QuEDS Guide to Admission and Inpatient Treatment

Developed by Queensland Eating Disorder Service (QuEDS)

This guide has been developed by Queensland Eating Disorder Service (QuEDS) and is supported by current literature (see references 1-22), research and expert opinion. It has been endorsed by the Statewide General Medicine Clinical Network (incorporating Emergency Medicine) and GP Queensland in 2009, the Statewide Mental Health Clinical Network (2011) and reviewed and endorsed by the Queensland Eating Disorder Advisory Group (EDAG) in 2018. In 2014, these guidelines were adapted and incorporated into the Royal Australia & New Zealand College of Psychiatrists (RANZCP) clinical practice guidelines for the treatment of eating disorders.
Appendix VII: QuEDS Weight Chart

Appendix VIII: Specialist Eating Disorder Services

References

QuEDS Guide to Admission and Inpatient Treatment
Queensland Health Eating Disorder Services

The Queensland Eating Disorder Service (QuEDS) aims to increase the capacity of local services to safely and effectively treat people with eating disorders. QuEDS is available to provide support to treating teams/clinicians throughout Queensland. Local Specialist Eating Disorder Services have been established within the Gold Coast HHS, Sunshine Coast HHS and Cairns HHS. QuEDS may be able to facilitate access to specialist beds at the RBWH if a trial of local treatment with QuEDS input has not been able to achieve treatment goals. Additional QuEDS resources and guidelines can also be accessed at: https://metronorth.health.qld.gov.au/rbwh/healthcare-services/eating-disorder

Background

Eating disorders are associated with significant psychiatric and medical morbidity. Common eating disorder diagnoses requiring hospital admission/treatment include: Anorexia Nervosa (AN), Avoidant Restrictive Feeding Intake Disorder (ARFID*), Bulimia Nervosa (BN), Binge Eating Disorder (BED), Other Specified Feeding or Eating Disorder (OSFED), Unspecified Feeding or Eating Disorder (UFED) and other atypical eating disorders. Further information on diagnoses is covered in the DSM-5 (https://insideout institute.org.au/assets/dsm-5%20criteria.pdf). Effective management requires close collaboration between clinicians working in psychiatric, medical and community settings. The overarching principle that guides the management of patients with eating disorders within Queensland Health (QH) is that patients have the right to access medical and mental health services across the continuum of care including community, inpatient and specialist services (NEDC National Practice Standards) as determined by their medical and mental health needs.

*Further information on the application of these guidelines for ARFID diagnoses is provided in Appendix IV

Involving Family and Carers

Unless there are contra-indications, or the individual is opposed, family or significant others should be enlisted as partners in the assessment and treatment process. Given the considerable burden on family, it is important that the family is provided with appropriate support and information (see QuEDS Family Support Guide, QuEDS Patient Support Guide on QuEDS website). Further resources are available at Eating Disorders Queensland - https://eatingdisordersqueensland.org.au/eating-disorder-services-qld/queensland-carers/ (Clinical Practice Guidelines for the Treatment of Eating Disorders. Royal Australian and New Zealand College of Psychiatrists; 2014.)

Objectives

The following guidelines will assist treating teams to:

- Manage the medical and psychological risks and needs of people with eating disorders,
- Promote coordinated care with a smooth transition across medical, mental health and specialist services,
- Encourage state-wide consistency in treatment and management,
- Include families and carers in the service response to people affected by eating disorders.

Goals of Inpatient Treatment

The goals of inpatient treatment are (in the following order):

- medical stabilisation;
- prevention and treatment of re-feeding syndrome;
- engagement of carers, family and community supports;
- nutritional resuscitation and rehabilitation with weight restoration as appropriate;
- reversal of cognitive effects of starvation so the person can benefit from psychotherapy;
- to ensure the patient is able to consume adequate nutrition and contain compensatory behaviours both on and off the ward prior to discharge;
- and arrangement of appropriate outpatient follow-up care.
Table 1: QuEDS Indicators for Admission to Adult Inpatient Beds (>18yrs)

If **ONE or MORE** of these parameters is met at the time of assessment, inpatient treatment is advised (2). The list in the table is not exhaustive; therefore, any other medical problems which are of concern should be discussed with the relevant medical team. **Contact QuEDS Intake or your local Qld Health Specialist Eating Disorder Service for support during business hours on (07) 3114 0809.**

<table>
<thead>
<tr>
<th>Medical Parameters</th>
<th>Medical admission indicated&lt;sup&gt;β&lt;/sup&gt;</th>
<th>Psychiatric admission indicated&lt;sup&gt;µ&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical observations</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Systolic blood pressure</td>
<td>&lt;80 mmHg</td>
<td>&lt;90 mmHg</td>
</tr>
<tr>
<td>Postural blood pressure&lt;sup&gt;#&lt;/sup&gt;</td>
<td>&gt;20 mmHg drop with standing</td>
<td></td>
</tr>
<tr>
<td>Heart rate</td>
<td>≤40 bpm or &gt; 120 bpm</td>
<td>&lt;50 bpm</td>
</tr>
<tr>
<td>Postural Heart rate&lt;sup&gt;#&lt;/sup&gt;</td>
<td>Postural tachycardia &gt; 20 bpm&lt;sup&gt;^&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>Temp</td>
<td>&lt;35.5°C</td>
<td>&lt;36.0°C</td>
</tr>
<tr>
<td>12-lead ECG</td>
<td>Any arrhythmia including: QTc prolongation, or non-specific ST or T-wave changes including inversion or biphasic waves</td>
<td></td>
</tr>
<tr>
<td>Blood sugar</td>
<td>Below normal range (&lt;3.0 mmol/L)</td>
<td></td>
</tr>
<tr>
<td><strong>Pathology</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium</td>
<td>&lt;125 mmol/L</td>
<td>&lt;130 mmol/L&lt;sup&gt;*&lt;/sup&gt;</td>
</tr>
<tr>
<td>Potassium</td>
<td>Below normal range (&lt;3.5 mmol/L)</td>
<td></td>
</tr>
<tr>
<td>Magnesium</td>
<td>Below normal range (&lt;0.7 mmol/L)</td>
<td></td>
</tr>
<tr>
<td>Phosphate</td>
<td>Below normal range (&lt;0.75 mmol/L)</td>
<td></td>
</tr>
<tr>
<td>eGFR</td>
<td>&lt;60 ml/min/1.73m&lt;sup&gt;2&lt;/sup&gt; or rapidly dropping (25% drop within a week)</td>
<td></td>
</tr>
<tr>
<td>Albumin</td>
<td>&lt;30 g/L</td>
<td>Below normal range (&lt;35 g/L)</td>
</tr>
<tr>
<td>Liver enzymes</td>
<td>Markedly elevated (AST or ALT &gt;500)</td>
<td></td>
</tr>
<tr>
<td>Neutrophils</td>
<td>&lt;0.7 x 10&lt;sup&gt;9&lt;/sup&gt;/L</td>
<td>&lt;1.0 x 10&lt;sup&gt;9&lt;/sup&gt;/L</td>
</tr>
<tr>
<td><strong>Nutritional</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Re-feeding risk</td>
<td>High – see Appendix II</td>
<td></td>
</tr>
<tr>
<td>Oral intake</td>
<td>Grossly inadequate nutritional/fluid intake (&lt;1000kCal/4MJ daily)</td>
<td>Unmanageable compensatory behavior (vomiting, exercise, laxatives)</td>
</tr>
<tr>
<td><strong>Anthropometry</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight loss</td>
<td>Rapid weight loss (i.e. 1 kg/week over several weeks)</td>
<td></td>
</tr>
<tr>
<td>Body Mass Index (BMI)&lt;sup&gt;@&lt;/sup&gt;</td>
<td>BMI &lt;12 kg/m&lt;sup&gt;2&lt;/sup&gt;</td>
<td>BMI 12-14 kg/m&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community supports</td>
<td>Not responding to outpatient treatment</td>
<td></td>
</tr>
</tbody>
</table>

* Please note, any biochemical/electrolyte abnormality which has not responded to adequate replacement within the first 24 hours of admission should be reviewed by a Medical Registrar urgently.

<sup>β</sup> Medical admission is recommended if BMI <12 or there are significant abnormalities of physical parameters as indicated in the table above.

<sup>µ</sup> Psychiatric admission is indicated if BMI 12-14, or there are other abnormalities of physical parameters that are not of sufficient severity to warrant medical admission.

<sup>#</sup> Postural HR and BP are measured from lying to standing with a 2 minute break.

<sup>^</sup> Postural tachycardia is only a criterion for admission if the patient has restricted oral intake or weight loss.

<sup>@</sup> Body Mass Index (BMI) is Weight (kg) / Height (m)<sup>2</sup> – see QuEDS Weight Chart – Appendix VII


For support re: adolescent eating disorder treatment (business hours) contact CYMHS-EDP Intake on (07) 3397 9077.

QuEDS Guide to Admission and Inpatient Treatment

Version 4 Effective: July 2020; Review July 2022
Flowchart A: Overview of Treatment for Adults with Eating Disorders (>18yrs)

Also refer to Table 2: Guide for Emergency Department Clinicians, Page 4.

The patient meets ANY of the criteria for a medical/psychiatric admission as outlined in the QuEDS Indicators for Admission to Adult Inpatient Beds See page 2, Table 1.

Does the patient meet any of the medical parameters for admission to a medical ward? See page 2, Table 1.

Admit / transfer to local mental health inpatient unit. Consider consultation input from Qld Health Specialist Eating Disorder Service until:
- Refeeding risk passed (7 days from the commencement of refeeding)
- Medically stable (i.e. NOT meeting criteria for medical admission) for >48 hours
- BMI ≥ 14
Consider criteria for eligibility for transfer as below *

Medically stable for 24 hrs

Discharge to local community mental health and/or primary care services for:
- Weekly medical monitoring as per QuEDS Indicators for Admission, plus
- Evidence-based psychological treatment e.g. CBT, +/- dietetic intervention.
- Consider accessing treatment/support from private/non-government organisations. See Appendix VIII.

Qld Health Specialist Eating Disorder Services are available to provide support and advice to treating teams/clinicians in the inpatient, outpatient and community setting. Services include: QuEDS, EDS-SC, GCHHS-AEDP, N-QuEDS. See Appendix VIII for full listing.

For support with Adolescent (<18yrs) admissions contact CYMHS-Eating Disorder Programme Intake during business hours (07) 33979077. Plus, refer to Adolescent (<18yrs) Eating Disorder Admission Pathways (summary by CYMHS-EDP) on QuEDS website.

Queensland Eating Disorder Service (QuEDS)
For health services outside Gold Coast, Sunshine Coast and North Queensland.
Please contact us via QuEDSConsultationServices@health.qld.gov.au or via our intake line on (07) 3114 0809.
Resources, referral forms etc are available on our website https://metronorth.health.qld.gov.au/rbwh/healthcare-services/eating-disorder or google QuEDS.

* Transfer criteria as follows:
- Systolic BP ≥90
- HR ≥50 and < 100
- No significant postural tachycardia or hypotension
- Normal ECG
- Normal electrolytes
- At goal nutrition for at least 48 hrs
Medical to mental health ward transfer can occur at BMI 12-14 if there is agreement between the medical and mental health units, and patient is medically stable for 24 hrs as above.
Table 2: Guide for Emergency Department Clinicians: QuEDS/Eating Disorder Admission Pathways for Adults (>18yrs)

Refer to Table 1: QuEDS Indicators for Admission to Adult Inpatient Beds (>18yrs) in this document, or available on QuEDS internet website. https://metronorth.health.qld.gov.au/rbwh/healthcare-services/eating-disorder
For more information please refer to the QuEDS admission guidelines on QHEPS or google ‘QuEDS’ https://metronorth.health.qld.gov.au/rbwh/healthcare-services/eating-disorder

Initial Assessment:
- Weight (document potential confounders: hydration status, clothing, heavy jewellery etc.)
- Height measured in Emergency Department (do NOT accept patient report)
- Postural physical observations (HR and BP); ensure 2 minutes apart – lying to standing
- ECG and blood tests from day of presentation: FBC, eLFTs, Phosphate, Mg, glucose, eGFR, TFTs, B12, Folate
- Rate of recent weight loss or severe restriction of nutritional intake (inc. food and fluid)
- Ask about vomiting, laxative use and exercise

**NB. Please take physical observations recorded by the GP into consideration**

Administer IM/IV thiamine, PRIOR to:
- Prompt nutrition provision – liquid supplements (eg Resource Plus/Ensure Plus/Fortisip Compact), or food whilst awaiting implementation of nutrition prescription.

**NB. Delayed provision of adequate nutrition in a malnourished client may exacerbate medical instability**

A. Patient meets ANY of the physical parameters indicating need for medical admission – as per Table 1

- Provide the following:
  - Thiamine 300mg IM/IV 30 minutes prior to feeding and daily for initial three days
  - Electrolytes (K+, Mg2+, PO4-) supplement as required - https://www.health.qld.gov.au/__data/assets/pdf_file/0023/700088/electrolyte-glines-adult.pdf
  - Multivitamin 1 oral tablet daily
- Insert nasogastric tube (NGT) and confirm placement as per local procedure

B. Patient meets ANY of the physical parameters indicating need for psychiatric admission – as per Table 1

- Arrange URGENT psychiatric assessment with recommendation for admission to mental health unit on oral meal plan

C. Patient does NOT meet any of the parameters indicating need for admission – as per Table 1

- Arrange psychiatric review/assessment to determine if mental health admission is required to address failure of outpatient treatment or meet other mental health needs

D. Prior to discharge from Emergency Department

- Arrange follow up with local community services including letter to GP requiring weekly monitoring as per QuEDS Indicators for Admission to Adult Inpatient Beds
- Consider contact with local Qld Health Specialist Eating Disorder Service or QuEDS Intake (07) 3114 0809 re: appropriate community follow-up (business hours only)

**Actions for GP to consider include:**
- **Adults:** Referral to a Specialist Eating Disorder Service for assessment, diagnostic clarification or treatment advice.
- **Adolescents:** Referral to local CYMHS

Qld Health Specialist Eating Disorder Services include: QuEDS, EDS-SC, GCHHS-EDP, N-QuEDS (Appendix VIII).
For support with Adolescent (<18yrs) admissions contact CYMHS-Eating Disorder Programme Intake during business hours (07) 33979077. Plus, refer to Adolescent (<18yrs) Eating Disorder Admission Pathways (summary by CYMHS-EDP) on QuEDS website.

To obtain NG feeds contact __________________________. The Eating Disorder Dietitian is __________________________.
On the weekend call __________________________.
Consultation Liaison (C/L) Psychiatry teams are available to provide adequate, regular and frequent (daily if required) support to the medical team to assist them with their patients’ behavioural and psychological management.

Medical monitoring is a cornerstone of treatment in both the inpatient (medical/mental health ward) and community setting. The table below outlines appropriate medical monitoring from initial presentation to hospital and a guide to reducing frequency as clinically indicated throughout the admission.

<table>
<thead>
<tr>
<th>Orders</th>
<th>Frequency at commencement</th>
<th>Reduction as clinically indicated and after initial refeeding period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thiamine</td>
<td>300mg daily IM/IV first 3 days</td>
<td>100mg oral daily after first 3 days</td>
</tr>
<tr>
<td>Multivitamin</td>
<td>Daily</td>
<td>Daily</td>
</tr>
<tr>
<td>Pathology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TFTs, B12/folate</td>
<td>Initial</td>
<td>As clinically indicated</td>
</tr>
<tr>
<td>FBC, e/LFTs, Phosphate, Mg, eGFR</td>
<td>Daily for at least the first 7-10 days</td>
<td>Second daily By week 3, Twice weekly on weigh days</td>
</tr>
<tr>
<td>ECGs</td>
<td>Daily</td>
<td>Second daily or twice weekly</td>
</tr>
<tr>
<td>Observations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BGLs (capillary)</td>
<td>If on NGF: QID + 0200hrs, If on oral meal plan: 0200hrs, 0600hrs plus 1-2hrs post main meals</td>
<td>BD Can cease if BGLs continue to be within normal range</td>
</tr>
<tr>
<td>Postural BP + HR</td>
<td>QID</td>
<td>BD</td>
</tr>
<tr>
<td>Temperature</td>
<td>QID</td>
<td>BD</td>
</tr>
<tr>
<td>Fluid balance chart</td>
<td>Including IV, NG, oral food/fluid. Include output if medically indicated</td>
<td>Required for duration of admission.</td>
</tr>
<tr>
<td>Weight</td>
<td>Twice weekly</td>
<td>Twice weekly</td>
</tr>
<tr>
<td>Bowel chart</td>
<td>Daily</td>
<td>Daily</td>
</tr>
<tr>
<td>Other/Nutritional</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nasogastric Tube (NGT)</td>
<td>Insert in emergency department</td>
<td>Remove NGT if nutrition goals are consistently met via oral route only (meal plan/liquid supplements) for ~7days</td>
</tr>
<tr>
<td>Fine bore</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enteral feed:1.5kcal/ml fibre-free enteral formula (Nutrison Energy or equivalent)</td>
<td>Initial rate of 40ml/hr continuous 24/24 Request urgent Dietitian review</td>
<td>Increase rate as per Table 4: Enteral Nutrition Regimen, page 6.</td>
</tr>
<tr>
<td>Food chart (if only oral intake)</td>
<td>Observed and documented at each meal/snack</td>
<td>Observed and documented at each meal/snack</td>
</tr>
</tbody>
</table>

**TO MINIMISE THE RISK OF RE-FEEDING SYNDROME IT IS RECOMMENDED YOUR TEAM COMMENCE THESE ACTIONS IMMEDIATELY**
Management of Medical Complications

- Immediately replace potassium (K⁺), phosphate (PO₄³⁻), magnesium (Mg) if these are found to be deficient using Qld health guidelines - “Prescribing Guidelines for HYPO-Electrolyte Disturbances in Adults” [link](https://www.health.qld.gov.au/__data/assets/pdf_file/0023/700088/electrolyte-glines-adult.pdf)
- Hypoglycaemic episodes often occur in the re-feeding stage of severely malnourished patients. Low BGLs (<4.0mmol/l) should be managed according to the document ‘Insulin Subcutaneous Order and Blood Glucose Record Adult that include Guidelines for Medical Officer responding to Blood Glucose Alerts and Hypoglycaemia Management in Diabetes: BGL less than 4 mmol/L’. [link](http://qheps.health.qld.gov.au/medicines/docs/sw006-adult-insulin-subcut-blgl.pdf)

**Note:** Wherever the above document recommends giving a fast-acting carbohydrate, a slow-acting carbohydrate should be given in addition (e.g. Resource Plus/Ensure Plus/Fortisip, 250ml glass of milk plus 2 portion packs of crackers/1 portion pack sweet biscuits).
- Manage constipation as clinically indicated with stool softeners (eg Movicol). Stimulant laxatives (including Senna) should be avoided. Seek specialist assessment as required.
- See also Appendix II – Key Medical Considerations

### Nutritional Management

The following recommendations are aimed at optimising medical stability, whilst reducing medical risk, time to goal energy and length of admission. Ensure your ward dietitian has been notified.

**Table 4: Enteral Feeding Regimen**

<table>
<thead>
<tr>
<th>Day</th>
<th>Regimen – 24hr continuous enteral feeds</th>
<th>Energy (kJ/kcal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1, 2</td>
<td>40ml/hr Nutrison Energy (or equivalent)</td>
<td>6000/1500</td>
</tr>
<tr>
<td>Day 3, 4</td>
<td>55ml/hr Nutrison Energy (or equivalent)</td>
<td>8000/2000</td>
</tr>
<tr>
<td>Day 5, 6</td>
<td>70ml/hr Nutrison Energy (or equivalent)</td>
<td>10000/2500</td>
</tr>
<tr>
<td>Day 7 onwards</td>
<td>80ml/hr Nutrison Energy (or equivalent)</td>
<td>12000/3000</td>
</tr>
</tbody>
</table>

**DELAY INITIATING ENTERAL FEEDING IN A MALNOURISHED CLIENT MAY DELAY PROGRESSION TO MEDICAL STABILITY AND INCREASE DURATION OF STAY**

For further details please refer to ‘QuEDS Recommendations for Nutritional Management of patients with an eating disorder on medical wards’ [link](https://metronorth.health.qld.gov.au/rbwh/wp-content/uploads/sites/2/2018/02/queds-nutrition-flowchart.pdf)

**Nutrition Option 1: Best practice and strongly recommended**

- Commence 24hr continuous nasogastric feeding at 6000kJ/1500kcal per day using a 1.5kcal/mL (6kJ/mL) fibre-free complete enteral feed (eg Nutrison Energy).
- Consider use of Nutrison Advanced Diason (or equivalent allergen free formula) if diagnosed with anaphylactic reaction to fish or dairy.
- Also, see standardised eating disorder enteral feeding regimes by COD-ED on NEMO (Nutrition Education Materials Online) - [link](https://www.health.qld.gov.au/nutrition/clinicians#)
- If nasogastric feeds are interrupted, consider provision of an equivalent catch-up bolus. If volume of loss is unknown, then provide catch up bolus of 150ml.
Nutrition Option 2: If nasogastric feeding is not possible or delayed

- Commence oral liquid diet at 6000kJ/1500kcal per day (see default meal plan below)

**Table 5: Oral Liquid Nutrition Plan – interim use only**

<table>
<thead>
<tr>
<th>Meal</th>
<th>Supplement Prescribed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breakfast 0730hrs</td>
<td>1 bottle/tetrapak Resource plus/Ensure plus/Fortisip Compact (or equivalent)</td>
</tr>
<tr>
<td>Morning tea 1000hrs</td>
<td>½ bottle/tetrapak Resource plus/Ensure plus/Fortisip Compact (or equivalent)</td>
</tr>
<tr>
<td>Lunch 1230hrs</td>
<td>1 bottle/tetrapak Resource plus/Ensure plus/Fortisip Compact (or equivalent)</td>
</tr>
<tr>
<td>Afternoon tea 1530hrs</td>
<td>½ bottle/tetrapak Resource plus/Ensure plus/Fortisip Compact (or equivalent)</td>
</tr>
<tr>
<td>Dinner 1730hrs</td>
<td>1 bottle/tetrapak Resource plus/Ensure plus/Fortisip Compact (or equivalent)</td>
</tr>
<tr>
<td>Supper 1930hrs</td>
<td>½ bottle/tetrapak Resource plus/Ensure plus/Fortisip Compact (or equivalent)</td>
</tr>
<tr>
<td>Late Supper 2130hrs</td>
<td>½ bottle/tetrapak Resource plus/Ensure plus/Fortisip Compact (or equivalent)</td>
</tr>
</tbody>
</table>

**Other Considerations**

- Use low fibre, energy dense feeds/supplements (1.5kcal/ml or 6kJ/ml)
- Progress prescribed nutrition in 2000kJ/500kcal increments every second day until goal energy of 12000kJ/3000kcal is reached (some patients have higher goal requirements – use clinical judgement)
- Calculate fluid requirements based on ~40ml/kg (unless medical management indicates otherwise)
- Limit oral water intake to 250ml/day whilst on nasogastric feeding. No other oral liquid or food, apart from that required for medication or hydration purposes, is to be taken.
- No food should be brought in from outside/home
- Avoid diet foods, lollies or chewing gum
- When discussing weight with patient, use Body Mass Index Banding (see QuEDS weight chart – Appendix VII) or intranet link below
  

**If medically stable and goal energy has been provided for 48 hours, consider either:**

- Continuing nasogastric feeds to maintain medical stability until transfer to Mental health OR
- Commence **3 step oral meal plan** at goal energy – see intranet link
  
- plus, NEMO/eating disorders/COD-ED resources for standard meal plans – see internet link below.
  

Nasogastric tube to remain in place until not required for 3 consecutive days

**If not yet medically stable, then consider:**

- Continue 24hr nasogastric feeds OR
- Progress to a combination of overnight nasogastric feeds with a 3 step meal plan to meet goal energy (see mental health admission for details)
# Nursing Management

Nursing staff play a key role in the monitoring and management of patients with an eating disorder. People with eating disorders have a complex interplay of both medical and psychiatric requirements which require close observation and supervision to ensure patient safety and medical stability. It is the role of the nurse to monitor for early signs of physical deterioration and escalate appropriately. Nurses provide supportive, consistent and empathetic care in alignment with the treatment goals of admission. See Nursing Observations Table below:

<table>
<thead>
<tr>
<th>Visual Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Leave</strong></td>
</tr>
</tbody>
</table>
| **Visual observations** | Minimum frequency 15min  
Consider 1:1 constant supervision including supervised bathroom/toilet use. Limit physical activity and redirect |
| **Bed allocation** | Offer shared room with shared bathroom (rather than single room) – consider high visibility bed near nursing station |
| **Weight** | Blind weight twice weekly (Monday & Thursday) |
| **Height** | On admission  
Measured early morning, ensure patient is standing at fully height, legs straight |

**Table 6: Nursing Observations in medical wards**

<table>
<thead>
<tr>
<th>Visual Observations</th>
<th>Bed allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Leave</strong></td>
<td>Initially no leave from ward and full bed rest due to medical risk</td>
</tr>
</tbody>
</table>
| **Visual observations** | Minimum frequency 15min  
Consider 1:1 constant supervision including supervised bathroom/toilet use. Limit physical activity and redirect |
| **Bed allocation** | Offer shared room with shared bathroom (rather than single room) – consider high visibility bed near nursing station |
| **Weight** | Blind weight twice weekly (Monday & Thursday) |
| **Height** | On admission  
Measured early morning, ensure patient is standing at fully height, legs straight |

**Physical Observations**

*Frequency as determined clinically by medical team  
*Arrange urgent RMO/ward call review if parameters meet any of the listed criteria

<table>
<thead>
<tr>
<th>Physical Observations</th>
<th>Bed allocation</th>
</tr>
</thead>
</table>
| **BGLs** | BGLs <3.0mmol/L  
Capillary BGLs<4.0mmol/l – see [Management of Medical Complications](#) page 6 |
| **Postural BP** Record lying to standing BP measured two minutes apart | Systolic BP below 90mmHg  
Postural drop of more than 20mmHg |
| **Postural HR** Record lying to standing HR measured two minutes apart | Pulse is below 50bpm or above 120bpm  
Postural tachycardia > 20 bpm |
| **Temp** | Below 35.5c |
| **ECG** | Any arrhythmia |

**Nutrition Support**

<table>
<thead>
<tr>
<th>Nutrition Support</th>
<th>Bed allocation</th>
</tr>
</thead>
</table>
| **Bowel chart** | Record bowel activity (or lack of) and supervise toilet use  
AVOID use/prescription of Senna-based and stimulant laxatives  
No laxatives from home (including laxative/diuretic teas) |
| **Food & Fluid Balance Chart** | All meals to comply with prescribed meal plan by Dietitian  
DO NOT ALLOW EXTRA FOOD/FLUIDS.  
Record all offered foods & fluids as well as all observed consumed intake and fluids (for under or over drinking) |
| **Mealtimes** | Toilet needs attended to prior to meals  
Supervision at meals and post meals (60min post main, 30min post snack)  
Observe for purging/chewing and spitting or other compensatory behaviours  
Address any non-compliance with meal plan with gentle prompting |
| **Family Support** | Request family members to assist with the management plan by NOT bringing in food and medications (especially laxatives) from home or allowing patient to exercise |
Guidelines for transfer from medical ward to mental health unit

1. All patients have been medically stable for a minimum of 24 hours prior to transfer; as evidenced by:
   a. Systolic BP 90mm or above
   b. Heart Rate >50 and <120 bpm
   c. No significant postural tachycardia* or hypotension
   d. Patient has been on goal nutrition for at least 48hrs
   e. Normal ECG
   f. Normal electrolytes

2. Patients should ideally at a BMI of 14kg/m² before transfer to a mental health ward. Transfer can occur with BMI between 12 and 14kg/m² if there is agreement between the medical and mental health units, and the patient has been medically stable for at least 24 hours.

3. The risk of refeeding syndrome has passed (at least 7 days from commencement of refeeding). There is clear evidence the patient has received verifiable consistent nutrition as per the ‘QuEDS Recommendations for Nutritional Management of patients with an eating disorder on medical wards’ see Appendix III.


4. Electrolytes should be within normal limits without requiring electrolyte supplementation once goal nutrition is reached.

NB: *Postural tachycardia of > 20bpm persisting for more than 7 days with verifiable consistent nutrition (as per the “QuEDS Recommendations for Nutritional Management”) is less likely to be associated with medical compromise, and so should not preclude transfer to a mental health ward if the treating physician has established that the patient is medically stable.

NB: The mental health treating team should have timely access to advice and support from the local department of medicine, including transfer back to a medical bed if indicated.

NB: If Patient is being discharged to the community directly from the medical ward, ensure discharge criteria are met as outlined in Discharge Planning, page 12.

ADMISSION TO MENTAL HEALTH WARD

Medical Management

Please see Table 3 on page 5 for medical management guidelines plus Appendix II - Key Medical Considerations.

Nursing Management

Nursing patients with Eating Disorders on a Mental Health ward combines medical monitoring and assessment (see Table 2 Medical Assessment), risk and psychological assessment, support and advocacy. Evidence and lived experience identify the core foundation of Nursing Management is the provision of a consistent care model. See Table 6: Nursing Observations on Medical Wards. As a member of the Multidisciplinary Team, nurses assess, provide and implement supportive patient-centred strategies and techniques such as Supportive Meal Therapy (see Appendix IV), sensory modulation and distraction therapies. Nurses promote, empower and support the achievement of the individual’s treatment goals.
**Nutritional Management**

Ensure the ward dietitian has been notified of admission. It is best practice to have dietetic involvement in nutritional rehabilitation and nutrition education of the patient and their family/carers prior to discharge.

**If patient has been transferred to mental health from the medical ward and risk of refeeding syndrome has been minimised:**

Continue to provide goal nutrition for nutritional rehabilitation via a 3 step meal plan as described below. Also, see standardised meal plans by COD-ED (Collaborative of Dietitians in Eating Disorders) on NEMO (Nutrition Educational Materials Online). [https://www.health.qld.gov.au/nutrition/clinicians](https://www.health.qld.gov.au/nutrition/clinicians)

**If patient has been directly admitted to the mental health unit:**

Commence a 3 step meal plan (see below) at 6000kJ/1500kcal. It may be appropriate to commence at a higher energy if there is minimal risk of refeeding syndrome or patient has higher requirements – use clinical judgement.

- Ensure supplement replacement option is of equivalent energy content for each meal and snack
- Copies of meal plan should be available for patient and staff
- Progress prescribed nutrition in 2000kJ/500kcal increments every 2 days until goal energy (usually 12000kJ/3000kcal) is reached
- Calculate fluid requirements based on ~40ml/kg (unless medical management indicates other)
- No food should be brought in from outside/home
- Avoid diet foods, lollies and chewing gum

**The process for the 3 step meal plan is as follows:**

Step 1: Consume 100% of prescribed meal in allocated time*, if <100% consumed proceed to step 2

Step 2: Consume 100% of liquid supplement in allocated time*, if <100% consumed proceed to step 3

Step 3: Remainerd of liquid supplement to be delivered via nasogastric bolus

*Allocated time frames: 30 minutes for meals, 20 minutes for snacks, and 10 minutes for liquid supplements

**Table 7: 6000kJ/1500kcal Default 3 step meal plan**

<table>
<thead>
<tr>
<th>Meal</th>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breakfast 0730hrs</td>
<td>1 cereal with 150ml milk AND 1 fruit (or fruit juice)</td>
<td>250ml Sustagen/Resource plus/Ensure Plus or 120ml Fortisip Compact</td>
<td>Via NGT</td>
</tr>
<tr>
<td>Morning tea 1000hrs</td>
<td>175-200g yoghurt OR portion pack cheese &amp; crackers</td>
<td>250ml Breaka/Milk/Sustagen</td>
<td>Via NGT</td>
</tr>
<tr>
<td>Lunch 1230hrs</td>
<td>1 Main meal option (sandwich, hot meal, salad)</td>
<td>250ml Sustagen/Resource plus/Ensure Plus or 120ml Fortisip Compact</td>
<td>Via NGT</td>
</tr>
<tr>
<td>Afternoon tea 1530hrs</td>
<td>175-200g yoghurt OR 2 sweet biscuits + 150ml milk</td>
<td>250ml Breaka/Milk/Sustagen</td>
<td>Via NGT</td>
</tr>
<tr>
<td>Dinner 1730hrs</td>
<td>1 Main meal option (sandwich, hot meal, salad)</td>
<td>250ml Sustagen/Resource plus/Ensure Plus or 120ml Fortisip Compact</td>
<td>Via NGT</td>
</tr>
<tr>
<td>Supper 1930hrs</td>
<td>150ml glass milk OR 200ml soymilk + fruit/2 sweet biscuits</td>
<td>250ml Breaka/Milk/Sustagen</td>
<td>Via NGT</td>
</tr>
<tr>
<td>Later Supper 2130hrs</td>
<td>150ml glass milk OR 200ml soymilk + fruit/2 sweet biscuits</td>
<td>250ml Breaka/Milk/Sustagen</td>
<td>Via NGT</td>
</tr>
</tbody>
</table>
Implementation of meal plan

- Closely observe and record all oral intake
- Recommend provision of Supportive Meal Therapy (see Appendix V)
- Menu items to be adjusted according to food availability within local services and in consultation with the dietitian
- Nutrient intake to be divided over a minimum of 3 meals and 3-4 snacks
- Low energy foods should be limited (e.g. max 3 serves fruit per day, soup etc)
- Coffee/tea/caffeinated drinks should be limited to 3 cups/day
- At least one hot main meal should be included each day
- Ensure adequate protein and carbohydrate at each meal
- Diet products are not suitable
- No chewing gum or lollies
- No food/fluids brought in from home unless planned in nutrition prescription

Nutritional Complications

- Confirm allergies/intolerances through clinical history and recommended testing (serum allergen specific IgE) plus referral to immunology/allergist. All formal diagnoses must be adhered to and clinical judgement should be used for other restrictions.
- Co-existing medical conditions may increase goal energy (e.g. young male, breastfeeding mother). Tolerance, rate of weight restoration and progression towards medical stability should be monitored.
- If inadequate intake is suspected or nutritional rehabilitation is required and an average weight gain of 1kg/week is NOT achieved with goal energy, consider:
  - Increasing level of supervision at meals and post meal
  - Assessing and managing compensatory behaviours
  - Ceasing leave
  - Supervising showers and toileting
  - 1:1 nursing supervision
  - Addition of a “medpass” to meal plan (e.g. 60ml QID Resource 2.0/Fortisip Compact) to increase energy by 2000kJ/500kcal per day

Discharge Nutrition

- Negotiate individualised meal plan for discharge with patient, keeping in mind long term goals of achieving adequate nutritional status and normal body weight (i.e. BMI >20kg/m2.)
- Discharge meal plan can include liquid supplements – purchase/supply should be arranged prior to discharge

Leave Guidelines

Leave off the ward should be utilised to practice positive behaviours in the community including adequate oral intake, containment of compensatory behaviours and linking in with ongoing community supports eg GP, psychological therapy. Leave is normally increased in a stepwise fashion in alignment with treatment progression (See QuEDS Leave Guidelines in Appendix VI).
Criteria and guidelines for transfer to RBWH adult specialist eating disorders beds

There are 5 specialist eating disorder beds on a general mental health ward at RBWH. These beds may be available if:

a) The patient is NOT meeting treatment goals despite treating team’s ongoing and repeated consultation with QuEDS

b) The local service agrees to maintain ongoing contact with the patient during the admission and provide follow up treatment on discharge.

Discharge Planning

In order to provide patients with an opportunity to utilise community treatment, it is recommended each of the following six criteria are met prior to discharge:

1. Medical stability
2. Psychological safety
3. Nutritional rehabilitation including:
   a. Achievement of appropriate weight goal for admission, based on the following:
      i. BMI <16kg/m² then achieve BMI > 17-20kg/m²
      ii. BMI 16-17kg/m² then achieve 2 BMI bands increase
      iii. BMI>17kg/m² patient may require individualised discharge weight goals
   b. Demonstrated adequate nutritional intake and containment of compensatory behaviours on the ward and during periods of leave
   c. Correction of micronutrient deficiencies
4. Education by dietitian for patient plus family/carers re: discharge meal plan
5. Established community treatment plan including:
   c) GP review for ongoing medical monitoring at least weekly or more frequently dependent on clinical indications. Monitoring to include weight, bloods, physical observations (postural measures of both BP & HR)
   d) Assigned case manager from the local mental health service
   e) Community dietitian if available
   f) Psychosocial support – If the patient is willing, evidence-based psychological treatment (e.g. CBT-e, SSCM, or Day Program delivered by a clinician experienced in treatment of eating disorders) and
   g) Referral of carers to appropriate support services for skills training to identify risk, encouraging help seeking and treatment engagement, and sustaining a recovery focus.
   h) A GP care plan (Better Access Mental Health Care Plan, Chronic Disease Management Plan, Eating Disorder Treatment and Management Plan) for rebate to access private services (eg mental health practitioner, dietitian) may also be required.
6. Established early intervention plan (e.g. identified readmission criteria) developed in collaboration with family/community supports to facilitate voluntary solution focussed admissions as appropriate.

Voluntary or involuntary readmission should be facilitated if medically compromised (in line with medical parameters outlined on page 2 of this document), psychologically unsafe or there is a failure of outpatient treatment.

QuEDS or your local Qld Health Specialist Eating Disorder Service is available to consult with the medical, mental health and C/L teams weekly, or as required, by teleconference, videoconference or on site. Specialised eating disorders support and training can also be accessed via QuEDS. Please contact via QuEDS@health.qld.gov.au or phone QuEDS Intake Line on 3114 0809 during business hours.

QuEDS resources and guidelines can also be accessed at:
Using the Mental Health Act 2016 (MHA)

Eating Disorders are mental illnesses that can be life-threatening and associated with impaired capacity due to the mental illness itself as well as the physical effects of starvation on brain. The MHA can be used where the person’s impaired capacity is putting them at risk and there is no less restrictive way of ensuring they receive treatment. Please find below a list of the criteria for involuntary treatment under s12 of the MHA, along with notes to assist in deciding whether the criteria apply to a patient with an eating disorder. To justify involuntary treatment, all criteria (a) to (d) must apply:

(a) The person has a mental illness

**Note:** Anorexia Nervosa (AN), Bulimia Nervosa (BN), Other Specified Feeding or Eating Disorder (OSFED previously Eating Disorder Not Otherwise Specified), Avoidant Restrictive Food Intake Disorder (ARFID) and Un-specified Feeding or Eating Disorder (UFED) are all listed as mental illnesses in DSM-V.


(b) The person does not have capacity to consent to be treated for the illness

**Note:** In addition to the capacity-impairing symptoms of eating disorders such as intense fear of eating and/or gaining weight, starvation of the brain can cause profound cognitive changes such as rigid, inflexible thinking, obsessive preoccupation and fear around food and weight, ritualised behaviours around food and exercise, depression, and extreme decision-making difficulty. These capacity-impairing effects of starvation can be often reversed with nutrition. For more information, see *The Biology of Human Starvation* by Keys, Henschel & Brožek or for a summary of the study go to:


(c) Because of the person’s illness, the absence of involuntary treatment is likely to result in imminent serious harm or serious mental or physical deterioration

**Note:** Anorexia Nervosa has the highest mortality rate (up to 20%) of any mental illness. Deaths can be due to reversible complications of malnutrition, eating disorder behaviours, and patient suicide. The Minnesota semi-starvation study demonstrated that starvation causes predictable mental, behavioural and physical symptoms that only reverse with nutritional rehabilitation.

(d) There is no less restrictive way for the person to receive treatment and care for their mental illness

**Note:** The RANZCP Clinical Practice Guidelines for the treatment of eating disorders and the QUEDS guidelines for admission and treatment (see Table 1, page 2) recommend (immediate) inpatient treatment if a person with an eating disorder meets any ONE of the following criteria:

- BMI <14
- Systolic BP <90 mm
- HR ≤40 or >120 bpm
- Significant postural tachycardia or BP changes
- Electrolyte abnormalities
- Non-responsiveness to community treatment
- Rapid weight loss
- Grossly inadequate nutritional intake
‘Less restrictive way’

In determining whether a person is to be treated involuntarily under the MHA, clinicians must consider least restrictive principles in providing treatment and care. The MHA refers to this as ‘less restrictive way’. An authorised doctor may make a Treatment Authority if treatment is considered necessary and no less restrictive options are appropriate to meet the person’s needs.

If involuntary treatment or care under the MHA is considered necessary in a medical ward, it is advisable to contact the hospital Consultation Liaison Psychiatry Team to seek advice and assistance regarding the use of the MHA to aid in the person’s treatment and care. The rationale for decisions made must be clearly documented. Any use of the MHA to provide involuntary treatment or care should be discussed with person’s family/carers, preferably beforehand, if clinically appropriate. ‘Less restrictive way’ resources and forms can be accessed on the Queensland Health MHA Internet site:


Use of restrictive interventions

Mental health services aim to reduce and where possible eliminate the use of restrictive interventions such as seclusion, physical restraint and mechanical restraint. Such practices are internationally recognised as non-therapeutic interventions that carry a serious risk of harm to both patients and staff. As many people accessing inpatient services have a history of trauma, abuse or neglect, clinicians need to be mindful of the principles of trauma-informed care, and endeavour to use the least restrictive options possible to assist with providing life-saving nutrition and other treatment.

Seclusion, mechanical restraint and physical restraint

Seclusion, physical restraint and mechanical restraint are to be used only as a last resort, where less restrictive interventions have been unsuccessful or are not feasible.

Seclusion, physical restraint, and mechanical restraint may only be used according to the provisions of the MHA and the associated Chief Psychiatrist Policies and Practice Guidelines, unless authorised under another law. For further information please refer to:


Guardianship and Administration Act 2000 (GAA)

If the person with an eating disorder has impaired capacity to provide or withhold consent to treatment, treatment without consent may also be possible under the Guardianship and Administration Act 2000 (GAA), if the criteria within the legislation are met.

Human Rights Act 2019 (HRA)

Involuntary treatment and care must always be provided with due consideration of the person’s human rights, as outlined in the Human Rights Act 2019 (HRA). These include the right to protection from cruel, inhuman or degrading treatment, the right to privacy, the right to liberty, and the right to human treatment when deprived of liberty, but also the right to life, in which public authorities are required to protect the lives of people in their care, including any harm they do to themselves. The HRA acknowledges that protections exist for clinicians delivering involuntary treatment under the MHA and GAA, if the criteria within the legislation are met.

Enquiries regarding involuntary treatment for hospital patients with an eating disorder can be directed in business hours to QuEDS on 07 3114 0809 or your local Qld Health Specialist Eating Disorder Service in the following Health Service Districts: SCHHS, GCHHS, CHHHS. After hours, contact MH CALL (Ph 1300 642 255) for advice and assistance.
## Appendix II: Key medical considerations

<table>
<thead>
<tr>
<th>Risk of Refeeding Syndrome</th>
<th>Patient has one or more of the following:</th>
<th>Patient has two or more of the following:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Weight loss greater than 15% within the last 3-6 months</td>
<td>• Weight loss greater than 10% within the last 3-6 months</td>
</tr>
<tr>
<td></td>
<td>• Little or no nutritional intake for more than 10 days</td>
<td>• Little or no nutritional intake for more than 5 days</td>
</tr>
<tr>
<td></td>
<td>• Low levels of potassium, phosphate or magnesium prior to feeding attributable to malnutrition</td>
<td>• A history of behaviours which deplete electrolyte/thiamine stores e.g. alcohol dependence, excessive vomiting, laxative abuse</td>
</tr>
<tr>
<td></td>
<td>• BMI less than 16kg/m²</td>
<td>• BMI less than 18.5kg/m²</td>
</tr>
</tbody>
</table>

Table adapted from MNHHS Guidelines 003453 Refeeding Syndrome in Adults (>15yrs) – Identification and Management. (23)

### Electrolytes and Haematology

The first two weeks of refeeding pose the greatest risk to the patient with an eating disorder. Potential biochemical abnormalities include hypokalaemia, hypophosphataemia and hypomagnesaemia. Patients should be monitored daily for electrolyte disturbance and urgent replacement instituted if indicated. Electrolyte disturbances such as hyponatraemia, hypokalaemia and hypochloraemia, or abnormal bicarbonate levels may reflect ongoing vomiting or laxative abuse, water-loading, a total body deficit or refeeding syndrome. Orthostatic pulse or blood pressure changes can be indicative of either dehydration or malnutrition. Other indicators of malnutrition include low serum albumin, serum protein, and serum globulin. Haematological complications result from starvation-induced bone marrow suppression, and include anaemia, neutropenia (relatively common in anorexia), and thrombocytopenia.

### Refeeding Complications

Although phosphate and magnesium levels may initially present within the normal range, they can drop precipitously during refeeding and require timely replacement in consultation with the medical team. Thiamine deficiency is common and may worsen during re-feeding. Thiamine replacement must occur promptly at the time of admission, immediately prior to commencing nutrition.

### Cardiac Risk

Cardiovascular complications include sinus bradycardia, hypotension, tachycardia, postural hypotension and tachycardia, impaired myocardial performance, pericardial effusion, mitral valve prolapse and sudden death. ECG abnormalities in eating disorders (particularly anorexia) include bradycardia, low QRS, P and T wave voltages, ventricular tachyarrhythmia, non-specific ST-T changes, presence of U waves, and prolongation of the QTc interval.

QTc interval prolongation does not necessarily reflect underlying biochemical derangement, and studies have demonstrated QTc interval prolongation in individuals with normal electrolyte levels and demonstrated no correlation between BMI and QTc interval.

A cardiovascular review and ECG should also be performed regularly to detect cardiovascular manifestations of refeeding syndrome.

Some patients rapidly develop peripheral oedema and cardiac failure, and this should be suspected in the presence of rapid weight gain. The risk of heart failure in refeeding syndrome is reduced by controlled, closely monitored re-feeding.
Appendix III: Nutrition Flowchart

QuEDS Recommendations for the Nutritional Management of Patients with an Eating Disorder on Medical Wards

Patient assessed as requiring a medical admission
(please see QuEDS Guide to Admission and Inpatient Treatment and Guide for Emergency Department Clinicians: QuEDS/Eating Disorder Admission Pathways for Adults (>18yrs)

Commence IV thiamine (300mg) for the first 3 days (then oral 100mg tds), oral Multivitamin and daily bloods

Commence continuous 24hr nasogastric feeds at 6000kJ/1500kcal per day#

Use a low fibre, concentrated feed (e.g. 1.5kcal/ml = 6kJ/ml)

Calculate fluid requirement based on 40ml/kg (unless medically contraindicated)

Increase feeds in increments of 2000kJ/500kcal every 2 days until goal energy* of 12000kJ/3000kcal reached

Assess if adequate delivery of energy and fluid

Maintain nasogastric feeds at goal energy* for a 48hour period

Assess medical stability

If medically stable, then consider either...
- Continuing nasogastric feeds to maintain medical stability until transfer to Mental Health, or
- commence 3 step meal plan^ at goal nutrition (usually 12000kJ/3000kcal)
  *nasogastric tube to remain in place until not required for 3 consecutive days.

If NOT yet medically stable, then make clinical decision to either...
- Continue 24 hrs NGFs at goal, or move to a combination of overnight NGFs with a 3 step meal plan^ to meet goal nutritional requirements
- Consider if increased support/ supervision is required to ensure retention of nutrition.

NB: Delay in instituting enteral feeding in a malnourished client may delay progression to medical stability and increase duration of stay. If unable to commence enteral feeds, please refer to QuEDS Admission Guidelines for further details.

# Sample 24hr continuous nasogastric feed regimen – based on 1.5kcal/ml (6kJ/ml), fibre-free formula (e.g. Nutrison Energy)
- Day 1 – 40ml/hr (6000kJ/1500kcal)
- Day 3 – 55ml/hr (8000kJ/2000kcal)
- Day 5 – 70ml/hr (10000kJ/2500kcal)
- Day 7 – 80ml/hr (12000kJ/3000kcal)

➢ Consider use of Nutrison Advanced Diason (or low allergen equivalent) if diagnosed with anaphylactic reaction to fish or dairy
➢ Calculate fluid requirements based on 40ml/kg body weight - provide needs by 4 hourly water flushes. Assume feeds contain 750ml fluid per 1000ml. Suggest NBM or limit of 250ml of water orally

*Co-existing medical conditions may influence goal energy – exercise clinical judgment in such cases. e.g. Young males may require more than 12000kJ/3000kcal for adequate weight gain and medical stability. Tolerance, rate of weight restoration and progression towards medical stability should be monitored.
Appendix IV: Application of QuEDS guidelines for adults with Avoidant Restrictive Food Intake Disorder (ARFID)

To be interpreted with reference to the QuEDS Guide to Admission and Inpatient Treatment, including Table 1: QuEDS Indicators for Admission to Adult Inpatient Beds, Table 2: Guide for Emergency Department Clinicians and Appendix I: A Guide to Applying the Mental Health Act 2016 (MHA) and Guardianship and Administration Act 2000 (GAA) for the Assessment and Treatment of Patients with an Eating Disorder.

People with ARFID are at risk of medical complications secondary to protein-energy malnutrition, micronutrient deficiencies and other food-related behaviours (e.g. excessive vomiting) and may require inpatient treatment if they become medically unstable or there is failure of a community outpatient treatment – see Table 1 QuEDS Indicators for Admission.

Admission to a medical or mental health ward for nutritional resuscitation/rehabilitation may be required to achieve medical stability and address starvation-induced cognitive changes to enable effective engagement in community-based treatment.

Follow usual QuEDS admission guidelines with these additional considerations.

Avoidant/Restrictive Food Intake Disorder (ARFID) was an addition to the DSM 5 Eating Disorder Diagnoses in 2013 (https://insideoutinstitute.org.au/assets/dsm-5%20criteria.pdf).

ARFID is defined by limited volume or variety of food intake motivated by one or more of the following:

- **sensory sensitivity** (heightened sensitivity to the sensory properties of food e.g. taste, texture, appearance, smell) – often longstanding in nature with reliance on highly processed energy-dense foods and associated with vitamin/mineral deficiencies,

- **fear of aversive consequences** (fear of choking, vomiting, or gastrointestinal pain secondary to food-related trauma) – often acute in onset, maybe associated with an anxious predisposition, food avoidance may broaden over time to include entire food groups, or

- **lack of interest in food** or eating (secondary to low appetite) evidenced by low dietary volume, and associated with medical, nutritional, and/or psychosocial impairment.

ARFID diagnostic criteria differ from Anorexia Nervosa or Bulimia Nervosa as behaviours are NOT secondary to fear of weight gain or weight/shape overvaluation. In ARFID diagnoses, limitation in volume/variety of oral intake is NOT secondary to food insecurity, cultural practices or attributable to a concurrent medical condition.

ARFID is heterogeneous in presentation and requires both medical and psychological management (1). People with ARFID have a higher rate of comorbid medical/psychiatric illness than those with AN – e.g. protein/energy malnutrition, obsessive compulsive disorder, generalized anxiety, autism spectrum disorder and cognitive/learning difficulties (5).

Common issues of abdominal pain, nausea and early satiety have been reported (3). Emerging evidence suggests it may be as common as Anorexia Nervosa and Bulimia Nervosa and can occur in individuals of all ages (1,2,4).

Validated ARFID specific screening tools include the PARDI (Pica, ARFID, Rumination Disorder Interview) (7) and the NIAS (Nine-item ARFID screen) (8).

ARFID is a new diagnosis and evidence-based treatment strategies and consensus guidelines are still being developed (4).
Admission

Detailed psychological, medical and nutritional assessment includes causation of limited nutritional intake, micronutrient deficiencies (e.g. iron, calcium, vitamin B12, vitamin D, folate, vitamin A), medical sequelae and medical/psychological comorbidities to inform treatment/management plan. A multi-pronged assessment and support/treatment may include clinicians from the following services: specialist eating disorder, consultation liaison psychiatry/mental health, general medicine, gastroenterology, speech pathology, occupational therapy, psychology and dietetics.

Goals of Inpatient Treatment – remain the same as with other eating disorders with additional considerations as follows:

- assess and address micronutrient deficiencies,
- exclude possible medical causes of limited oral intake e.g. gastroenterology review, swallow assessment etc.,
- emphasis is on adequate nutrition for discharge vs normalised nutrition – this may be achieved through use of liquid oral nutrition supplements (ONS) or if required via enteral feeds,
- continue vitamin, mineral supplementation until deficits addressed and oral meal plan provides for all macronutrient and micronutrient requirements.

*Adequate nutrition:* adequate, regular intake of macronutrients, micronutrients and fluids to maintain/improve medical stability, health and nutritional status over time.

*Normalised nutrition:* a balanced intake of a wide variety of foods, including regular meals and snacks as appropriate for the home/social environment.

ARFID presentations may require extra support to deal with:

- heightened sensory sensitivity to ward environment, nasogastric feeding and oral feeding,
- fear of vomiting, choking,
- constipation and abdominal pain,
- anxiety,
- poor appetite, early satiety, and
- extreme food aversions.

QuEDS nutritional management guidelines - considerations

It is recommended that medically unstable adults with ARFID are managed on the usual QuEDS refeeding guidelines with continuous nasogastric feeds (NGFs) and close monitoring to avoid Refeeding Syndrome, and to facilitate progression to medical stability and nutritional rehabilitation.

Prompt clinical assessment by the dietitian (with appropriate reviews) is essential to inform the nutrition plan. Members of the treating team should consult with family/carers early in the admission to guide management and refeeding options.

Usual transition to oral intake via the 3-Step meal plan may be inappropriate.

secondary to poor appetite, early satiety, fear of vomiting and limited variety/number of tolerated foods.

Transition to oral intake requires planning and clinical judgement with consideration of:

- admission goals
- motivations for avoiding foods
- flexible timing for introduction of oral intake e.g. small meals/snacks over top of 24 hr continuous NGFs early in refeeding or as first step post 7 days nasogastric refeeding protocol
- provision of preferred foods in oral meal plan – e.g. special meals - these may need to be provided from outside hospital eg home/canteen
• use of liquid supplements (ONS) in oral meal plan (as part of Step 1)
• slower progression of oral meal plan e.g. snacks over top of 24hr continuous NGFs, overnight NGFs, use of liquid supplements to meet requirements, smaller serve sizes
• commencing nutritional rehabilitation with increased volumes of preferred foods whilst nutritional deficiencies are addressed by vitamin/mineral and liquid supplements
• inclusion of food challenges to increase variety of foods (may be commenced in the medical ward or general mental health ward or over an extended period in the community)
• service capabilities e.g. consider occupational therapist involvement in sensory training

Community treatment

Formulation of a community treatment plan should be initiated early in admission in consultation with family/carers and finalised prior to discharge. Therapy to facilitate an increase in variety/volume/adequacy of food choice is best actioned via extended treatment in the community setting. In addition to usual QuEDS recommendations, consider:

• Referral to psychologist/mental health practitioner with experience in treatment of eating disorders and ideally Cognitive Behaviour Therapy for ARFID (CBT-AR)
• Referral to dietitian, speech therapist, occupational therapist with expertise in Sequential Oral Sensory (SOS feeding), CBT-AR training.
• Consider referral to clinicians with expertise in Autistic Spectrum Disorder if there is a comorbid ASD diagnosis.

https://sosapproachtofeeding.com

The ARFID diagnosis is NOT specifically covered by the new eating disorder specific MBS items in the Eating Disorder Management Plan (EDMP), however, as a chronic illness it may fulfil criteria to access 10 psychological therapy session rebates via the Better Access Mental Health Care Plan (MHCP) and 5 dietetic session rebates via the Chronic Disease Management Plan (CDMP) per calendar year. Consider whether the ‘Other Specified Feeding or Eating Disorder’ diagnosis is appropriate to enable provision of an EDMP.
REFERENCES for ARFID:


Supportive Meal Therapy (SMT) Handout A - for the Patient/Person

SMT is the process where a meal chaperone/staff member eats a meal or snack with you to support you in completing their prescribed nutrition (as per the meal plan). The meal chaperone models helpful eating behaviour*, whilst fostering an environment that assists with your nutritional restoration, provides consistency and aims to reduce anxiety.

**Goal:** To provide a safe, supportive, consistent environment, which maximises the opportunity for nutritional restoration and minimises anxiety associated with meal times.

*Helpful Eating Behaviour* is demonstrating adequate portioning, adequate food variety and pace of eating while engaging in neutral conversation during and after the meal. These eating behaviours are helpful for your nutritional restoration and assist you with challenging eating disorder cognitions and behaviours.

**Table Rules**
- Try to use the bathroom prior to the meal (any trips to the bathroom during or post meal will require supervision)
- No excess condiments/serviettes/excess cutlery
- Meals will be checked by the chaperone prior starting the meal
- All food is to remain on the plate
- Unhelpful behaviours* are to be avoided and will be addressed if needed
- Eat your food in the way it has been provided
- All food/drink items provided to you must be consumed and this will be checked by the meal chaperone
- All participants must remain at the table until SMT time has finished and remain with the chaperone for the post meal time

*Unhelpful Behaviours* can keep you stuck in the eating disorder cycle. These include: Comparing or commenting on meals, breaking or picking food into smaller pieces, pulling food apart, hoarding food, disposing of food (including intentionally crumbling, dropping or wiping content from provided meals), choosing low calorie or diet food items, eating gum, eating very slowly, chewing and spitting food or regurgitating and re-swallowing food, shaking or jiggling your body, or pacing.

---

**Patient/Person – Responsibilities**

<table>
<thead>
<tr>
<th>PRE MEAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>- You will be made aware that you are on SMT, given a copy of your meal plan, and taken through the table rules*, helpful* and unhelpful behaviours</td>
</tr>
<tr>
<td>- Discuss any queries with your meal chaperone prior to the meal</td>
</tr>
<tr>
<td>- Try to attend the bathroom prior to the meal start time</td>
</tr>
<tr>
<td>- Arrive at the agreed dining area at the designated meal times</td>
</tr>
<tr>
<td>- Ensure long sleeves are pulled back, and clothing with excessive folds or pockets are not worn to the meal table</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DURING MEAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Follow the table rules* and complete the prescribed meal as per your meal plan</td>
</tr>
<tr>
<td>- Try to not delay starting eating (can lead to excess stress in the last few minutes) and</td>
</tr>
<tr>
<td>- Pace yourself throughout the meal, time updates will be provided to help you pace yourself over the time allowed</td>
</tr>
<tr>
<td>- Focus on your own eating, behaviours and recovery goals</td>
</tr>
<tr>
<td>- Try not to engage in unhelpful behaviours*</td>
</tr>
<tr>
<td>- Take guidance from the meal chaperone/staff when provided, these are made with your recovery goals in mind</td>
</tr>
<tr>
<td>- Unhelpful behaviours* will be addressed at the table in a thoughtful and concerned manner</td>
</tr>
<tr>
<td>- All meals must be completed, if this does not occur, the prescribed nutrition will be delivered as per your meal plan</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>POST MEAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Remain seated and do not leave the meal chaperone/staff until the allocated time is completed (i.e. no teeth cleaning or accessing other rooms)</td>
</tr>
<tr>
<td>- Try engaging in distraction activities and conversation which can help to prevent and reduce post meal distress and anxiety</td>
</tr>
</tbody>
</table>
Supportive Meal Therapy (SMT) Handout B - for the Meal Chaperone/Staff

Note: It is important that staff working with people with eating disorders receive support from senior staff members and colleagues (including for bathroom and meal breaks) and do not have an active eating disorder. Other support persons are encouraged to access services such as Eating Disorders Queensland (EDQ).

MEAL CHAPERONE/STAFF SHOULD DEMONSTRATE:

Role modelling: consuming an appropriate meal or snack with the person, demonstrating normal speed of food consumption and appropriate eating behaviours, providing non-meal related light conversation during meal times and assisting the person to identify inappropriate behaviours by providing gentle verbal redirection.

Consistency: Following a set program provides certainty and boundaries for the person, shows respect for your colleagues and fights against the eating disorder affecting the person.

Externalising: Using externalising language that challenges the eating disorder, not the person. I.e. “It looks like the eating disorder is making things hard for you today”.

Support: Using an empathic and supportive tone. I.e. “Your body deserves the right to this nutrition”. Do be cautious of sharing too much of your own personal information and/or opinions.

Remember it is not your responsibility to make the person eat. Your responsibility is to follow the SMT program so the person can consume and retain their nutrition. Refrain from taking an authoritative stance, try expressing empathy and validating the persons struggles while reminding them that their treatment is medically required. One redirection prompt at the table is enough, as the unhelpful behaviour is generally due to anxiety and may not be within the person’s control.

**MEAL CHAPERONE/STAFF - RESPONSIBILITIES**

PRE MEAL

- Receive appropriate training and ongoing support in SMT provision
- Remind of appropriate meal times behaviours relevant for that person including bathroom use prior to meal
- Ensure that the person's meal provided matches the meal plan prescribed
- Be familiar with the table rules* and unhelpful behaviours* (see SMT Handout A)
- Prepare drinks etc... offer the person their preferences if in their meal plan and available i.e. flavour of juice or yoghurt.

*Ensure the person has been provided with their pre SMT information (i.e. SMT Handout A) and prompt them to attend the bathroom.

DURING MEAL

- Inform person of starting time and total time allowed (i.e. “It’s 12pm, we’ll start now and have 20 minutes”), and provide one reminder when 5 minutes is left.
- Do not engage in ANY negotiations around the prescribed meal plan, food intake or time allowances. Do not allow meal changes from the prescribed meal plan.
- Follow the table rules*
- Model helpful eating behaviour* by eating a reasonable quantity meal/snack (a similar number of items to the patient is recommended, no diet foods). Moderate availability of condiments.
- Encourage non-eating related conversation, redirect and/or discourage focus on weight, diet and food topics.
- If struggling with unhelpful behaviours*, try one gentle reminder, avoiding direct confrontation. Be aware of any hypervigilance of/distress at other patients' behaviour and seek assistance from staff if needed.

*In the event not all of the meal is consumed, step 2 of the meal plan is to be provided (followed by step 3 as required)

POST MEAL

- Remain with, and observe all people participating and engage them in activity/conversation.
- Note the role of anxiety and its co-morbidity with eating disorders. Use distress tolerance techniques to assist with helpful ways of coping (i.e. using warm pack on the stomach for complaints of discomfort, sensory interventions or distraction with a game or activity).
- Record intake in food and fluid charts
- Notify the treating team if unhelpful behaviours* occur, they will consider if treatment changes are required.

**GOALS**

**Pre meal**
- Assess person’s mental and emotional state
- Engage in anxiety management strategies

**During meal**
- Address any issues (e.g. inappropriate eating behaviours) in a non-threatening manner
- Manage emotional lability
- Provide a calm and pleasant environment

**Post meal**
- Support in addressing eating disorder cognitions/behaviours
- Encourage relaxation and diversion activities
Appendix VI: QuEDS LEAVE GUIDELINES - Adult Mental Health Inpatient

These leave guidelines have been developed to support timely progress towards the admission goals of medical/nutritional rehabilitation. The goal of leave is to assess ability to eat off the ward, manage compensatory behaviours and support the transition to continuing treatment/recovery in the community. During the first week of admission, no leave from the ward is recommended, after which increased amounts of leave are allocated according to the criteria outlined in the table below. The leave is reviewed at the Multi-Disciplinary Team ward round, with staff completing this form and providing a copy to the patient.

<table>
<thead>
<tr>
<th>LEAVE LEVEL APPROVED (staff to circle)</th>
<th>LEAVE ALLOCATED</th>
<th>CRITERIA FOR LEAVE (tick if criteria met, cross if criteria not met)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>No leave will be allocated in the first week of admission</td>
<td>Not applicable</td>
</tr>
<tr>
<td>1</td>
<td>2 x ½hr escorted leave off ward - escorting persons may include nursing and MDT staff, case managers and suitable family/support persons as agreed by the MDT and deemed aware and supportive of the treatment goals Participation in community challenge and SMT off the ward (if applicable) Escorted leave to attend approved health professional appointments (not during meals or snack times)</td>
<td>○ Medical stability for 7 continuous days as outlined below:  • Blood pressure ≥ 90, postural changes ≤ 20 mmHg  • Heart Rate ≥ 50, postural changes ≤ 20 bpm  • Neutrophils ≥ 1.5  • Blood glucose levels - WNLs  • Electrolytes in normal range ○ Psychologically safe ○ 100% oral consumption of Step 1 and/or Step 2 ○ Efforts to reduce compensatory behaviours noted ○ Participation in group program/meal challenges</td>
</tr>
<tr>
<td>2</td>
<td>2 hours of continuous unescorted leave off the ward for a meal or snack</td>
<td>○ All criteria as outlined for Leave Level 1 ○ Successful use of leave allocated for Leave Level 1 * ○ Increase of 1 BMI Band from admission (if weight restoration is goal of admission)</td>
</tr>
<tr>
<td>3</td>
<td>5 hours of continuous unescorted leave off the ward for a consecutive meal and snack</td>
<td>○ All criteria as outlined for Leave Level 1 ○ Successful use of leave allocated for Leave Level 2 * ○ Increase of 2 BMI Bands from admission (if weight restoration is goal of admission)</td>
</tr>
<tr>
<td>4</td>
<td>Overnight unescorted leave off the ward for a consecutive meal and snack</td>
<td>○ All criteria as outlined for Leave Level 1 ○ Successful use of leave allocated for Leave Level 3 * ○ Commencement of linkage with community supports</td>
</tr>
</tbody>
</table>

* ie. Remains medically stable, able to eat as prescribed whilst on leave and nil compensatory behaviours noted.

In order to meet admission goals if BMI Band does not increase within three weeks or compensatory behaviour is not adequately contained, one or more of the following will be considered by the MDT (staff to circle):

1. Review of leave (reduce or cancel)  2. Supervised toilet/shower  3. Increased supervision on ward (+/- transfer to HDU/PICU)  4. Increased nutrition

Patient Name: ______________________  Clinician Signature: ______________________  Date of ward round: ______________________
## Appendix VII: QuEDS Weight Chart

### Queensland Eating Disorder Service (QuEDS) Weight Chart

<table>
<thead>
<tr>
<th>Date</th>
<th>V.A.</th>
<th>BMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td></td>
<td></td>
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<td>22</td>
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<td>20</td>
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<td>19</td>
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<td>13</td>
<td></td>
<td></td>
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<tr>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Instructions for weight recording**
- Consumer dressed in gown and underwear
- Weigh first thing in the morning after voiding
- Specific Gravity required each weigh, <1.010 indicates dilute urine
- Please see over the page for further notes

To complete plot BMI on dotted line. Note BMI = weight (kg) / height^2 (m)

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QuEDS Guide to Admission and Inpatient Treatment for People with Eating Disorders in Queensland
Notes

Admission Weight: admission weight and height is to be recorded in the space located on the top left hand side of the weight chart document.

The BMI (body mass index) is then calculated and disclosed to the consumer, along with weight and height.

\[ \text{BMI} = \frac{\text{weight (kg)}}{\text{height squared (m}\,^2)} \]

e.g. Weight 42.0 kg and height 1.72 m
\[ \frac{42.0}{1.72 \times 1.72} = \text{BMI 14.2} \]

Subsequent Weights: subsequent weights are to be recorded by plotting the consumer's weight on the weight chart document.

Feedback regarding the consumer's weight must not include actual numbers, but rather include information regarding the client's 'BMI range'. This essentially includes three options:

1. Steady/stable
   - the consumer's weight has remained in the current BMI range
   - the consumer's weight has gone above/below the current range but is a one off

2. Moved up
   - the consumer's weight has been above the current BMI range for two consecutive weights

3. Moved Down
   - the consumer's weight has been below the current BMI range for two consecutive weights

Example:

![Weight Chart Example]

- BMI on admission 15.6
- Subsequent feedback for each weight as follows:

<table>
<thead>
<tr>
<th>Admit</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.6</td>
<td>Stable</td>
<td>Stable</td>
<td>Up</td>
<td>Stable</td>
<td>Stable</td>
<td>Stable</td>
<td>Stable</td>
<td>Stable</td>
<td>Stable</td>
<td>Stable</td>
</tr>
</tbody>
</table>

*QuEDS Guide to Admission and Inpatient Treatment*

Version 4 Effective: July 2020; Review July 2022
Appendix VIII: Queensland Health Eating Disorder Services

Queensland Eating Disorder Service (QuEDS)
(For health services outside Gold Coast, Sunshine Coast and North Queensland)

- Services provided: phone intake and advice, specialist consultation (assessment) clinic (based at RBWH), consultation and workforce development and training
- Individual and group treatment (CBT-e, SSCM and a 12 week intensive Day Program)
- Access to RBWH specialist beds if inpatient treatment goals aren’t met with QuEDS Consultation Service input

Contact: 07 3114 0809 or email: QuEDS@health.qld.gov.au

Gold Coast Eating Disorder Program (GCHHS-AEDP)

- Services provided: Consultation and assessment, workforce development and training, evidence-based individual outpatient treatment

Contact: 07 5635 6200
Referrals 1300 MHCALL

Sunshine Coast Eating Disorder Program (EDS-SC)

- Services provided: Consultation and assessment, workforce development and training, evidence-based individual outpatient treatment

Contact: (07) 5202 9500 or email: SC-MHAS-EDS@health.qld.gov.au or Fax: 5202 9501

North Queensland Eating Disorder Service (N-QuEDS)

Services Provided: Consultation, Training, Evidence-based Outpatient Treatment
Contact: TBA when service opens in Cairns September 2020

Specialist Eating Disorder Services

Provide evidence-based and supportive psychological therapies to complement care provided by public community mental health.

Queensland Health Eating Disorder Services/Private Eating Disorder Services

Services may include:
- Assessment and treatment recommendations
- Individual evidence-based therapy
- Group programmes
- Day programmes
- Specialist eating disorder beds or facilitation of inpatient admission
- Provision of consultation to community teams

Contact Butterfly Foundation for listing of private specialist eating disorder clinicians/services

Non-government organisations

Include:
- The Butterfly Foundation https://butterfly.org.au
Services may include:

- Individual counselling in evidence-based therapies and supportive counselling
- Online support
- Group programmes
- Supportive meal therapy
- Residential programmes – e.g. Butterfly, EndED Butterfly House.

EDQ provides services for carers, including:

- Individualized coaching
- Family coaching
- Carer Peer Mentor Program
- Carer Connect Support Group
- Fostering Recovery workshops.
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15) Whitelaw, M., Gilbertson, H., Lam, P., Sawyer, SM. Does aggressive refeeding in hospitalised adolescents with anorexia nervosa result in increased hypophosphatemia? Journal of Adolescent Health 2010:46;577-582
16) Kohn, MR., Madden, S., Clarke, SD. Refeeding in anorexia nervosa; increased safety and efficiency through understanding the pathophysiology of protein calorie malnutrition. Current Opinion in Pediatrics 2011:23:390-394
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