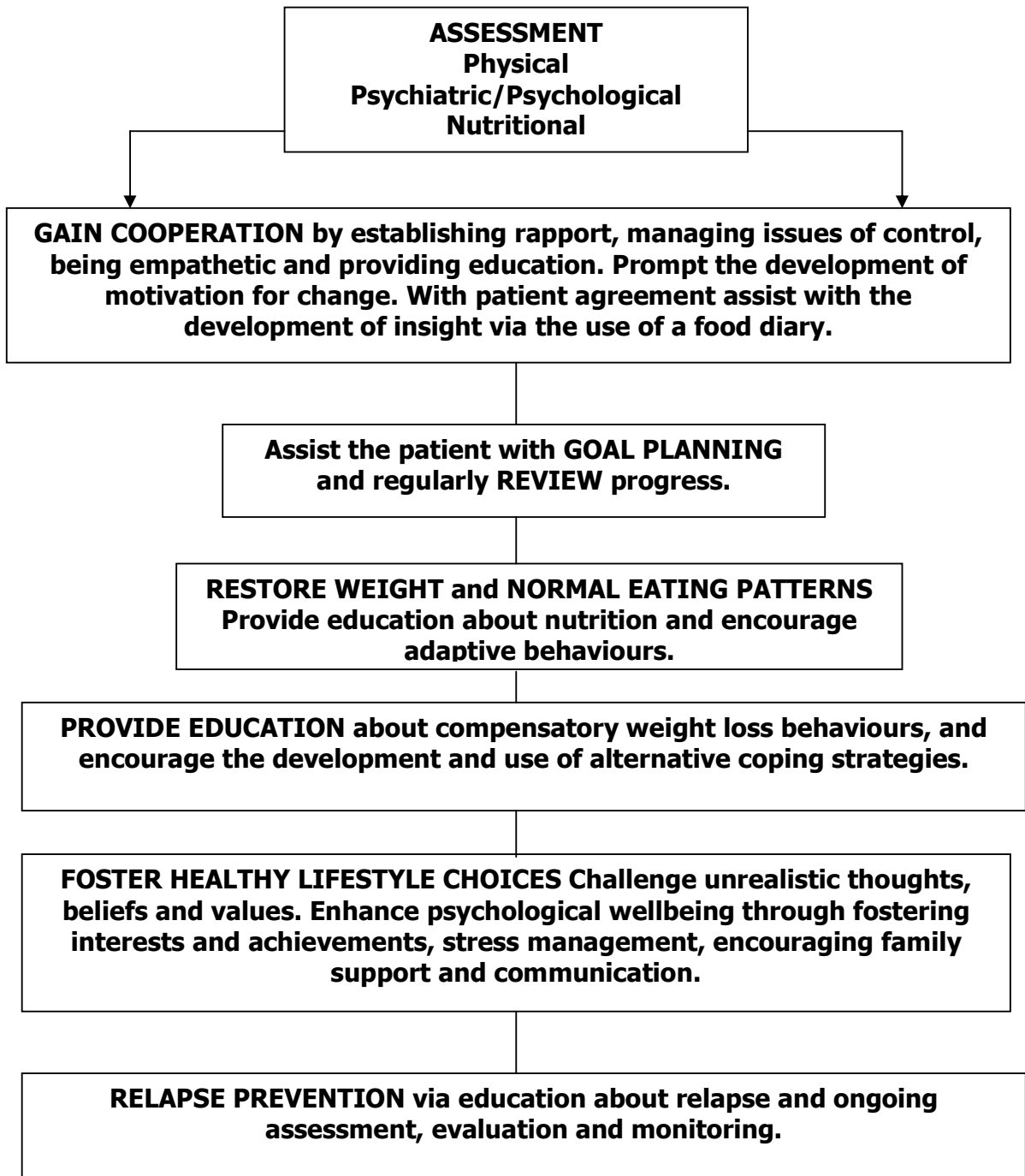
### **Therapeutic efforts generally focus on:**

- 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 section page 47)

## Flowchart of Management Plan<sup>54</sup>



## Treatment Components<sup>55</sup>

Diagnosis	Nutritional rehabilitation	Psychosocial interventions	Medications
Anorexia nervosa	<ul style="list-style-type: none"> <li>Nutritional rehabilitation and weight restoration</li> <li>Resumption of normal eating behaviours, eating meals, reducing binge eating, purging and dietary restriction and increasing food variety</li> <li>Consider hospital-based program for those who are markedly underweight or for children and adolescents</li> </ul>	<ul style="list-style-type: none"> <li>Any individual or group psychotherapy that incorporates an understanding of: psychodynamic issues, cognitive development, psychological defenses, family relationships, other psychiatric disorders</li> <li>Family therapy for children and adolescents</li> <li>Marital counseling if necessary</li> <li>Support groups beneficial as adjuncts to other psychosocial treatment</li> </ul>	<ul style="list-style-type: none"> <li>Psychotropic medications should not be used as the sole or primary treatment</li> <li>Should not be used routinely during the weight restoration period</li> <li>The role of antidepressants is best assessed after weight gain, when the psychological effects of malnutrition are resolving</li> <li>Consider (if normal weight) to prevent relapse or to treat depression or obsessive-compulsive problems</li> </ul>
Bulimia nervosa	<ul style="list-style-type: none"> <li>Most are normal weight so nutritional restoration not a central focus of treatment</li> <li>Nutritional counselling useful for minimising food restriction, increasing the variety of foods eaten, and encouraging healthy but not excessive exercise patterns</li> </ul>	<ul style="list-style-type: none"> <li>Cognitive behavioural therapy is the treatment of choice with the most evidence of efficacy</li> <li>Interpersonal psychotherapy also effective</li> <li>Psychodynamic and psychoanalytic approaches useful once bingeing and purging are improving</li> <li>Group therapy may help deal with shame surrounding ED as well as provide peer support</li> <li>Marriage/Family therapy if appropriate</li> </ul>	<ul style="list-style-type: none"> <li>A combination of psychosocial interventions and medications must be considered</li> <li>Antidepressants can be effective as one component of a treatment program; SSRIs are safest</li> <li>Avoid prescribing tricyclics to patients who may be suicidal and MAOIs to patients who chronically binge eat and purge</li> </ul>
Eating Disorder not otherwise specified	<ul style="list-style-type: none"> <li>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</li> </ul>		
Binge eating disorder	<ul style="list-style-type: none"> <li>Therapies using a nondiet approach focusing on normal nutrition and health, increased physical movement, and not on weight loss</li> </ul>	<ul style="list-style-type: none"> <li>Cognitive behavioural therapy, behaviour therapy, and interpersonal therapy associated with binge reductions and abstinence during active treatment</li> <li>Follow up is important</li> <li>Self-help programs using self-guided professionally designed manuals may also be effective in reducing symptoms</li> <li>Aim to improve self acceptance and body image</li> </ul>	<ul style="list-style-type: none"> <li>Antidepressants have been used but studies generally report very high placebo responses rates</li> <li>In addition, patients tend to relapse after medication is discontinued</li> </ul>

## GP Role

The basic tasks for primary care professionals working with people with eating disorders include: <sup>56 57 58</sup>

### **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

**Patient and Family Issues**

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<sup>59</sup> 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 disorder 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<sup>60</sup>:

- 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<sup>61</sup>**

- 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.

### **Working with the Family/Carer**

Eating disorders impose substantial burdens on families. Parents can 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.

### **When 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

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### **Managing Chronicity**

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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<sup>62</sup>:

- 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<sup>63</sup>

## REFERRAL

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<sup>64</sup>. This should be contemplated even in those individuals whose weight loss is not yet marked. For those with *bulimia nervosa* and EDNOS syndromes, 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.

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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

For all people affected by eating disorders referral to a self-help, consumer-based organisation can be extremely helpful and a source of ongoing information, support and assistance, particularly for the patient's family.

- Eating Disorders Association Resource Centre (QLD)
- Ph. 07 3394 3661

Remember, people affected by eating disorders may deny they have a problem, may minimise 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 even more important.

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### Referral to a Specialist

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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:<sup>65</sup>**

- 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

**Indications for Hospitalisation**

**Criteria for immediate specialised medical intervention <sup>66</sup>**

- 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.

## FOR FURTHER INFORMATION, SUPPORT AND REFERRAL

### **Eating Disorders Association Inc. Resource Centre (Qld)**

#### **Services:**

**Information and Referral Service** – The Resource Centre offers clients' access to information about eating disorders and to the Centre's Service Directory listings of health professionals who offer support or treatment in the area.

**Crisis Support** – Triage, initial assessment and discussion of referral options are provided. Where necessary, supportive counseling, family consultation and facilitation of hospital admission are also undertaken.

**Library** – A very comprehensive library with information specifically about eating disorders as well as other related issues is offered at the Resource Centre. The library has information tailored for people with eating disorders, family and friends, and professionals.

**Support Groups** – Structured support and discussion groups run several times a year at the EDA Resource Centre. These groups are open to anyone affected by an eating disorder and are regularly advertised in the Resource Centre newsletter. A Family Information and Support program and a Family skills-based group are also held several times a year at the Centre. They are for all family or friends.

**Support Networks** – The EDA maintains a telephone support network and hold regular support group meetings. These services are available to sufferers, their families and their friends. The Resource Centre can also provide contact information for networks and support groups outside of Brisbane.

**Newsletter** – The Resource Centre produces a newsletter each month. "Through the Looking Glass" contains self-help information, research information, creative pieces, letters and information about events relevant to people affected by eating disorders.

**Internet Services** – The EDA maintains a website ([www.eda.org.au](http://www.eda.org.au)) which has basic information about eating disorders. It contains recovery stories and the site is also the contact point for an email discussion list for sufferers.

#### **Contact Details:**

Street Address: 12 Chatsworth Road, Greenslopes, Qld 4120

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

Tel: **07 3394 3661**

Fax: 07 3394 3663

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

Opening hours: 9am – 5pm Monday to Friday  
(After hours by appointment)

## **APPENDIX A: What To Look For In A Treatment Program**

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.

## APPENDIX B: Survival Suggestions for Families

- 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.
- Don't expect yourself to be a perfect parent.
- 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, and the family needs help coping with it.
- Do remember to do fun things with the person with the eating disorder.

### Recommended Reading for Families and Friends:

- Ball, J and Ball, R (1995). Eating Disorders: A Survival Guide for Families and Friends. Moorebank: Doubleday.
- Costin, C (1997). Your Dieting Daughter: Is she dying for attention? New York: Brunner / Mazel.
- Friedman, S (1997) When Girls Feel Fat: Helping Girls through Adolescence. Toronto: Harper Collins.
- Palmer, R (1980). Anorexia Nervosa: A Guide for Sufferers and their Families. New York: Penguin Books.
- Pipher, Mary, (1996). Reviving Ophelia. New York: Doubleday
- Seigel, M, Brisman, J and Weinshel, M (1988). Surviving an Eating Disorder: Strategies for Family and Friends. New York: Harper and Row.
- Treasure, J (1999). Anorexia nervosa: A survival guide for families, friends and sufferers. East Sussex, Psychology Press Ltd.

## **APPENDIX C: Refeeding Syndrome**

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.

## APPENDIX D: Mental State Examination Form

<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: Interview Checklist

### 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:

<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><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> <ul style="list-style-type: none"> <li>❖ <b>Employment:</b></li> <li>❖ <b>Childhood &amp; School:</b></li> <li>❖ <b>Family relationships:</b></li> </ul>

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.

## **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 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>

## APPENDIX G: Dietary Guidelines

### FOR BULIMIA NERVOSA, BINGE EATING DISORDER AND LATER STAGE ANOREXIA NERVOSA

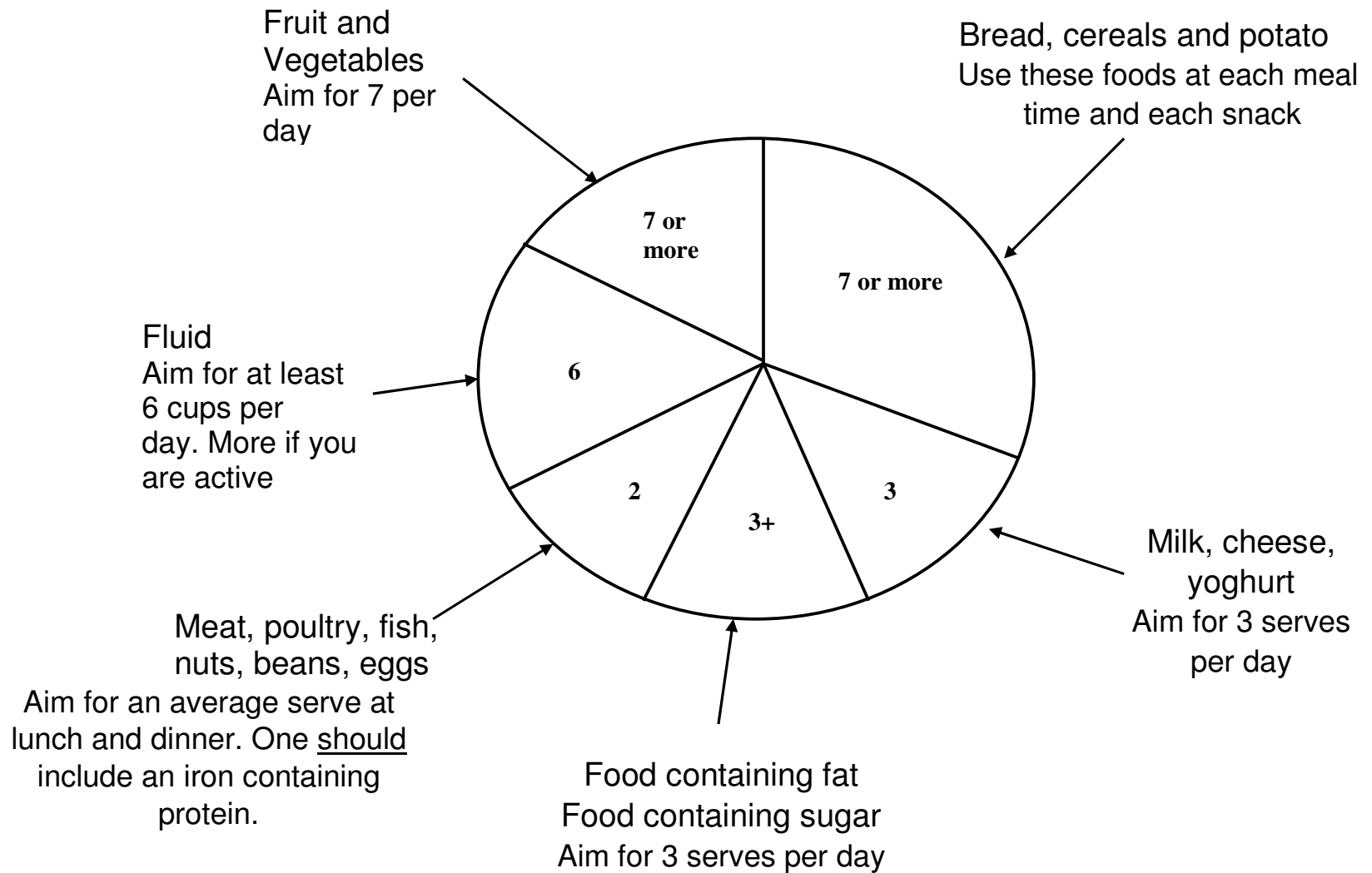
**AIM** To stop dieting and 'normalise' eating. That is, to be able to eat a wide variety of food in moderate amounts and in a relaxed and flexible manner.

- ✓ 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

## A GUIDELINE FOR BASIC NUTRITIONAL NEEDS



## 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:

Patient Characteristics	Comment	Recommendations
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.**

## **APPENDIX I: Framework for Supporting People with Eating Disorders Over Time**

### **– Medicare Benefits Schedule items**

- ENHANCED PRIMARY CARE PLAN AND TEAM CARE ( ITEMS 721 AND 723)  
Dietician – 5 per calendar year – Allied Health Referral Form  
Dentist – currently up to \$4250 per calendar 2 years ( under Threat) –  
Dental Referral Form
- MENTAL HEALTH CARE PLAN ( ITEM 2710)  
As from 1/1/10 GP's will 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".  
  
Referral to psychologist or other registered mental health worker including social  
workers  
  
Can be used for Maudsley programme
- 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

## **APPENDIX J: The Effects of Starvation on Behaviour**

### **INFORMATION SHEET : THE RBH ADULT EATING DISORDERS PROGRAMME**

#### **THE EFFECTS OF STARVATION ON BEHAVIOUR**

*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 re-fed. 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 cooking 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.

## APPENDIX K: The Eating Disorders Outreach Service

### EATING DISORDERS OUTREACH SERVICE (EDOS)

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.**

1. 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
2. The second is State-wide education
3. 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.
4. 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 Outpatient 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:**

**Post: Eating Disorders Outreach Service  
Building 14 Cartwright St, Windsor Q 4030  
Fax: 07 3114 0806  
Ph: 07 3114 0809**





**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 <  $\frac{90}{60}$  or postural drop > 20
- 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.**

1. 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**

1. 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: EATING DISORDERS CLINIC (Maudsley Model), Royal Children's Hospital and Child Health Service District.**

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

- (a) 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.
- (b) Age - up to 18 years
- (c) The young person must have their physical status assessed and be medically safe (see attached criteria for referral to Department of Emergency Medicine)
- (d) 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.

## **APPENDIX M: Treatment Summary Card**

### **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)

## APPENDIX N: A QUICK REFERENCE GUIDE FOR PRIMARY CARE PROVIDERS

### EATING DISORDERS - A Quick Reference Guide for Primary Care Providers Publication of the Eating Disorders Association of Queensland

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:**

#### **Does this patient have an eating disorder?**

The SCOFF questions:

S - Do you make yourself Sick because you feel uncomfortably full?

C - Do you worry you have lost Control over how much you eat?

O - Have you recently lost more than One stone (6.35kgs) in a 3-month period?

F - Do you believe yourself to be Fat when others say you are too thin?

F - Would you say Food dominates you life?

\*One point for every "yes"; a score 01 > 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.

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

2. 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**

1. **Establish a differential diagnosis**
2. **Evaluate and treat nutritional deficits**
3. **Treat uncomplicated cases in primary care**
4. **Provide regular monitoring of physical status**
5. **Help to decide if and when hospitalisation is necessary**
6. **Interpret the course of therapy and influence specialist referral**
7. **Serve as a support and educator for the patient and family**
8. **Provide primary care support of outpatient specialist treatment**
9. **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 >20bpm or a**
- **Drop in blood pressure of >20mm Hg/min standing**
- **Bradycardia below 40 bpm**
- **Tachycardia over 100 bpm or**
- **Inability to sustain body core temperature ie. <36°C**
- **Electrolyte imbalance (potassium, phosphate, magnesium)**

**Referral options:**

- Outpatient care - consider when patient has high motivation to participate in treatment, supportive family, brief symptom duration, weight no less than 20% below healthy body weight
- Private practitioners/individual therapists - the professional discipline and treatment school of the therapist are less important than his or her competence and experience in treating people with eating disorders
- Inpatient care/day patient - preferably in a specialist unit with staff experienced in eating disorders and using a multidisciplinary approach with expertise in a variety of domains such as dietician, nurse specialist, occupational therapist, psychiatrist, psychologist, and social worker.
- Family therapy - for those under 18 years of age or where the family is thought to be important in maintaining the disorder
- Involuntary treatment - use of the Mental Health Act should be reserved only for patients with life-threatening complications or those with high risk of suicide and who refuse voluntary admission to hospital

\* Further information, support and training are available. Contact the Eating Disorders Association Resource Centre

\* A comprehensive Information Pack for General Practitioners is also available via the Eating Disorders Association website: [www.eda.org.au](http://www.eda.org.au)

**Local Contacts and Referral Information:**

**Name:**

**Address:**

**Telephone:**


**Eating Disorders Association Resource Centre**

EDA (Qld) is a useful referral service for all people affected by eating disorders including families and health professionals. Services include information and referral directory, crisis support, borrowing library, support groups, family information workshops, telephone support network, monthly newsletter, web site and email discussion list.

Address:  
12 Chatsworth Road,  
Greenslopes, Qld 4120  
Fax: 07 3394 3663  
Tel: 07 3394 3661  
Email: [admin@eda.org.au](mailto:admin@eda.org.au)  
Web: [www.eda.org.au](http://www.eda.org.au)

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