

STANDARD OPERATING PROCEDURE CAMHS INPATIENT SERVICE EATING DISORDERS

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Author/Lead Job Title	Charlotte Reeves, Specialist Paediatric Dietitian Rachel Douglas, Clinical Lead for Eating Disorders at Inspire
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Consultation:	Beth Griffiths, CAMHS Inpatient Service, Unit Manager Bethany Harper CAMHS Inpatient Service, Unit Manager Nicola Green, Consultant Clinical Psychologist Hannah Townsend Paediatric Consultant Clare Fenton Consultant Psychiatrist Melissa Turner Specialist Clinical Pharmacist CAMHS Mobilisation Board
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CHANGE RECORD

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Contents

1. INTRODUCTION	3
2. SCOPE	3
3. DUTIES AND RESPONSIBILITIES.....	3
4. CAMHS INPATIENT ACCEPTANCE CRITERIA: INSPIRE	4
5. PROCESS	5
5.1. Inspire Inpatient Pathway	5
5.2. Referrals	5
5.3. Assessment	6
5.4. Admission.....	6
5.5. Treatment/Interventions	6
5.6. The Service Will Provide:.....	7
6. ON ADMISSION.....	8
6.1. MEED Risk Assessment.....	8
6.2. %Median BMI.....	8
6.3. Initial Physical Health Assessment	8
6.4. Initial Investigations	9
7. REFEEDING SYNDROME.....	10
8. WEIGHT MONITORING	11
9. HEIGHT.....	11
10. MEALTIMES/MEAL PLANS	12
10.1. Mealtime Expectations:	12
11. NASO-GASTRIC FEEDING	13
12. MANAGEMENT OF PHYSICAL ACTIVITY	13
13. SUPERVISION, SUPPORT AND ENGAGEMENT:	14
14. TREATMENT.....	15
15. RESTRICTIVE PRACTICES	16
16. STAFF TRAINING AND DEVELOPMENT	16
17. DISCHARGE	18
18. RELEVANT TRUST POLICIES/PROCEDURES/GUIDELINES	18
Appendix 1: Risk Assessment Framework	19
Appendix 2: 50 th Centile BMI values.....	23
Appendix 3: Sit-Up-Squat-Stand Test.....	24
Appendix 4: Pathogenesis of Refeeding Syndrome	25
Appendix 5: Emergency Dietetic Feeding Protocol	26
Appendix 6: Factors Associated with the Risk of Refeeding Syndrome.....	27
Appendix 7: Micronutrient Replacement in Severe Anorexia Nervosa	28
Appendix 8: Emergency Nasogastric Feeding Regime.....	29
Appendix 9: Decision Tree for Nasogastric Tube Placement (Children and Infants).....	30

1. INTRODUCTION

The Inspire inpatient CAMHS team will support the delivery of integrated care by inpatient and dedicated Community Eating Disorder Services (CED services), to provide effective mental health care in the right place at the right time. The aim is to improve access to high-quality mental health care and support for children and young people with an eating disorder and co-existing physical and mental health problems and reduce unwarranted variation in service provision and outcomes. Children and young people should be treated as close to home as possible, at the earliest opportunity, to substantially reduce the need for admission and length of stay.

This standard operating procedure is informed by the recent publication by NHS England of the extended guidance to support integration between community and inpatient services as well as the use of the Medical Emergencies in Eating Disorders, NICE guidance and QNIC standards. [college-report-cr233-medical-emergencies-in-eating-disorders-\(meed\)-guidance.pdf \(rcpsych.ac.uk\)](https://www.rcpsych.ac.uk/college-report-cr233-medical-emergencies-in-eating-disorders-(meed)-guidance.pdf)

The extended guidance was written in collaboration with young people who have experienced mental health care for an eating disorder in inpatient settings and provides clear guidance to commissioners and providers about what young people find most helpful for their recovery. There is a strong emphasis on the locality CAMHS Community Eating Disorder (CED) Team remaining an integral part of the care pathway when a young person requires an inpatient admission or more intensive treatment.

2. SCOPE

This SOP covers all staff working for Humber Teaching NHS Foundation Trust on the Inspire CAMHS Inpatient Unit who are responsible for caring for Young People with eating disorders, including (but not limited to) those requiring NG feeds. The SOP also applies to students under the supervision of a registered nurse who is competent in this aspect of care and the supervisory role. The guidance for the passing and management of enteral feeding tubes is covered in the Guideline for the Safe Insertion of Fine Bore Nasogastric Feeding Tubes for Young People Requiring Enteral Feeding as Part of the Eating Disorder Pathway (CAMHS Inpatient Unit).

This SOP should be read in conjunction with the overarching Nutrition Guideline for the CAMHS inpatient unit which covers all the nutritional and hydration guidelines for the CAMHS inpatient service in general whilst also making reference to nasogastric feeding and refeeding syndrome. Both this SOP and the Nutrition Guideline for the CAMHS inpatient unit should be used together with the Guidelines for the Safe Insertion and Maintenance of Fine Bore and Nasogastric Feeding Tubes to guide safe patient care for young people presenting with eating disorders at Inspire.

3. DUTIES AND RESPONSIBILITIES

Service Manager

The service manager will ensure dissemination and implementation of the SOP and associated documents.

Ward Manager

The ward manager will disseminate and implement the SOP and ensure the inpatient team adheres to the SOP and associated documents. They will take responsibility for ensuring all staff responsible for the placement and management of enteral feeding tubes and administration of enteral feeds maintain their competencies. They will ensure new staff are trained and assessed in the placement and management of feeding tubes and administration of enteral feeds.

Clinical Staff

All clinical staff will familiarise themselves with and follow the SOP and associated documents. The medical team will take responsibility for medical stabilisation and adherence to Medical Emergencies in Eating Disorders (MEED) guidelines in close liaison with paediatric colleagues. The service dietitian will take responsibility for monitoring and reviewing safe re-feeding in liaison with paediatric/medical colleagues. The MDT will work in close liaison with the Community CAMHS Eating Disorder service with regards to the overall care plan and responsibility for appropriate psychological interventions

4. CAMHS INPATIENT ACCEPTANCE CRITERIA: INSPIRE

The service accepts eating disorder referrals meeting the following criteria:

Young person has a primary diagnosis of a severe and complex eating disorder which cannot be safely treated in the local Tier 3 CED service either due to increased physical or psychiatric risk. However, Inspire will only have capacity to take 2 patients with eating disorder, eating difficulty or ARFID at any one time whether they require NG feeding or not. Young people who are presenting with ARFID (Avoidant Restrictive Food Intake Disorder) which cannot safely be treated in the community.

Consider transfer to Specialist Eating Disorder Unit (SEDU) when:

There has been a previous admission or current admission in a Tier 4 service where the severity/ complexity of the eating disorder or lack of response to treatment on a general adolescent unit means that care in specialist eating disorder service is necessary.

Exclusion Criteria:

- Over 18 years of age (unless this is for a short time period to complete an episode of care and appropriate safeguards are in place).
- Young people with a moderate or severe learning disability unless considered to be in their best interests and they would be able to benefit from general adolescent inpatient service intervention.
- Young people with a primary diagnosis of substance misuse.
- Young people with a primary diagnosis of conduct disorder and no co-morbid mental disorder.
- Young people whose primary need is for accommodation due the breakdown of family or other placement.
- Young people who are in need of CAMHS Low Secure or CAMHS Medium Secure care.
- Young people who are currently in secure settings (including secure welfare placements) provided by local authorities or Youth Justice, who in the first instance would be referred to the CAMHS Medium Secure or a Low Secure Inpatient Unit.

- Young people who are deaf where care may be more appropriately be provided by the National Deaf CAMHS service.
- Young people with severe autism where it is clinically assessed that care would be more appropriately provided by a specialist unit.

5. PROCESS

5.1. Inspire Inpatient Pathway

Young people will be referred to the inpatient service by the locality CAMHS Community Eating Disorder (CED) Team.

The CED team will retain close working links with the inpatient team throughout the course of the young person's admission including in-reach and stepping back out to the community.

The CED team keyworker will be invited to attend weekly MDT meetings with the inpatient service for the duration of the admission.

The CED team will continue to be part of the therapeutic input for the duration of the admission as per the community package of care.

The service will have good links with the general paediatric ward at Hull Royal Infirmary where medical facilities can be accessed given the physical health risk for this group.

The service will provide:

- Assessment
- Admission
- Intensive care and treatment
- In-patient education provision
- Advice and consultation to Community CAMHS and other inpatient CAMHS

The care pathway includes urgent and unplanned admissions within 24 hours of presentation and non-urgent (within two weeks) inpatient. However, despite this being the QNIC standard due to limited dietetic and medical provision at Inspire admissions should be planned where possible as it could be unsafe to admit when dietetic and medical professionals are not available.

5.2. Referrals

Referrals are accepted from locality Community Eating Disorder Services.

All referrals will be reviewed and responded to by the MDT in the referrals meeting on a Wednesdays or by the 2 clinicians allocated onto the access assessment rota each day.

Response times:

Ideally all eating disorder referrals will be planned admissions due to the need for immediate dietetic support on admission. Therefore, where possible, referrals for eating disorder patients can be reviewed out of hours but the admission should be arranged for

weekdays (not during nights or weekends) within normal working hours (9-5). If the dietetic support is not at Inspire on the day of admission, emergency protocol should be followed.

Urgent referrals will be responded to within four hours.

Urgent and emergency referrals where there is high physical risk requiring medical stabilisation will be discussed with colleagues at Hull Royal paediatric department and a decision made based on physical health risk as to the most appropriate environment for admission within 24 hours of referral.

Urgent referrals where there is high psychiatric risk will be admitted within 24 hours, this will not necessarily be to Inspire due to bed capacity and ward acuity at the time of the referral.

All young people referred to the service will have their individual needs assessed to determine if the criteria for admission has been met. The service will work with the Specialist Community Eating Disorder Service, Hull University Teaching Hospitals NHS Foundation Trust, and NHSE Case Mangers to determine the most appropriate environment to support the young person's needs.

5.3. Assessment

An access assessment will be carried out with or in consultation with the locality Community Eating Disorders team.

The assessment will address:

- Goals of admission
- Care and treatment needs
- The best environment/level of service (inpatient, CEDS or paediatric/medical ward)
- Risk
- How able the referring organisation is to safely care for the young person until admission can occur
- Discharge planning (if admission indicated)

5.4. Admission

The inpatient service will provide a comprehensive assessment of physical health to quantify the severity of malnutrition e.g., physical examination, blood tests, ECG monitoring, fluid and electrolyte monitoring) and a full mental health and risk assessment in accordance with NICE guidance CR69, Medical Emergencies in Eating Disorders (MEED), Royal College of Psychiatrists (2012) or the most recent update and CPA good practice guidelines. See more detailed guidance on the admission screening below.

Assessment will be carried out with paediatric colleagues if there is serious concern regarding physical health risk.

5.5. Treatment/Interventions

There are challenges associated with managing young people presenting with eating disorders alongside a general adolescent unit population in one environment.

All inpatient staff will be trained in understanding and managing eating disorder presentations including NG tube insertion and feeding (see further guidance detailed below) and offering meal support.

Consideration will be given to providing separate eating spaces for young people who require meal support. This will include 2 separate tables in a side room which will have space for 2 staff members and 2 young people to sit at when more intensive meal support is needed for the young person.

At times there will still be a need to refer on to a Specialist Eating Disorder Service when there is lack of response to treatment or the severity/complexity of the eating disorder warrants it.

5.6. The Service Will Provide:

A range of interventions aimed at medical stabilisation (with close liaison with the local paediatric ward team), weight restoration and the adoption of healthier eating patterns including reduction of the behaviours associated with the eating disorder.

Safe re-feeding with access to dietetic advice and paediatric/medical advice- led by the dietitian and medical team with input from paediatric ward if required –MEED guidance will be followed.

NG insertion and feeding depending on the decision regarding the most appropriate environment for the young person (see further guidance below). If physical health needs are paramount, this will take place on the paediatric ward.

Daily biochemistry will be needed for the first 5 days as a minimum for those identified to be at risk of refeeding syndrome, should this risk subside biochemistry will be monitored once a week. Should the risk of refeeding syndrome remain high, daily biochemistry will be continued until the risk lessens (this will be done in consultation with the paediatric ward if results are abnormal) and frequent physical observations will continue in accordance with NICE guidance as described above.

Management of weight control behaviours (such as water loading, excessive exercising, self-induced vomiting and laxative abuse).

Appropriate evidence-based family therapy and family interventions including supported family meals and parent groups in conjunction with the Community Eating Disorders Services.

Additional psychological interventions will be provided by the locality Community Eating Disorder team where possible to support continuity of care.

A multidisciplinary approach which includes access to occupational therapy, family therapy and dietetics.

6. ON ADMISSION

Key outcomes of initial clinical assessment:

- Assessment of physical instability using the MEED risk criteria.
- Establish the risk of developing refeeding syndrome.
- Identification of any psychiatric or physical comorbidities.
- Identification of any child protection issues.

6.1. MEED Risk Assessment

All young people admitted with a diagnosis of an eating disorder should be screened using the risk-assessment framework (Appendix 1) outlined in the MEED guidance. If the young person is currently under the CAMHS community ED team, the assessment may have been completed previously but should be repeated on admission. Each domain is rated using a traffic light system, indicating risk to life. The risk assessment is to be used to aid decisions relating to the young person's plan of care such as level of monitoring required and refeeding risk. Assessment of young person's physical health will continue throughout admission and physical observations should be taken as per the individual's care plan. If a number of red flags or Amber flags are noted when assessing the young person's physical observations; or if the young person appears medically unstable or acutely unwell a, medical assessment should be sought from the on call medic at the weekend/ evening or from the ward medic in working hours.

Flags to consider that the nursing team can assess are:

Sit/ stand blood pressure noting postural drop

Sit/ stand Heart rate noting postural increase

No urine output for 24 hours

Low Temperature

SUSS test

Blood sugar level of under 3 (and they refuse oral glucagon treatment)

Ketone level of over 3 (and they continue to refuse oral fluid intake)

The number of red or amber flags should then be documented clearly to help determine the level of physical instability and required monitoring. If it is deemed necessary to contact the medic to assess it is suggested, they complete bloods and ECG as part the assessment. Liaison with acute services at Hull Royal Infirmary (HRI) paediatric registrar may be needed based on the level of concerns from nursing and medic assessment at Inspire the result of this may be a face-to-face assessment at HRI or continued monitoring.

6.2. %Median BMI

Percentage median BMI (%mBMI) is used as an age-adjusted measurement for BMI in young people <18yrs. Studies indicate a %BMI of less than 70%, ongoing weight loss or this level of %BMI being maintained in the long term predicts a high risk of mortality. The MEED risk assessment categorises a %mBMI <70% as Red, 70-80% as Amber and >80% as green.

%BMI for age can be read from BMI centile charts (Appendix 2) or calculated using the Junior Marzipan app. This portion of the assessment will most likely be conducted by the dietitian during their initial assessment.

6.3. Initial Physical Health Assessment

As part of the MEED risk assessment, a number of physical health markers will need to be obtained. This will include:

- Weight, weight history, height and %mBMI
- Physical observations (NEWS2 score– resp, o2, blood pressure, pulse, temp)
- Presence of oedema
- Assessment of dehydration/cardiovascular compromise
- Sit-up-squat-stand test (SUSS) test (see appendix 3)
- Biochemical markers (Bedside Blood glucose and Ketones)
- Assessment of growth and puberty
- Evidence of purging behaviours (if applicable) and/or deliberate self-harm

6.4. Initial Investigations

Bloods

An initial blood sample should be taken as soon as possible after admission. The following markers should be tested for:

- Full blood count
- Urea and electrolytes, including sodium and potassium
- Phosphate, calcium, magnesium
- FBC, Ferritin, Vitamin B12
- B12/folate/Vit D

Bedside Blood glucose levels (“fingerprick” blood test) and ketones (via “fingerprick” blood test or via urine dipstick) may also be monitored if thought to be a concern. Lab blood glucose is not helpful due to the delay in obtaining results and because the glucose in the sample can continue to fall during transport to the laboratory.

ECG

A 12-lead ECG should be performed, with particular attention paid to QTc interval (best calculated manually); and any signs of hypo- or hyper- kalaemia. Any serious abnormalities should be discussed with the on-call Paediatric Registrar at HUTH as these may require continuous ECG monitoring or repeat ECGs within a given time frame. Consider also the use of any medication that may prolong the QTc interval and whether this needs to be reduced/discontinued until the patient is more stable.

In general, the medics will be looking for the rate, rhythm, axis, duration of conduction of electrical signals across the heart.

ECG findings

Sinus bradycardia (lower than normal heart rate) -maybe benign

ST segment elevation

T-wave flattening

Right axis deviation -maybe benign

Prolonged QTc interval – if left untreated may lead to cardiac arrhythmias (abnormal heart rhythm) and sudden cardiac arrest.

Other parameters like electrolytes may also be important in interpreting findings on ECG as conditions like hypokalaemia could explain some ECG abnormalities

The dietitian, Inspire medic or on-call doctor should be informed when a young person with a diagnosed eating disorder is admitted to the ward. The dietitian will conduct an in-depth assessment, including recent dietary intake and nutritional requirements which will be used to inform the nutritional care plan.

7. REFEEDING SYNDROME

Refeeding syndrome is a potentially serious complication in the nutritional management of young people with eating disorders and close consideration of the risk should be performed; (appendix 4).

Ideally, the initial refeeding assessment should be conducted by a dietitian to assess the level of risk. In the absence of a dietitian, the factors outlined below and in appendix 5 should be considered and used to formulate an emergency management plan. Dietetic assessment should be sought as soon as possible following implementation of the emergency plan to ensure nutritional care plans are individualised and appropriate. If one or more of the following factors is present, high risk of refeeding syndrome is indicated, see appendix 6:

- Extremely low weight (%mBMI <80%).
- Little/no oral (<500Kcal) intake for >4 days.
- Weight loss of over 15% in the past 3 months.
- Abnormal electrolytes (K, Na, Phos, Mg), low white blood cell count or vitamins such as thiamine prior to refeeding.
- Medical comorbidities and/or complications.

Pharmacy

A complete multivitamin and mineral supplement such as Forceval should be prescribed on admission, one capsule daily, regardless of assessed refeeding risk.

If assessed to be at risk, oral thiamine must also be started and continued for 7-10 days, if the young person is under 75% weight for height this may be continued for longer. The MEED recommends (50mg QDS, although in young people they can be prescribed as 100mg BD in young people), see table 9 (appendix 7)

Monitoring

Weight - To be taken twice during the first week of admission.

Bloods – Taken once per day for the first 5-7days.

Blood glucose – As per medical plan (e.g. 6 hourly or before meals).

Fluid balance – Close monitoring and documentation of fluid input and output.

Medical assessment – Initial full assessment, then twice weekly during refeeding period.

Management

Once refeeding risk is established, a nutritional plan will be formulated to slowly build up the diet. During this period, close monitoring and correction of individual electrolyte abnormalities through supplementation is required. Table 9 (appendix 7) in the MEED guidelines provides guidance on administration of individual supplements.

Emergency protocol detailed in appendix 5

If the dietitian is unavailable to conduct an initial assessment:

If one or more of the above criteria for refeeding risk is met, meal plan A (1400kcal) should be implemented to account for refeeding risk. The meal plan should then be increased by 200kcal every 2 days, ensuring close monitoring and correction, if required, of refeeding biochemistry.

To avoid underfeeding syndrome, the young person should never be started on a meal plan which will provide less calories than was being consumed before admission. This information should be obtained through discussion with the young person, with a family member or carer present to aid reliability or via handover from the CAMHS ED team or HUTH. If the young

person has already been established on a meal plan and is understood to be compliant, this should be continued.

If all oral intake is declined persistently and there is significant concern regarding their physical wellbeing (taking into account their weight for height, blood results, ECG results, physical observations) and whether it is felt there is a significant risk of harm should they be without oral intake for a further period of time, the emergency NG feeding regime should be implemented, this should be indicated on admission and agreed with MDT but be based on the decision of the dietician and medic. (appendix 8). The decision for NGT feeding due to persistent food refusal during the admission should be following an MDT discussion then care planned and meals and snacks should continue to be offered orally as per their meal plan. Should the MDT not be available for discussion due to weekends or bank holidays the CAMHS on call consultant psychiatrist and paediatric nurses at ward 130 or PAU can be consulted for MDT discussion to implement NGT feeding if there is concern about persistent food refusal.

8. WEIGHT MONITORING

The young person should be weighed on admission and twice per week if assessed to be at risk during the refeeding period. Once medically stable, an updated weight should then be taken once per week. Weigh days should be randomised between a Monday/ Tuesday each week so an up to date weight is ready for MDT, and staff should be aware of weight manipulation strategies such as water loading or concealment of heavy items.

Weight should be taken first thing in the morning, after going to the toilet, and before any food or drink. The young person should be weighed in underwear or light clothing such as pyjamas only, ensuring footwear is removed. The young person should be given the option to see their weight as this will allow them to take an active part in their recovery, this will be determined in a discussion with the dietitian. Should seeing the weight be causing significant distress to the young person an MDT discussion might need to be held with the young person about whether they want to take short break from knowing their weight. The updated weight should then be clearly documented, along with any refusals to be weighed. The dietitian will discuss the patients weight increases or decreases with them with the use of a chart to track trends rather than focussing on individual weekly numbers.

If significant increases to weight are seen (e.g. 2kg over 2-3 days), weight manipulation strategies such as water loading may be considered and strategies to manage this employed. Once meeting full nutritional requirements after a period of 7-10days, MEED outlines and expected weight gain of 0.5-1kg/week. If weight gain is less than expected, calorie purging behaviours may be considered.

9. HEIGHT

Height should be taken on admission, ensuring the young person is standing straight and documented clearly for use in the initial assessment to calculate %mBMI. A standardised measuring device should be used, ensuring the young person is standing straight, with shoes removed.

Height measurements should then be repeated monthly during inpatient admission.

10. MEALTIMES/MEAL PLANS

Meal plans will be formulated and amended by the dietitian. Once provided, no changes or substitutions should be made at ward level before consultation with the dietitian to avoid negotiation by the young person during mealtimes. The catering staff will be responsible for portion sizes, following dietetic advice, with standard, age-appropriate portions being used. Once plated, no changes should be made to the meal or snack.

Meal plans are labelled as A-G to avoid focus on calorie content, and meal plans should be referred to the young people on the ward by letter only. Each meal plan outlines the expected food intake for the day. If the young person is unable to eat the meal or snack, a supplement equivalent is outlined to be offered in place. This should only be given following refusal of the meal. If the meal or snack is started but less than half eaten, the full volume of supplement is to be given as outlined in the meal plan. If more than half, but not all of the food is eaten, half the volume of supplement is to be offered. Document the amount of supplement administered on the food charts as well as on EPMA.

Paper food and fluid charts for each young person will be kept in the kitchen on the ward. These should be completed after every meal or snack session by the member of staff undertaking meal supervision. It is imperative that an accurate record of food, drinks, supplements and NGT feeds is kept. Reported intake from the young person should not be used and all meals/snacks should be observed. A description of the food offered, and amount eaten should be recorded clearly. The content of the paper chart should then be documented to Lorenzo by the end of each shift.

10.1. Mealtime Expectations:

Patients will be encouraged to follow a set of meal time expectations at every meal time, these will be enforced/ encouraged by the staff team present during these times with the nurse in charge overseeing this. These expectations will include both generic ward expectations and Eating Disorder specific expectations:

- No mobile phones at the table
- No inappropriate discussions or language at the table
- Patients need to go to the toilet before mealtimes as they will not be able to go until after their rest period following the meal.
- Patients will not be able to stand up during meal times once the meal has started unless they need to move to a separate room for meal supplements.
- Patients will ideally wear short sleeves during the meal to avoid them being able to hide food.
- Patient's hands must be visible above the table at all times throughout the meal.
- Patients are not to break up, tear or cut their food up into small pieces as this is a behaviour relating to eating disorders, staff should discourage patient's from doing this during the meal whilst on meal support.

This list of meal time expectations is not exhaustive and other expectations may be individually care planned for the patients as per their needs and based on assessment. Staff should check the patient's care plans regularly to ensure they are up to date with any meal time/support changes and these should be handed over on each shift to the incoming team.

11. NASO-GASTRIC FEEDING

The trusts protocol for the insertion and management of nasogastric feeding tubes as part of the eating disorder pathway provides a framework to facilitate the use of naso-gastric tubes (NGTs) as a method of feeding when required in the care of young people with eating disorders. The guidance around placement and administration of feeds should be followed closely and only be undertaken by staff with the relevant competencies. The decision to feed via NGT should always be via MDT discussion, although delay should be avoided due to the health implications of underfeeding. The NGT should be removed after each feeding session.

A paper record to document essential information for each NGT insertion will be kept in the clinic room and should be completed fully after each insertion and uploaded to Lorenzo. Staff should continue to offer food and fluids as per their current meal plan prior to feeding via NGT. The NGT decision tree should be used/ considered for each feed (appendix 9)

NGT feeding should be considered when a number of these parameters are met:

- Persistent refusal to adhere to the meal plan which is causing a potentially life threatening deterioration in physical health
- Not meeting fluid requirements orally and showing signs of severe dehydration
- Young person's % is below 70%, indicating a life threatening weight and their weight is continuing to decrease over a period of time.
- Biochemical abnormalities and high risk of refeeding syndrome suggesting a potential risk to life.
- Physical health observations indicating a significant decline in their physical wellbeing over a period of time.

Should the use of NG feeding be commenced it is imperative that a plan to reintroduce food as soon as possible is established straight away so it can be started once acute concerns have subsided, this will be documented in their individual care plan. The young people should always be offered their meal plan orally even if they are known to be NG fed at that time to give them an opportunity to eat.

12. MANAGEMENT OF PHYSICAL ACTIVITY

Young people with eating disorders may use excessive exercise or activity as a means of avoiding weight restoration or increases in weight as they are encouraged to work towards health. It is important for staff to be monitoring for these behaviours at all times. However, some degree of gentle activity (watching TV with others, reading a book or doing crafts) or going for a brief walk with others (nursing staff or family) can help reduce distress without any additional risk.

Total bed rest was used in the past in hospital treatment of severe eating disorders. However, research has found the risks relating to enforced bed rest include psychological distress and physical complications such as pressure sores, infections, deep vein thrombosis, muscular atrophy and increased bone absorption. Restriction of excessive activity with an explanation of the rationale, education around the risks and offering alternatives is helpful rather than using total bed rest. However, use of wheelchairs may be necessary for those who are at risk of falls or fainting, but this must be in place for the shortest time possible. The use of total bed rest should never be used. Patients should be mobilising as soon as safe to do so. When patients are not mobilising regularly Prophylaxis will potentially be needed if the risk of pressure sores and DVTs is high due to the lack of

mobilisation. If there is a development of pressure sores or evidence of skin breakdown staff must seek specialist wound care support. It is also imperative that the correct equipment is used. This includes the use of pressure cushions which they must use at all times when sat down or are in the wheelchairs and air flow mattresses for young people to sleep on rather than the typical hospital mattresses this will reduce the risks of pressure sores and skin breakdown.

It is important to keep the patient warm and supervised to prevent dysfunctional exercise. Assessment of functional abilities, transfers and mobility are required to ensure the individual is safe to engage in functional tasks and the level of support or assistance required. For example, an individual may be at risk of falls with reduced balance and stability and may therefore require assistance to mobilise within the bed space or to the bathroom. Arrangements for toileting and washing will need to be considered to prevent excessive exercise, such as supervised bath or shower/ unlocked bathroom or toilet doors, but with provisions for privacy. These interventions are intrusive and need to be explained, documented, and maintained with consistency if necessary.

13. SUPERVISION, SUPPORT AND ENGAGEMENT:

Staff will be expected to encourage young people to be out of their bedrooms and engaging in the ward timetable as much as possible on a day to day basis. However each young person's supportive engagement level will be individually agreed in MDT and will be care planned as such by the nursing team. Engagement levels will be least restrictive however should the patient present with ongoing compensatory behaviours (such as exercising or vomiting) or if their physical health is significantly compromised it may be necessary to consider a higher level of supportive engagement to monitor the patient's physical safety or discourage the young person from engaging in compensatory behaviours which will lead to continued weight loss. The levels of supportive engagements will be in line with the current Supportive Engagement Policy.

Staff will be expected to support patients in the post meal timeframe as part of the meal support; this will be to support the patient to manage increased feelings of anxiety and provide activities/ distractions to give time for these increased anxiety levels to reduce. However patient's with eating disorders can continue with compensatory behaviours at any time of day therefore it will be imperative that there is at least 1 member of staff, preferably 2 members of staff depending on staffing levels, in the communal lounge at all times to observe for any unhelpful behaviours such as discreet exercising (hovering above the chair, toe tapping, squatting down to pick items up off the floor, pacing); staff will be expected to discourage these behaviours and report concerns to the nurse in charge.

It is recognised that should patient's spend time in their bedrooms especially increased amounts of time alone, they may engage in risk behaviours or compensatory behaviours. In the first instance this should be managed through verbal support and offers of distraction, ward timetabled activities or ad hoc activities. However in extreme cases where risk to the young person's weight restoration treatment plan is to a point where it will significantly compromise their physical health it may be necessary to consider more restrictive measures such as locking bathroom doors for certain time periods such as after meals to avoid vomiting; or restricting access to the patients bedroom in general so staff can monitor and offer support more easily due to them being in communal areas. However, these restrictions must be an MDT decision due to the nature and level of the restrictions and should not be

any one professional's decision. These restrictions must also be reflected in the patient's care plan.

The staff team supporting the young people will be expected to complete meal support and training will be provided. The meal support covers before, during and after the meal. Prior to the meal those who are allocated to meal support are expected to go to the young person and encourage them to come for their meal and to go to the toilet before they attend the dining area, should the patient need to be in a wheelchair the staff member will bring the patient down to the dining area. Staff are expected to remain with the young person at all times during the meal once eating has commenced, staff are to eat with the young person to normalise eating behaviours. Staff need to enforce mealtime rules throughout the meal and discourage disordered eating behaviours as listed in the mealtime rules section. Staff are to try and make meal times as relaxed as possible but must also encourage the young person to eat when they are struggling. Staff need to be aware of the conversations they are having with the patient and whether these are appropriate during the meal. Staff need to be observant and report any concerns to the Nurse in charge.

Following the Maudsley model of meal time support the patient will be given 10 minutes to start their meal in the main dining room. If they have not started in 10 minutes. And should the patient continue to not eat they will be offered a supplement as per prescription and meal plan. The supplement should not be presented in the bottles they need to be decanted into a lidded cup and the number of supplements in the cup is not to be discussed with the young person. Should the young person decline the supplements, staff will need to consider this a missed meal and be aware that NG feeding may be utilised if this has been agreed in MDT and as per the young person's care plan. If the patient does begin eating within the allotted 10 minutes, they will have 30 minutes (including the 10 minutes to start) for main meals and 10 minutes for their snacks with 5 minutes to start. Following the meal staff are expected to sit with the young person as per their care plan but this will usually be for 30 minutes following the meal. During this post meal time the staff member will be expected to offer a seated activity or distraction, they will also need to discourage compensatory behaviours throughout this time if these are noted. In some cases, young people may need to move to a different table or quieter area if this has been deemed appropriate and helpful in supporting them to take a consistent oral diet. However, it must be noted this approach can have the opposite effect so is not appropriate for all young people.

14. TREATMENT

Treatments will be provided by a range of professionals on the inpatient unit including nurses, healthcare assistants, doctors, dietitians, occupational therapists, psychologists, pharmacy staff and social care if necessary and this will be done in conjunctions with the community teams in an attempt to offer seamless care throughout the care system.

These treatments will include:

- Family therapy
- Family Meals
- Weight restoration
- Use of medication including vitamins
- Physical health improvement
- Individual psychology sessions

- Confidence building around activity of daily living skills and other occupational therapy related assessments
- Groups around body image and appetite potentially delivered in conjunction with the dietitian
- Work with the nursing team in line with and which compliments the work being completed by the community team

It is the expectation that the young person's community workers will attend the unit for sessions on at least weekly basis and to attend meetings to discuss their ongoing care and for discharge planning.

15. RESTRICTIVE PRACTICES

Patients at Inspire may need to be NG fed as a result of persistent food refusal. However, restraint to feed via nasogastric tubes should only be used in life-threatening situations where the patient's physical health is severely compromised, or as part of a carefully considered multi-disciplinary care plan which is regularly reviewed on a weekly basis. See Guidelines for the Safe Insertion and Maintenance of Fine Bore and Nasogastric Feeding Tubes and CAMHS Safety Pod Standard Operating Procedure for further guidance on restraint using safety pods for NG feeding.

Where repeated and continued restraint for the purpose of NG tube feeding is being used and where the young person has been care planned to be NG fed under restraint for a prolonged period of time despite the care plan being reviewed weekly a second opinion should be sought from a CAMHS ED consultant and recorded.

Patients should continually be offered food/ supplements orally alongside any NG feeding care plan to continue exposure to food and fluids. The use of NG feeding should aim to be done for the shortest period of time possible to ensure the patient's do not become reliant on the NG tube for nutrition.

16. STAFF TRAINING AND DEVELOPMENT

All clinical staff working on the wards at Inspire are required to complete an induction in which the following topics are covered this should also be completed with bank and agency staff members:

- The physical care of young people with eating disorders
- Mealtime protocols
- The highly structured nature of the eating disorder ward programme
- Access to food, drink and exercise
- Suitable topics of conversation, with reference to discussions about weight, shape and eating
- Therapeutic boundaries between staff and young people, and how these are established
- Identification of compensatory behaviours and how to manage them.

All staff who are involved in supervising and supporting young people's mealtimes are expected to have completed the training programme as outlined above, they need to also be able to demonstrate appropriate eating behaviours, they are expected to eat with the young people and need to be aware of the language they are using when eating with young people- such as only using positive language and avoidance of discussing food related topics.

The training that staff are involved in regarding eating disorders should be recorded on their personal development record and should be consistent and relevant to their role within the clinical team. Training will also be completed face to face in team meetings, online training, through competencies and through self-directed learning using tools such as mind-ed.

It will be expected that permanent clinical staff at Inspire who are involved in the direct care of young people with eating disorders receive eating disorder-specific training on psycho education, motivational enhancement and working with families; as well as training on managing distorted perceptions of food, body image and managing young people with other psychological comorbidities. This may include the Maudsley Inpatient Training or bespoke training jointly run by the Inspire and community eating disorders services relating to working with Young People with eating disorders and their families. This training will also be expected to benefit the staff who are involved in assessment, formulation and care planning for our young people who present with eating disorders.

The skills and competencies of staff involved in the insertion and management of tubes/tube feeding will be reviewed on a 3 monthly basis for those who have not passed an NG tube for 3 months they will be expected to demonstrate their competencies on the mannequin at Inspire and recomplete the self-assessment competency framework. For those staff who have not passed an NG tube on a patient for a year they will have to complete the full training again and this will include updated information to reflect any new practice in the management of NG tubes. In the clinic room on Inspire there will be a folder with a paper copy documenting every NG feed done at Inspire and who administered this as well as paperwork on Lorenzo to reflect this which will be audited fortnightly to establish who is administering the feeds and ensure that it is noted when a staff member has not completed an NG feed for 3 months. Once it has been recognised that a staff member needs to review their competencies a meeting will be arranged to address this as soon as possible. The outcome of this review will be documented in the staff personnel file and within the central training records and it is again up to the Clinical Lead for Eating Disorders and the Ward Manager to ensure the training is completed, up to date and the records are accurate on ESR.

Where physical restraint by staff is required in order to facilitate a feed via NG tube a registered nurse who is trained in DMI must be present and will be responsible for directing and subsequently documenting and reporting of the restraint. A minimum of 3 staff performing the restraint with an additional staff member responsible for overseeing the feed is required. All restraints for NG feeding should be in line with the DMI training specific to this intervention and the use of safety pods, anyone who has not had this specific training should not be involved in the restraints during NG feeding.

It is of the utmost importance that staff are aware of the physical health risks relating to eating disorders and have had training appropriate to their clinical role. All staff must be aware of the physical health risks as outlined in the MEED as a minimum level of knowledge. This will include knowing the relevant flow charts and escalating this as per the outlined protocol in the MEED. Registered Nurses, Dietetic staff and medical staff must be able to recognise the signs and symptoms of refeeding and underfeeding syndromes and be aware of the protocol to manage this quickly and effectively.

Staff will be expected to engage in regular supervision as per the supervision structure as it is important for staff to look after their own wellbeing when caring for others. It will also be expected that staff engage in team reflections once a month specific to eating disorders, in this staff can bring specific clinical cases they are struggling with, issues around care but

also it will give staff a chance to check in and make sure they are following gold standard care procedures relating to meal support and NG feeding as well as helping the team come together and check in regarding the level of consistency on the units.

17. DISCHARGE

The discharge process as outlined in the overarching CAMHS inpatient SOP will be followed, working closely with the community eating disorders teams to plan discharge and ensure smooth transition back to community care as soon as possible. A discharge date should be set during the access assessment process to give the admission a direction and date to work to for discharge planning purposes.

18. RELEVANT TRUST POLICIES/PROCEDURES/GUIDELINES

- [Nutrition Guideline for the CAMHS inpatient](#)
- [CAMHS Guideline for the safe insertion of fine bore nasogastric feeding tubes for young people requiring enteral feeding \(G396\)](#)
- [CAMHS Safety Pod SOP](#)
- [Hand Hygiene Policy](#)
- [Standard Precautions Policy](#)
- [Consent to Treatment under the MHA SOP](#)
- [Consent Policy N-052](#)
- [Mental Health Act Legislation Policy](#)
- [Physical Restraint Policy](#)
- [Deteriorating Patient Policy](#)
- [Deteriorating Patient Protocol](#)

Appendix 1: Risk Assessment Framework

Refer to section 6.1 in the main body of the SOP to establish the context for the use of this risk assessment framework. Whilst this assessment tool is referenced in the section regarding admissions, the use of this is not limited to the admission process and can be used throughout the young person's time at Inspire to determine if liaison with paediatrics is needed.

Table 1: Risk assessment framework for assessing impending risk to life

	 Red: High impending risk to life	 Amber: Alert to high concern for impending risk to life	 Green: Low impending risk to life
Medical history and examination			
Weight loss	Recent loss of weight of $\geq 1\text{kg/week}$ for 2 weeks (consecutive) in an undernourished patient ³⁴ Rapid weight loss at any weight, e.g. in obesity or ARFID	Recent loss of weight of 500–999g/week for 2 consecutive weeks in an undernourished patient ¹²⁶	Recent weight loss of $< 500\text{g/week}$ or fluctuating weight
BMI and weight	<ul style="list-style-type: none"> Under 18 years: m%BMI³⁵ $< 70\%$ Over 18: BMI < 13 	<ul style="list-style-type: none"> Under 18: m%BMI 70–80% Over 18: BMI 13–14.9 	<ul style="list-style-type: none"> Under 18: m%BMI $> 80\%$³⁶ Over 18: BMI > 15
HR (awake)	< 40	40–50	> 50
Cardio-vascular health^{37 38}	Standing systolic BP below 0.4th centile for age or less than 90 if 18+, associated with recurrent syncope and postural drop in systolic BP of $> 20\text{mmHg}$ or increase in HR of over 30bpm (35bpm in < 16 years)	Standing systolic BP $< 0.4\text{th}$ centile or < 90 if 18+ associated with occasional syncope; postural drop in systolic BP of $> 15\text{mmHg}$ or increase in HR of up to 30bpm (35bpm in < 16 years)	<ul style="list-style-type: none"> Normal standing systolic BP for age and gender with reference to centile charts Normal orthostatic cardiovascular changes Normal heart rhythm




³⁴ Patients losing weight at higher BMI should be assessed for other signs of medical instability and weight loss strategies to determine risk.

³⁵ Also known as **weight for height** percentage.

³⁶ Note these do not denote a healthy weight but rather a weight above which other parameters in this risk framework may better reflect risk.

³⁷ <https://pubmed.ncbi.nlm.nih.gov/24067349/>




³⁸ https://www.nhlbi.nih.gov/files/docs/guidelines/child_tbl.pdf

	 Red: High impending risk to life	 Amber: Alert to high concern for impending risk to life	 Green: Low impending risk to life
Assessment of hydration status	<ul style="list-style-type: none"> Fluid refusal Severe dehydration (10%): reduced urine output, dry mouth, postural BP drop (see above), decreased skin turgor, sunken eyes, tachypnoea, tachycardia 	<ul style="list-style-type: none"> Severe fluid restriction Moderate dehydration (5–10%): reduced urine output, dry mouth, postural BP drop (see above), normal skin turgor, some tachypnoea, some tachycardia, peripheral oedema 	<ul style="list-style-type: none"> Minimal fluid restriction No more than mild dehydration (<5%): may have dry mouth or concerns about risk of dehydration with negative fluid balance
Temperature	<35.5°C tympanic or 35.0°C axillary	<36°C	>36°C
Muscular function³⁹: SUSS Test	Unable to sit up from lying flat, or to get up from squat at all or only by using upper limbs to help (Score 0 or 1)	Unable to sit up or stand from squat without noticeable difficulty (Score 2)	Able to sit up from lying flat and stand from squat with no difficulty (Score 3)
Muscular function: Hand grip strength⁴⁰	Male <30.5kg, Female <17.5kg (3rd percentile)	Male <38kg, Female <23kg (5th percentile)	Male >38kg, Female >23kg
Muscular function: MUAC⁴¹	<18cm (approx. BMI<13)	18–20cm (approx. BMI<15.5)	>20cm (approx. BMI >15.5)
Other clinical state	Life-threatening medical condition, e.g. severe haematemesis, acute confusion, severe cognitive slowing, diabetic ketoacidosis, upper gastrointestinal perforation, significant alcohol consumption	Non-life-threatening physical compromise, e.g. mild haematemesis, pressure sores	Evidence of physical compromise, e.g. poor cognitive flexibility, poor concentration

³⁹ No muscle function test has been researched in patients <18 years.

⁴⁰ <https://pubmed.ncbi.nlm.nih.gov/19129352/>

⁴¹ <https://pubmed.ncbi.nlm.nih.gov/12765671/>

	 Red: High impending risk to life	 Amber: Alert to high concern for impending risk to life	 Green: Low impending risk to life
ECG abnormalities	<ul style="list-style-type: none"> • <18 years: QTc >460ms (female), 450ms (male) • 18+ years: QTc >450ms (females), 430ms (males) • And any other significant ECG abnormality 	<ul style="list-style-type: none"> • <18 years: QTc >460ms (female), 450ms (male) • 18+ years: QTc >450ms (females), >430ms (males). • And no other ECG anomaly • Taking medication known to prolong QTc interval 	<ul style="list-style-type: none"> • <18 years: QTc <460ms (female), 450ms (male) • 18+ years: QTc <450ms (females), <430ms (males)
Biochemical abnormalities⁴²	<ul style="list-style-type: none"> • Hypophosphataemia and falling phosphate • Hypokalaemia (<2.5mmol/L) • Hypoalbuminaemia • Hypoglycaemia (<3mmol/L) • Hyponatraemia • Hypocalcaemia • Transaminases >3x normal range • Inpatients with diabetes mellitus: HbA1C >10% (86mmol/mol) 		
Haematology	<ul style="list-style-type: none"> • Low white cell count • Haemoglobin <10g/L 		
Disordered eating behaviours	Acute food refusal or estimated calorie intake <500kcal/day for 2+ days		



Red: High impending risk to life



Amber: Alert to high concern for impending risk to life



Green: Low impending risk to life

Engagement with management plan	<ul style="list-style-type: none"> Physical struggles with staff or parents/carers over nutrition or reduction of exercise Harm to self Poor insight or motivation Fear leading to resistance to weight gain Staff or parents/carers unable to implement meal plan prescribed 	<ul style="list-style-type: none"> Poor insight or motivation Resistance to weight gain Staff or parents/carers unable to implement meal plan prescribed Some insight and motivation to tackle eating problems Fear leading to some ambivalence but not actively resisting 	<ul style="list-style-type: none"> Some insight and motivation to tackle eating problems May be ambivalent but not actively resisting
Activity and exercise	High levels of dysfunctional exercise in the context of malnutrition (>2h/day)	Moderate levels of dysfunctional exercise in the context of malnutrition (>1h/day)	Mild levels of or no dysfunctional exercise in the context of malnutrition (<1h/day)
Purging behaviours	Multiple daily episodes of vomiting and/or laxative abuse	Regular (=>3x per week) vomiting and/or laxative abuse	
Self-harm and suicide	Self-poisoning, suicidal ideas with moderate to high risk of completed suicide	Cutting or similar behaviours, suicidal ideas with low risk of completed suicide	

Key: °C = degrees Celsius; ARFID = avoidant restrictive food intake disorder; BMI = body mass index; BP = blood pressure; bpm = beats per minute; cm = centimetre; ECG = electrocardiogram; g = grams; h = hour; HR = heart rate; kcal = kilocalories; kg = kilogram; L = litre; mmHg = millimetres of mercury; mmol = millimole; mol = mole; ms = millisecond; QTc = corrected QT interval; SUSS Test = Sit Up-Stand-Squat Test.

Appendix 2: 50th Centile BMI values

50th Centile BMI values

age	boys	girls
years	Kg/m ²	
9	16.037	16.399
9.25	16.125	16.515
9.5	16.219	16.637
9.75	16.318	16.765
10	16.423	16.898
10.25	16.533	17.036
10.5	16.648	17.179
10.75	16.768	17.327
11	16.892	17.478
11.25	17.02	17.634
11.5	17.154	17.793
11.75	17.291	17.954
12	17.433	18.117
12.25	17.579	18.281
12.5	17.729	18.446
12.75	17.881	18.61
13	18.037	18.772
13.25	18.194	18.932
13.5	18.354	19.09
13.75	18.514	19.244
14	18.675	19.395
14.25	18.836	19.542
14.5	18.997	19.684
14.75	19.158	19.822

age	boys	girls
years	Kg/m ²	
15	19.317	19.955
15.25	19.475	20.083
15.5	19.632	20.206
15.75	19.786	20.324
16	19.938	20.438
16.25	20.087	20.547
16.5	20.234	20.652
16.75	20.378	20.751
17	20.519	20.847
17.25	20.656	20.938
17.5	20.791	21.026
17.75	20.923	21.11
18	21.052	21.19
18.25	21.178	21.267
18.5	21.301	21.342
18.75	21.422	21.413
19	21.54	21.482
19.25	21.655	21.548
19.5	21.768	21.612
19.75	21.878	21.674
20	21.986	21.735

BMI = height in metres x (weight in kg)²

%mBMI = (actual BMI/50th Centile BMI) x 100 [see chart]

Example

14.5 year old girl,

Weight: **30kg**

Height: **158cm**

BMI: $30 / (1.58 \times 1.58) =$

12kg/m²

50th Centile BMI: **19.684**

kg/m²

%mBMI = (12/19.684 x 100)
= 61%

Appendix 3: Sit-Up-Squat-Stand Test

Sit-Up-Squat-Stand (SUSS) Test

The SUSS Test is described below. However, clinical experience suggests that adolescents frequently 'pass' this test, especially if they are athletic. Performing poorly is therefore a concern, but it is important not to be falsely reassured if the person performs well. The SUSS Test has two parts (see [Figure 1](#)):

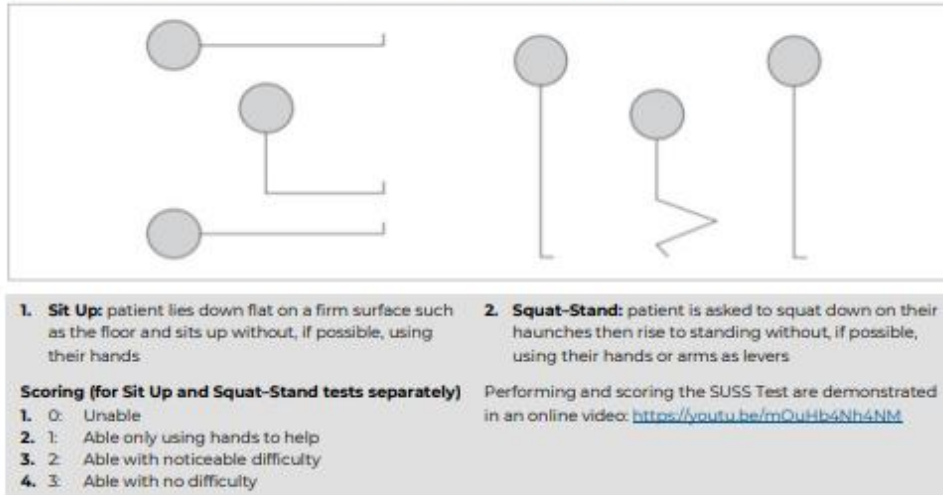


Figure 1: The SUSS (Sit-Up-Squat-Stand) Test

⁷⁸ <https://onlinelibrary.wiley.com/doi/pdf/10.1002/ery.2839>

⁷⁹ <https://www.amazon.co.uk/Digital-Dynamometer-Strength-Measurement-Capturing/dp/B00ABK4LB4>

⁸⁰ <https://pubmed.ncbi.nlm.nih.gov/29792107/>

⁸¹ <https://pubmed.ncbi.nlm.nih.gov/17165671/>

Appendix 4: Pathogenesis of Refeeding Syndrome

In starvation

Insulin concentrations decrease and glucagon levels rise. As a consequence, glycogen stores are rapidly converted to glucose and gluconeogenesis is activated resulting in glucose synthesis from protein and lipid breakdown products.

The adipose tissue lipase is activated releasing large amounts of fatty acids and glycerol. Free fatty acids and ketone bodies replace glucose as the major energy source in starvation. In the starved state the catabolism of fat and muscle leads to loss of lean body mass, water and minerals.

During re-feeding

There is a switch in metabolism from fat to carbohydrate with consequent insulin release, stimulated by the glucose load. With carbohydrate repletion and increased insulin production there is an increased uptake of glucose, phosphorus, potassium and water into cells, and a stimulation of anabolic protein synthesis. This can lead to marked hypophosphatemia, hypokalaemia and hypoglycaemia. If these occur, supplementation is required. Since these are predictable, close monitoring should prevent severe or unexpected results. Fluid overload can also occur, with peripheral oedema noticeable.

The only way to achieve medical stability is by giving nutrition. If symptoms of re-feeding occur, do not stop or reduce the feeds. Give supplements as needed and monitor slowly. There is a risk of underfeeding if feeds are stopped or reduced.

Appendix 5: Emergency Dietetic Feeding Protocol

For use when a patient with a diagnosed Eating Disorder is admitted and a dietitian is unavailable such as on weekends, bank holidays or non-working days.

Patients should be started on initially and encouraged to follow Meal Plan A (1400kcal). Meal supplement can be offered as a replacement for any meal or snack refusals as outlined on the plan. The Meal Plan should then be increased by 200kcal every 2 days as per standard meal plans A-G.

Emergency Meal Plan to be used in absence of Dietitian

Standard Meal Plan A


Meal		Fortisip Alternative
Breakfast	Bowl of cereal with milk OR 1 slice toast with butter Plus 200ml fruit juice or piece of fruit	1 Fortisip Compact
Mid-morning snack	1 biscuit OR piece of fruit PLUS 150ml whole milk	½ Fortisip Compact
Lunch	Sandwich (+protein filling) with butter and At least one protein filling - tuna/salmon/chicken/ham/cheese/egg/beef OR Jacket potato and protein filling	1 Fortisip Compact
Mid-afternoon	1 biscuit OR piece of fruit PLUS 150ml whole milk OR 200ml fruit juice	½ Fortisip Compact
Evening meal	Hot main meal to include: <ul style="list-style-type: none"> • Protein food e.g.; meat, fish, egg, beans, cheese or lentils • Carbohydrate: rice, pasta, potatoes, bread • At least one vegetable 	1 Fortisip Compact
Supper	200ml whole milk OR yoghurt	½ Fortisip Compact

- Include 200-300mls of drink with all meals/snacks
- If less than half of the meal or snack is eaten, the full volume of Fortisip Compact (as outlined in the right-hand column) is to be offered orally. If more than half, but not all of the meal or snack is eaten, half of the outlined volume of Fortisip Compact should be offered orally.
- If both the meal/snack and Fortisip Compact alternative is refused or not completed, this should be documented as a meal refusal.

If there are 2 meals/snack refusals within a 24hr period, the need for NGT should be considered via MDT discussion.

Appendix 6: Factors Associated with the Risk of Refeeding Syndrome

Table 8: Factors associated with the risk of refeeding syndrome

Clinical feature	 High risk level	Management
Extremely low weight	m%BMI <70% BMI <13 ¹⁷³	Cautious refeeding
Prolonged low intake	Little or no intake for >4 days	Cautious refeeding
Deranged baseline electrolytes	Low potassium, phosphorus, magnesium	Measure levels up to twice per day initially and supplement as needed
Low white blood cell count	<3.8	Monitor
At risk for low thiamine The precise requirement for thiamine is not known.	Low thiamine and other vitamins	Pabrinex, oral thiamine, and multivitamins.

Appendix 7: Micronutrient Replacement in Severe Anorexia Nervosa

Table 9: Micronutrient replacement in severe anorexia nervosa and other restrictive eating disorders

Supplementation	Administration
Pabrinex	Ampoules 1+2 by infusion ²⁰² over 30 minutes or Intramuscular ²⁰³ administration
Thiamine (NICE 2006)	50mg four times daily
Vitamin B Co-Strong (NICE 2006)	1-2 tablets, three times daily
Balanced Multivitamin/Trace Element Preparation (e.g. Forceval) (NICE, 2004)	One capsule daily
Phosphate	500mg twice daily orally/via NGT (see text for <18s advice)

Appendix 8: Emergency Nasogastric Feeding Regime

****to be used until initial dietetic assessment is completed****

Feeds should be given via bolus, twice per day as per the established meal timetable – 12:30 and 19:45. If some oral intake is achieved, the equivalent volume of supplement may be removed from the next feeding session. The regimen increases by 200kcal every 2 days. Fortisip Compact is to be used, with each 125ml bottle providing 300kcal and 12g protein. This should be prescribed on admission. In children under 20kg, an appropriate supplement alternative such as Fortini Compact Multifibre should be used. Should supplier change alternative supplements can be used and the dietitian will work out the equivalents needed for the meal plan.

Refeeding biochemistry should be monitored closely and corrected as required (see SOP)

Meals and snacks should continue to be offered as per their current meal plan.

Children over 20kg

	Day 1	Day 3	Day 5
Morning feed	280ml Fortisip Compact +180ml water (460ml)	340ml Fortisip Compact +180ml water (520ml)	375ml Fortisip Compact (3x125ml bottles) +180ml water
Afternoon feed	280ml Fortisip Compact +180ml water	340ml Fortisip Compact +180ml water	375ml Fortisip Compact (3x125ml bottles) +180ml water
Daily total	1350kcal, 54g protein, 920mls	1632kcal, 65g protein, 1040mls	1800kcal, 72g protein, 1110mls

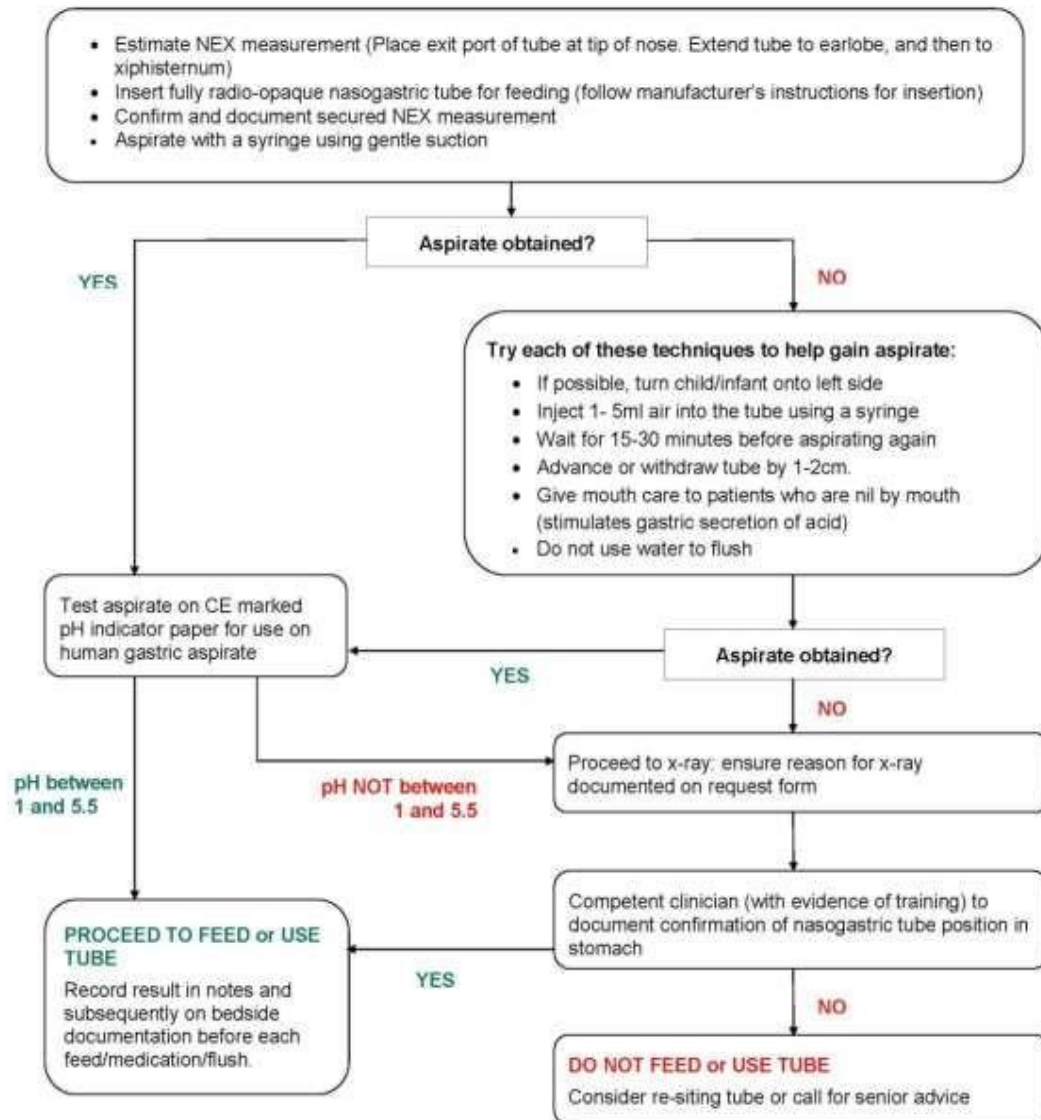
****additional fluid may be required if oral fluid is refused****

Whilst we will endeavour to treat the young people at Inspire should the following parameters be met immediate liaison with the paediatric wards at Hull Royal Infirmary regarding potential transfer of the patient to their service should take place:

- The young person's physical observations are out of range of their baseline for 48 hours period
- No urine output for 24 hours
- Postural increase in heart rate of >40bpm or resting heart rate >130
- Postural drop in systolic BP >30, diastolic >10
- Bedside blood sugar level under 3
- Bedside ketone level over 3 and continued refusal of fluids
- Persistent food/ supplement refusal over 48 hours (with out of range of their baseline physical observations)
- Clinically unwell, muscle weakness/ unable to stand from chair or fainting

Appendix 9: Decision Tree for Nasogastric Tube Placement (Children and Infants)

Decision tree for nasogastric tube placement checks in **CHILDREN** and **INFANTS** (NOT NEONATES)



A pH of between 1 and 5.5 is reliable confirmation that the tube is not in the lung, however it does not confirm gastric placement as there is a small chance the tube tip may sit in the oesophagus where it carries a higher risk of aspiration. If this is any concern, the patient should proceed to x-ray in order to confirm tube position.

Where pH readings fall between 5 and 6 it is recommended that a second competent person checks the reading or retests.