

Guidelines for the Inpatient Management of Adult Eating Disorders in General Medical and Psychiatric Settings in NSW

This document is designed to be used by nurses, doctors, allied health and general health staff located in hospitals or wards without specialist eating disorder facilities, to guide in the assessment of eating disorders, indicators for admission, and management strategies.

The document is divided into three sections:

- **Background**
- **Assessing for an Eating Disorder and**
- **Management of the Eating Disorder Inpatient Admission**

each of which is colour coded and designed to stand-alone. So, for example, section 3 can be separated from the others and distributed to inpatient staff involved in the care of the admitted patient.

NSW Ministry of Health

73 Miller Street
NORTH SYDNEY NSW 2060
Tel. (02) 9391 9000
Fax. (02) 9391 9101
TTY. (02) 9391 9900
www.health.nsw.gov.au

Disclaimer:

Content within this publication was accurate at the time of publication. This work is copyright. It may be reproduced in whole or part for study or training purposes subject to the inclusion of an acknowledgment of the source. It may not be reproduced for commercial usage or sale. Reproduction for purposes other than those indicated above requires written permission from the NSW Ministry of Health.

© NSW Ministry of Health 2014

SHPN (MHDAO) 130225
ISBN 978-1-74187-904-9

Further copies of this publication can be downloaded from the NSW Ministry of Health website at: www.health.nsw.gov.au

March 2014

Acknowledgments

This document was developed by the Centre for Eating and Dieting Disorders (CEDD) in consultation with the following organisations and individuals:

Royal Prince Alfred Hospital Eating Disorder Specialist Team: Elizabeth Frig (Dietitian), Professor Janice Russell (Psychiatrist), Brooke Adam (Clinical Psychologist)

Westmead Hospital Adult Eating Disorder Specialist Team: Elizabeth Parker (Dietitian), Dr Frances Wilson (Psychiatrist).

Local Health District Eating Disorder Coordinators: Dr Mel Hart (Dietitian), Juliet Elsegood (Clinical Psychologist), Dr Helen Rydge (Clinical Psychologist), Joanne Titterton (Clinical Nurse Consultant), Brooke Adam (Clinical Psychologist)

CEDD Eating Disorder Expert Network Members: Gail Anderson (Clinical Nurse Consultant), Peta Marks (Credentialed Mental Health Nurse), Deanne Harris (Dietitian)

NSW Local Health District Health Managers: Dr Mim Webber (NCLHD), Dr Nick O'Conner (NSLHD), Judith Leahy (CCLHD), Dr Susan Hart (SLHD), Alison Latta (CCLHD), Kerry England, (NS&CCLHD)

Eating Disorder Expert Academics: Professor Stephen Touyz, Professor Phillipa Hay

Eating Disorder Outreach Service (EDOS), Queensland: Elaine Painter, Dr Warren Ward

Centre for Excellence in Eating Disorders (CEED), Victoria: Claire Diffey, Michelle Robertson

Australian and New Zealand Academy of Eating Disorders (ANZAED): Dr Anthea Fursland (President), Jeremy Freeman (Development Director)

Butterfly Foundation: Christine Morgan (CEO), Kirsty Greenwood (National Manager Support, Education & Collaboration), and thank you to those consumers and carers who contributed anonymously to the focus group discussions on the guidelines.

This page has been left blank intentionally

Background

Eating Disorders

Eating disorders comprise a group of illnesses that range from moderately-severe through to critical and life threatening, including anorexia nervosa (AN), bulimia nervosa (BN), binge eating disorder, as well as sub-threshold, mixed and atypical cases (known as eating disorders not otherwise specified - EDNOS). Incidence of these disorders typically begins in childhood, peaks in the adolescent years but can occur in later life. Australian epidemiological data shows lifetime prevalence of eating disorders to be approximately 8% and almost double this in females. Research indicates that the overall prevalence of eating disorders is increasing.

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

Management Guidelines

These Management Guidelines were developed following a review of the relevant literature by the Centre for Eating and Dieting Disorders (CEDD) and in consultation with three expert reference groups; an eating disorder specialist clinician reference group, a NSW Health Management reference group comprising local health district medical and mental health managers as well as representatives from key health oversight organisations, and a Consumer and Carers reference group facilitated by the Butterfly Foundation.

Individuals with eating disorders are often at risk of not being admitted to hospital despite requiring urgent medical attention. Specifically, a person with an eating disorder may be acutely medically compromised without necessarily presenting as underweight. Similarly, severely ill individuals requiring urgent nutritional rehabilitation can present without obvious medical abnormality. These guidelines offer indicators for admission to hospital and subsequent management to address these risks.

Purpose of the Guidelines

To provide local health staff with information about when to admit an adult with an eating disorder who presents to the hospital setting either through Emergency Departments or other pathways, and how to treat the person once admitted until specialised advice or service can be accessed.

Scope of the Guidelines

These guidelines pertain to adult individuals suffering from a Diagnostic and Statistical Manual Version 5 (DSM V) eating disorder diagnosis. Child and Adolescent management is beyond the scope of this document; however, comprehensive guidelines and a toolkit for this subset of patients are available on the CEDD website (www.cedd.org.au). As this set of guidelines are for inpatient admissions, they largely refer to eating disorder diagnoses associated with severe medical compromise or emaciation. These are typically AN, BN along with mixed and atypical presentations classed in EDNOS. Guidelines for the management of Binge Eating Disorder are beyond the scope of this document, as are guidelines for outpatient, intensive outpatient or day program or care of the eating disorder.

This page has been left blank intentionally

Assessing for an Eating Disorder

People with an eating disorder may feel uncomfortable disclosing information about their behaviours, making the detection of disordered eating symptoms difficult.

Although the incidence of Eating Disorders tend to peak between the ages of 13-25, they can affect people of all ages. While AN and the other eating disorders are always more common in females, childhood AN occurs in males at a higher rate than after puberty. The ratio of AN in females to males is 3:1 before puberty and 10:1 after. Some individuals with an eating disorder will deny their symptoms (see Table 1). It is therefore important to keep objective measures such as weight and physical markers under review if an eating disorder is suspected.

Parents or carers should be included in the assessment process wherever possible. Endeavour to interview family members and carers of adults as part of the assessment procedure, with prior consent from the patient.

A thorough medical examination of the person is mandatory. Persons with an eating disorder will often not disclose eating disorder symptoms at presentation but will present for treatment for a variety of other, often related, physical signs and symptoms (as listed below). Comorbid psychiatric illnesses are seen in up to 80% of patients with an eating disorder and therefore should be examined in addition to the physical manifestations of the disorder.

Table 1: Indicators for an Eating Disorder Assessment

Hallmark Signs of an Eating Disorder	Physical Signs of an Eating Disorder	Comorbid Presentations
▶ Low body weight or failure to achieve expected weight gains	▶ Dehydration	▶ Major Depressive Disorder
▶ Fear of weight gain	▶ Hypothermia	▶ Anxiety Disorders
▶ Body image disturbances	▶ Syncope (e.g. low BP, postural drop)	▶ Obsessive Compulsive Disorder
▶ Severe body dissatisfaction and drive for thinness	▶ Cardiac arrhythmias (Bradycardia)	▶ Substance abuse / dependence
▶ Preoccupation with food, weight and shape	▶ Suicide attempts	▶ Self-harm and suicidal ideation
▶ Restricted dietary intake	▶ Overwhelming infection	
▶ Self-induced vomiting	▶ Renal failure (e.g. elevated creatinine)	
▶ Misuse of laxatives, diuretics or appetite suppressants	▶ Bone marrow suppression	
▶ Excessive exercise	▶ GIT dysfunction	
▶ Amenorrhoea, Oligomenorrhoea or failure to reach menarche	▶ Acute massive gastric dilatation from bingeing	
▶ Loss of sexual interest	▶ Enlarged Parotid Glands from purging	
▶ Binge eating episodes involving loss of control over eating and eating unusually large amounts of food	▶ Electrolyte imbalance (e.g. potassium, sodium)	
	▶ Dorsal hand calluses from inducing purging	

Screening for a likely Eating Disorder

If 1 or more of the above hallmark or physical signs, or a comorbid condition is present, an eating disorder diagnosis should be screened for. The SCOFF Questionnaire is an evidenced-based screening tool for determining the likelihood of an eating disorder.

Ask the following 5 questions:

1. Do you ever make yourself sick (S) because you feel uncomfortably full?
2. Do you worry you have lost control (C) over how much you eat?
3. Have you recently lost (O) more than 6kg in a three month period?
4. Do you believe yourself to be fat (F) when others say you are too thin?
5. Would you say that food (F) dominates your life?

One or two positive answers should raise your index of suspicion and indicate full assessment for an eating disorder and consultation with an eating disorder expert or mental health clinician is needed.

Morgan JF, Reid, F, Lacey JH. (1999), The SCOFF Questionnaire: assessment of a new screening tool for eating disorders, *British Medical Journal*, 319, 1467-1468)

Emergency Department Triage

The tests outlined below in Table 2 should be conducted for all patients presenting to the Emergency Department with an eating disorder. Seek consultation if there are any concerns or signs indicating admission.

While every endeavour has been made to recommend the most suitable hospital setting for admission (i.e. medical versus psychiatric), options at the local health district are often limited, therefore **when the indicators below are present, admitting the patient to hospital (regardless of setting) is the recommended policy**. Clinical judgment regarding best available setting should always be exercised.

Indicators for Community Referral

If the patient is medically and psychologically stable and does not require a hospital admission, it is recommended that the patient be referred to their GP and considered for referral to an eating disorder specialist or service (in districts where an Eating Disorder Coordinator is available they should be contacted to assist with referral options), the local dietitian and/or the local Mental Health Team. The recommended approach for community care for people with an eating disorder is multidisciplinary coordinated care, involving the GP and including other medical specialists, psychological and dietetic health professionals, and others as indicated.

Table 2: Indicators for Admission

	Psychiatric or Medical admission is indicated (level of acuity can usually be managed in either setting)	Acute Medical admission is required (level of acuity usually requires a medical ward)
Re-feeding risk	High (if markers below present)	Extreme (if markers below present)
Weight	Body Mass index (BMI) < 16	BMI < 14
Weight Loss	Rapid weight loss (i.e. 1kg/wk over several weeks) or grossly inadequate nutritional intake (<1000kCal daily) or continued weight loss despite adequate community treatment.	
Systolic BP	< 90mmHg	< 80mmHg
Postural BP	> 10mmHg drop with standing	> 20 mmHg drop with standing
Heart rate	< 40bpm or > 110 bpm or significant postural tachycardia (increase in more than 10bpm on standing)	
Temp	<35.5°C Or extremities are cold and blue	<35.°c Or extremities are cold and blue
12-lead ECG	Any arrhythmia including QTc prolongation, or non-specific ST or T-wave changes including inversion or biphasic waves	
Blood sugar	< 3.5mmol/L	< 2.5mmol/L
Sodium	< 130 mmol/L*	< 125mmol/L
Potassium	< 3.5 mmol/L*	< 3.0mmol/L
Magnesium	0.7 – 1.0 mmol/L*	< 0.7 mmol.L
Phosphate	0.8 mmol/L*	< 0.8 mmol/L
Albumin	< 35/L	< 30 g/L
Liver enzymes	Mildly elevated	Markedly elevated (AST or ALT >500)
Neutropils	< 2.0 x 10 ⁹ /L	< 1.0 x 10 ⁹ /L
Severity Eating Disorder Symptoms	<ul style="list-style-type: none"> – BN without control of vomiting – Vomiting more than 4 times a day – BN with hypokalaemia – Excessive daily laxative use 	
Risk Assessment	<ul style="list-style-type: none"> – Suicidal ideation – Active self-harm – Moderate to high agitation and distress – Other psychiatric condition requiring hospitalisation 	
Other	<ul style="list-style-type: none"> – Not responding to outpatient treatment – Aversive family relationships or severe family stress or strain 	
* Please note, any biochemical abnormality that has not responded to adequate replacement within the first 24 hours of admission should be reviewed by a Medical Registrar urgently.		

Indicators for Admission

If any of the signs listed in Table 2. are present the patient should be admitted to hospital immediately. There is a level of illness acuity where the purpose of admission is purely medical and the psychiatric setting is no longer ideal (as outlined in the 2nd column of table 2). Thresholds for both types of admissions in this document are high, however it should be noted that deterioration is the norm rather than exception, **lower admission thresholds should be employed across the district wherever possible, including on medical wards.**

Patient Refusal of Care

Unfortunately this will occur reasonably frequently. In the situation where the patient has an acute and potentially life threatening illness then a decision must be made regarding the degree to which the patient should be involved in the medical decision making process (i.e. their decision making capacity). A psychiatrist should be involved at this point. If a patient refuses medical care, please consider the following criteria:

1. Do they **understand** the information and do they understand the consequence of non-treatment?
2. Do they **believe** the information?
3. Are they able to **weigh-up** the information and arrive at a choice?
4. Are they **cognitively impaired** by severe starvation?
5. Are they **delusional** about the necessity of adequate nutrition, threat to life, and the need for medical intervention?

If they do not satisfy all criteria they do not have the ability to make a medical decision.

It may become necessary to utilise the *Mental Health Act* (<http://www.legislation.nsw.gov.au>) to enable ongoing enforced medical care (AN is a serious mental disorder, inpatient re-feeding is at times an essential and direct treatment for this illness and in rare situations, where there is a life threatening physical risk and an unwillingness or inability to agree to treatment, compulsory treatment can and should be initiated).

Patients can be detained under the *Mental Health Act* as mentally disordered.

Under the *Mental Health Act* mental illness is:

- ▶ a condition that seriously impairs, either temporarily or permanently, the mental functioning of a person and is characterised by the presence in the person of **any one** or more of the following symptoms:
 - (a) delusions,
 - (b) hallucinations,
 - (c) serious disorder of thought form,
 - (d) a severe disturbance of mood,
 - (e) sustained or repeated irrational behaviour indicating the presence of any one or more of the symptoms referred to in paragraphs (a)-(d).

A person (whether or not the person is suffering from mental illness) is a **mentally disordered** person if the person's behaviour for the time being is so irrational as to justify a conclusion on reasonable grounds that temporary care, treatment or control of the person is necessary:

- (a) for the person's own protection from serious physical harm, or
- (b) for the protection of others from serious physical harm.

Severely underweight persons with an eating disorder very often meet criteria as mentally disordered and therefore meet the criteria for treatment under the *Mental Health Act*. This process should be well documented in the medical records. Psychiatric services should be involved in the care of this patient as soon as practical (e.g. Consultation Liaison Psychiatry).

Management of the Inpatient Admission

Multi-disciplinary management of the patient should commence immediately. The following set of guidelines address medical, nutritional, and nursing management in the early stages of admission.

The inpatient medical team should be supported by a psychiatrist, preferably one with an expertise in eating disorders. If an expert is unavailable, consultation would involve a consultation liaison or adult general psychiatrist.

The inpatient medical team should contain a physician and a dietitian with specialist knowledge in eating disorders, preferably within a nutrition support team, and have ready access to advice from an eating disorders psychiatrist or expert. If specialist knowledge is unavailable then consultation with tertiary services with outreach support will be necessary and is recommended.

It is important to remember that the majority of patients to which these guidelines refer will be critically ill upon admission, and hence the admission needs to be considered as **medical** as well as psychiatric regardless of the ward to which the patient is admitted.

Who to call when processing an admission

If consultation liaison has not already been contacted they should be.

- Local clinical dietitian.
- Royal Prince Alfred Tertiary Eating Disorder Service (Ph 02 9515 8165) requesting the Eating Disorder Coordinator or Psychiatric Registrar.
- Centre for Eating and Dieting Disorders for supporting documentation and telemedicine support if needed (www.cedd.org.au).

The key tasks of the in-patient medical team are to:

- safely re-feed the patient
- avoid re-feeding syndrome caused by too rapid re-feeding
- avoid underfeeding syndrome caused by too cautious rates of refeeding
- manage, with the help of psychiatric staff, the behavioural problems common in patients with anorexia nervosa, such as resisting nutrition
- occasionally to treat patients under compulsion (using the *Mental Health Act*), with the support of psychiatric staff
- manage family concerns
- arrange transfer of the patient to next step in staged care

Goals of an Admission

It is important to establish the goals of the admission from the outset. If a patient presents with a low BMI, restoration of a normal weight is unlikely within one admission. If a medical or psychiatric inpatient admission is indicated (refer to Table 2), the likely goals of the admission include:

- Treat medical complications and restore medical stability
- Begin the process of nutritional rehabilitation and increase the patients BMI to a safer level
- Halt weight loss and stabilise body weight
- Reduce acute purging or other eating disorder behaviours sufficient to restore medical and behavioural stability
- Assist in the development of appropriate eating behaviour to allow for continued medical stability in the community

Ward Management

1. A consistent multi-disciplinary team approach is essential to minimise the potential for splitting between patient and individual members of the team.
2. A clear plan for the purpose of admission and what medical risk factors are present will assist to identify restrictions that may be put in place e.g. physical activity.
3. Collaborative and non-judgmental application of the care plan involving the patient and, wherever possible and appropriate, the family and carers will be most successful.
4. Patients with eating disorders require a firm, but understanding, non-judgmental, and non-punitive approach to management. They often illicit an intense countertransference and negative reactions from staff. Opportunities for debriefing, discussing adherence to the care plan, discussing strategies for distress tolerance techniques for staff and patient need to be frequently available.
5. Limiting physical activity on the ward is important from time of admission as it is harder to enforce as admission progresses.
6. The amount of physical activity will be determined by the medical team dependent on the medical stability of the patient.
7. The amount and frequency of activity should be clearly identified and timed e.g. 10 min walk in ward 3x per day.
8. The amount of exercise can be increased with weight gain, and should be reduced if there is weight loss or lack of progress.
9. If medically stable, the patient may be granted leave from the ward. Leave should be for a set period of time, in a wheel chair (if medically necessary or activity is to be reduced) and accompanied by family, a carer or friends. Those accompanying the patient should be informed and clear about the patient's care plan.
10. Supervision is a priority, at all times, as any unobserved time can be used for purging food or exercise (including excessive fidgeting or moving about whilst on bed rest; sit-ups) including time in bathroom and shower. When supervision is limited, locating the patient as close to the nurses station as possible is ideal (supervision and bed rest is strongly advised post-meal as outlined in nursing management).
11. On admission search belongings for laxatives, diuretics, diet pills, chewing gum, water bottles, small weights and do so again after any leave from the ward.
12. A behavioural management plan for each patient may be created outlining specific guidelines regarding activity, supervision, access to bathroom, challenging behaviours (purging, tampering with naso-gastric feeds, splitting staff etc), meal support, helpful/unhelpful phrases, leave arrangements etc.
13. It is important for staff to be aware and sensitive to families and carers, as this is a highly stressful and distressing experience for all involved. Families will require large amounts of information, and frequent updates, and it needs to be established who in the team will deliver this.

Medical Management

- ▶ Commence prophylactic supplementation immediately for patients at high and extreme risk of refeeding syndrome (as defined in Table 2: Indicators for Admission above): supplemental thiamine 100mg twice daily orally, or if unable to take orally, then IMI or via naso-gastric tube for first 3 days, then oral administration thereafter.
- ▶ And 1 tablet of multivitamins bd.
- ▶ And 1 tablet zinc sulphate 50mg daily.
- ▶ And commence 1 tablet Phosphate-Sandoz 500mg bd (or equivalent) (some may require this IMI)
- ▶ It is required that the patient receive daily medical monitoring for at least the first 7–10 days of re-feeding, and serum levels of EUC, CMP be monitored for at least 2 weeks following, even if normal.
- ▶ Immediately — FBC, EUC, LFTs, phosphate, Mg, ECG, B12/folate, TFTS and other investigations as indicated by clinical findings.
- ▶ Daily EUC, CMP, LFTs, K, ECG are necessary in the first week and then second daily until goal energy intake is reached. Immediately replace K, PO4, Mg if these are found to be deficient as required.
- ▶ BGL QID — early morning, and 1–2 hrs after meals, as low glycogen stores and an abnormal insulin response may lead to post-meal low BSLs, and low BGLs in the morning/overnight.
- ▶ Hypoglycaemic episodes often occur in the early re-feeding stage of severely malnourished clients. Low BGLs (<4.0mmol/l) should be managed with appropriate simple oral CHO (e.g. sugar in orange juice) and MUST be accompanied by a slow acting carbohydrate with protein (e.g. one of the following: Tetrapak or Resource Plus/Ensure Plus Fortisip/glass milk and crackers), to be given at the same time.
- ▶ IV Dextrose should not be necessary. If it becomes necessary it must be accompanied by IV phosphate and thiamine administered simultaneously.

Managing Refeeding Syndrome

Every LHD has access to a clinical dietitian with expertise in managing malnutrition and refeeding syndrome, and most districts will have a local policy relating to its management. Reference to the local policy should be made, and prompt referral to the clinical dietitian should be made before beginning a refeeding regime. The dietitian can assist in determining whether oral or NG feeding is recommended.

- ▶ Re-feeding Syndrome is the term used to describe the adverse metabolic effects and clinical complications when a starved or seriously malnourished individual commences refeeding. If nutrition is not managed carefully, a variety of detrimental effects can occur including:
 - sensory disturbances, confusion, depression, irritability
 - glucose intolerance, hyperglycaemia, polyuria
 - impaired muscle contraction (including heart, respiratory and gastrointestinal muscles)
 - neuromuscular weakness
 - reduced oxygenation of tissues, ventilation difficulties
 - cardiac arrhythmias
 - cardiac arrest.
- ▶ Confusion (delirium) is often the first sign, accompanied by chest pains, muscle weakness, and then heart failure.
- ▶ Avoidance of the syndrome can be achieved by **prophylactic supplementation of phosphate, thiamine and multivitamins** along with **gradually increasing nutritional intake beginning with a nutritionally balanced diet, adequate in protein and fat content.**
- ▶ **Managing risk of refeeding syndrome must be balanced against risk of underfeeding the patient;** adequate nutritional supplements along with fat and protein in the diet, should mitigate the risk of refeeding syndrome so as not to have to slow the feeding rate too much.
- ▶ Monitor markers of possible refeeding syndrome via **clinical observations twice daily and biochemical review daily (EUC, CMP, ECG).**
- ▶ Avoidance of refeeding syndrome can also be assisted by reducing carbohydrate calories and increasing supplementation of phosphate.
- ▶ **Feeding rates: (Risk defined above in Table 2: Indicators for Admission).**

These rates are guidelines only, and prioritise avoiding re-feeding syndrome. A specified feeding rate devised with a clinical dietitian (ideally with eating disorder expertise), is always preferable. With all of the above mentioned strategies in place to avoid re-feeding syndrome, much faster feeding rates can be tolerated by numbers of patients, and are advisable to avoid under-feeding.

Extreme risk patients (defined in Table 2)	High risk patients (defined in Table 2)
▶ Start with 0.5 x estimated BEE (Basal Energy Expenditure) i.e. approximately 20mL/h	▶ Commence with between 0.8 – 1.0 x estimated BEE i.e. approximately 1000Cal/day or 40mL/h
▶ Increase by 200-300Cal every two to three days if tolerated and biochem is stabilised.	▶ Increase rate daily or second daily, 20 – 40mL/h at a time, if tolerated and biochem is stabilised.
▶ Feeding rate can be increased faster if electrolytes are stable and prophylactic supplementation continues.	▶ Feeding rate can be increased faster if electrolytes are stable and prophylactic supplementation continues.
▶ May take many weeks to reach goal rate	▶ May reach goal rate in 2 weeks

- ▶ Minor or even moderate abnormalities in liver function (e.g. alanine transaminase up to four times the upper limit of the normal range) should not delay gradual increases in feeding.

Nutritional Management

- ▶ The ideal feeding method is oral; however many patients at this level of severity require N/G feeding for optimal treatment. Some patients may opt for N/G tube when this unwell as it reduces demands and guilt, for others oral feeding will fail (this needs to be reviewed daily and at this severity of illness moved to N/G tube feeding sooner rather than later. The *Mental Health Act* or Guardianship may be required).
- ▶ N/G Feeding is often the safest way of reintroducing nutrition; by the time the patient reaches a medical bed they are usually critically ill. If the patient is hypoglycaemic or bradycardic, delivering a constant and controlled supply of carbohydrate is less likely to cause reactive hypoglycaemia, and feeding patients overnight can help keep their low heart rate and blood sugar level at a safer level.
- ▶ Your local clinical dietitian can provide you with an individualised nutrition management plan for either oral or N/G delivery. **Feeding rates provided are a GUIDE ONLY, a personalised plan with regular monitoring and adjustment is always preferable.**
- ▶ For patients not at high or extreme risk of refeeding syndrome, orally delivered nutrition of approximately 1800 calories per day is an appropriate starting point for a period then gradual increases titrated to the patients weight gain and level of physical activity (e.g. 200 calorie increases twice per week as long as clinical and biochem markers are stable). For most adult patients a final level of 2400-2600 calories per day is sufficient to induce weight gain (with the occasional person requiring more).
- ▶ Ensure the current meal plan, with feeding method is clearly written and copies available for staff and patient.
- ▶ It is essential that only food on the meal plan is consumed i.e. **NO food to be brought in from outside**, and NO diet foods/lollies/chewing gum as these can be used to diminish appetite and/or may have a laxative effect.
- ▶ See below guidelines for managing NG tube feeding if this is how the nutrition is to be delivered (or if oral feeding fails), and guidelines for managing the delivery and consumption of food and meal times if to be orally administered.
- ▶ If a patient is struggling to adhere to the feeding regime it is likely a 1:1 nursing special will be initially required. Ideally this will be a psychiatrically trained nurse. Consultation Liaison Psychiatry in most districts needs to be contacted to conduct the assessment for a Individual Patient Special (IPS) and make referral.

Managing Enteral Nutrition via Naso-Gastric (NG) Feeding

1. Refer to your local policy regarding naso-gastric tube insertion.
2. 1:1 nursing is the only way to ensure that there is no sabotaging of N/G feeding.
3. A lockable pump is preferred to prevent patients from switching off the device or altering the settings.
4. The N/G tubing should be visible to nursing staff at all times, not covered by clothing or bed linen; this will prevent kinking or holes being put into the tube.
5. N/G feeding and resultant weight gain will likely be a source of great anxiety for the patient and may result in sabotaging behaviour as weight increases.
6. Offer PRN medication to assist with anxiety or encourage distraction.
7. Inspect tube at the start and end of the feed.
8. Make sure no syringes are left in the room unattended, even if in other patient's cubicle.
9. Access to bathroom/ sinks should be limited or supervised (bathrooms locked and patient requests to use facilities as needed, door kept open whilst toileting) to prevent syphoning off feeds down drains.
10. Access to bathroom to be restricted 1 hour post bolus feed.
11. Feed times are often highly anxiety-provoking and distressing for the patient and therefore encouragement, understanding, firm management of boundaries and assistance with distress tolerance will be needed.

Meal Management

1. Only food prescribed by the dietitian is to be consumed.
2. Meals to be delivered to nursing staff and not the patient directly.
3. Patient is not to be left alone with food.
4. All food eaten (type and portion) is to be recorded by supervising nursing staff.
5. Time allowed to complete meals/ snacks is to be decided by the care team and enforced by supervising staff, and documented clearly.
6. Uneaten food to be replaced with a supplement (as directed by dietician).
7. Bed rest or supervised quiet time for 1 hour after meals and snacks is required.
8. No bathroom access for 1 hour post meals. **Direct patients to use bathroom before meal.**
9. As eating is often highly distressing for the patient, distraction methods (e.g. conversation), gentle encouragement, and enforcement of boundaries during the meal, and distress tolerance assistance post-meals is almost always needed.

Nursing Management

1. Engage with the patient, build a trusting relationship, provide information as often as required (memory/cognition are both affected by starvation). Provide support and encouragement to the patient during the difficult process of early nutritional rehabilitation. Enforce care plan with compassion and be firm without being punitive.
2. Distress in eating disorder patients in this stage of treatment is the norm rather than the exception, they have severe weight and food phobia and are being exposed to both multiple times a day in quantities they have avoided for a long time. Skills in tolerating and managing distress will be required by the nursing staff, and need to be taught to the patient.
3. The management of the family and carers is very important during this often stressful and distressing time. Families may require detailed information, and frequent updates – establish who in the team who will deliver this. It will be natural for the family to be sympathetic to the appeals from their loved one for an alteration in treatment plan. It can be helpful to involve the family as much as possible in understanding the care plan, the rationale for it, and the clinical milestones needed. Give families a copy of the care plan, or appropriate version of the care plan, wherever possible. It can be helpful to arrange for a family member to attend a portion of ward round each week to reduce splitting.
4. In general leave from the ward is not granted due to medical risk, and when appropriate monitor leave as per care plan carefully
5. Observations should be taken 4th hourly until stable for a minimum of 72 hours. Only then should they be changed to QID.
6. QID lying & standing blood pressure. Staff should call for a clinical review or activate a local rapid response if:
 - Pulse is below 60bpm
 - Temp below 35.5c
 - Systolic BP below 90
 - Significant postural drop of more than 10mmHg
7. BGL QID – 1–2 hrs after meals, as low glycogen stores and an abnormal insulin response may lead to post-meal low BGLs, and low BGLs in the morning/overnight.
Suggested times are 0400, and 1–2 hrs post each main meal. Treat blood glucose levels of <4.0mmol/l as per Medical Management discussed earlier
8. Daily ECG initially and at least until medical stability maintained for a minimum of 72 hours.
9. Patient may require full bed rest if medically unstable
10. Accurate assessment of the patient's nutritional status and eating behaviours:
Weight: Measure and record, weight, height & urine specific gravity the morning after admission at 6.30am after voiding, and repeat each Monday and Thursday (Guidelines for Weighing below)

Height: Should be measured in early morning, check patient is standing at full height.

Bowel chart: record bowel activity (or lack of) daily as patient may have reduced gut motility (they may find this distressing and want to reduce eating and will need encouragement, and support, explaining continued eating is the only way to resolve discomfort)

Intake: Record all offered intake as well as all consumed food & fluids

Check all meals against the meal plan; patient should not be allowed to choose meal from the meal plan at this stage (see nutritional management plan)

11. Request family members to assist with the management plan, by NOT bringing in food and medications (e.g. laxatives) from home or allowing patient to exercise.
12. Monitor and contain eating disorder behaviours:
 - Visually observe the patient at a minimum frequency of 15 minute intervals
 - It is often more effective particularly on medical wards to provide 1:1 constant supervision
 - Shared room (rather than single room)
 - Exercise
 - Vomiting /chewing/spitting
13. Limit physical activity (the patient may require bed rest to reduce energy expenditure)
14. Support at meals and post meals e.g. crosswords, puzzles for distraction
15. Access to toilets needs to occur prior to meals (encourage patients to use bathroom before meals as access after will be denied for one hour). When risk is high, supervision is required during toileting and shower use to reduce opportunities for purging behavior(s) and or laxatives/diuretics use. Lock any bathroom ensembles and restrict the patient to using the ward toilet.
16. Manage constipation with psychoeducation regarding the biological factors that influence this including inadequate food intake, lack of dietary fibre and fluid restriction. Use stool softeners with caution and only when clinically indicated. Do not allow laxatives to be brought from home.
17. Inappropriate fluid intake:
 - Monitor fluid intake for under or over drinking
 - Restriction
 - If possible provide supervision during and after meals to observe and record intake.

Managing Weighing

1. Weighing is non-negotiable
2. Patients should be weighed wearing a hospital gown with underwear only and hair accessories removed, on consistent predetermined days
3. Ideally patients are weighed in the morning prior to breakfast
4. Patient should be instructed to empty their bladder prior to being weighed
5. If you suspect the weight has been falsified (water loading, salt loading, secreting weights in underwear, and/or bra) share concerns with team and document. In this instance a 'spot weigh' should be conducted. This involves weighing the patient at a random time, when they are not expecting to be weighed.
6. As weighing is often extremely anxiety provoking for the patient, distraction and distress tolerance methods should be utilized (e.g. engaging the patient in light conversation during the weight, encouraging them to do crosswords or knitting etc. afterwards).
7. In some cases 'blind weighing' or deciding collaboratively with the patient that it may be best for them to not know their weight can be helpful in these early stages of recovery where immediate weight restoration is essential (later exposure to weight and shape as an outpatient will be important). Discussing its advantages with the patients may be important. The team should agree on the weight approach and it be clearly outlined in the progress notes and treatment plan to avoid confusion and splitting.

Goals of Longer Admissions

- Medical and physical stability
- Continue to improve nutritional status and weight restoration towards healthy levels
- Sufficient normalisation of eating disorder behaviours that criteria for admission to a less restrictive treatment environment (day program, intensive outpatient) are met and transition can be effected.
- There may be limited utility in trying to engage the patient in psychological therapy while severely undernourished. Brain function is effected and engagement in psychological work can be difficult. Nonetheless psychologists can play a pivotal role in assisting the treatment team throughout the admission e.g. administering debriefing sessions, assisting the patient with distress tolerance especially around meal and weight times and speaking with families and assisting with any associated distress.

Discharge Planning and Transition

- Discharge needs to be carefully planned with the patient, family and carers, preferably from the outset of admission.
- These critically ill patients will require a long treatment trajectory involving numerous treatment settings, of which the inpatient medical admission is only one.
- Preparing families or carers and the patient will be important to contain anxiety and set realistic expectations about likely readmissions, the need for ongoing treatment, and realistic treatment outcomes.
- Ascertain the local treatment options outside of the inpatient setting and begin referral processes early in the admission. Follow-up with a GP and local dietitian and psychologist will be needed at minimum.
- Wherever possible transfer of the patient from the inpatient environment to an intensive day program environment should be arranged to prevent weight loss and rapid readmission, and to consolidate change once outside of hospital.
- Discharge is best avoided on Friday or Saturday when continuity of care in community within the 24-36 hours post-discharge is limited. It is ideal if discharge can occur earlier in the week to allow for follow-up appointments with a GP and/or outpatient team for later the same week.
- A multidisciplinary meeting should be facilitated to ensure appropriate referrals for community-based care have been made with follow-up appointments scheduled; if transferring to a different medical or psychiatric setting ensure the team is aware of who is responsible for organising the transfer and writing the discharge summary.
- With the permission of the patient, family, carers or support can be invited to the discharge planning meeting.