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Specialist help for eating disorders and health

NHS
North East and North Cumbria
Mental Health, Learning Disability and Autism Partnership

Emergency Re-Feeding Plans

For paediatric patients with a sensory restrictive eating disorder admitted to paediatric wards

The aim of any sensory-restrictive re-feeding admission is that a dietitian will devise a collaborated and individualised meal plan in discussion with the ward staff, patient, and family as soon as this is practicably possible (expected within 2 days of admission). However, in the rare event that this is not possible (such as weekends / bank holidays) feeding should not be delayed despite the sensory challenges presented and the following feeding plans should be started in lieu of an individualised plan.

Patients as young as 2 years old can present with an ARFID diagnosis. As this is a broad guidance document for children and young people <18 years, this guidance may not be suitable for those below school-age.

Please note that this is an expert consensus guidance document developed by a cohort of specialist eating disorder dietitians. It is intended to guide, support and inform emergency re-feeding admissions for patients with sensory restrictive eating. It is not intended to replace the dietetic role, or to replace clinical judgement. As such, any started standardised feeding plans should be reviewed and replaced by a tailored dietitian-devised and patient-specific meal plan within a maximum of 4 days (allowing for a weekend + 2 bank holidays).

Patients with the following diagnoses, or suspected diagnoses, should be offered these meal plans:

- ARFID (avoidant/restrictive food intake disorder)
- Autism
- Sensory processing disorder

Please note that patients may have autism and/or sensory processing disorder and may also have a suspected or diagnosed eating disorder (such as Anorexia Nervosa). These patients should be offered these sensory restrictive meal plans as a first line option rather than the standard/routine re-feeding meal plans used for those with Anorexia Nervosa.

Please note that for re-feeding to be started safely the appropriate risk assessment and risk monitoring must be followed.

MEED Risk Guidance found at: college-report-cr233-medical-emergencies-in-eating-disorders-(meed)-guidance.pdf (rcpsych.ac.uk) particularly pages 30-36 supports this. A summarised crib sheet for MEED risk assessment can be found in Appendix 1.

This guidance document was written and co-produced by dietitians from

- Cumbria, Northumberland, Tyne and Wear NHS Foundation Trust
- Tees, Esk and Wear Valleys NHS Foundation Trust
- InsightEating

Which starting calorie plan to use?

There are nuances to starting re-feeding requirements that are best placed with dietitians (such as determining pre-feeding calories, calculating current nutritional requirements, and accurately estimating fluid needs). However, in the interests of this short-term emergency, in the absence of specialist re-feeding assessment and input, it is recommended that an initial starting intake of 1400kcal/day (RCPSYCH, 2023) is safe for adolescent re-feeding (page 78-79) except in the instance of high-risk parameters outlined in Table 1:

Table 1 – High risk parameters for refeeding syndrome:

- Weight below 70% m%BMI *(see Appendix 2 for details on how to calculate)* or weight below 70% Weight4Height
- Anorexia nervosa in conjunction with acute medical illness (such as raised CRP / inflammatory response)
- WCC <3.8mmol/l
- Little or no intake for >4 days
- Already in established re-feeding syndrome (all/one of: low potassium / magnesium / phosphate, +/- peripheral oedema, +/- disturbance to organ function including respiratory failure, cardiac failure or pulmonary oedema, raised liver transaminases) It may be appropriate to start at 1000kcal for those < 10 years old dependent on age, gender and clinical presentation.

In cases, where the above risk factors are noted, energy intake should start at 1,000 kcal/day (seen in grey on the plans below).

In all cases of re-feeding a young person on the ward:

1. Follow MEED risk monitoring guidance including for re-feeding biochemistry, ECG, blood glucose, observations (including postural assessment for blood pressure and heart rate)
2. Do not advance the feeding calories if potassium, magnesium or phosphate fall below normal levels *until this has been corrected back to normal levels*
3. Avoid intravenous (IV) Dextrose for replacing fluids
4. Seek dietetic review and individual plan as soon as possible by instigating a referral to *both* your acute dietetic team and community eating disorders service.

Note: there are differences in normal phosphate level by age, e.g., 3–10 years, 1.2–1.8mmol/L; 10–15 years, 1.1–1.75mmol/L; >15 years, 0.8–1.45mmol/L

Sensory specific re-feeding considerations:

1. To manage the risk of developing re-feeding syndrome the evidence suggests that thiamine should be prescribed daily and for the first 10 days of re-feeding as well as an age-appropriate multivitamin.
    a. Forceval tablet or soluble (Adult or Junior) is the preferable option given its' availability on wards, and its' complete micronutrient profile.

    For individuals with sensory selection, micronutrient supplementation can present challenges. **You should discuss all alternative options with the Young Person (YP) and family, your medical team, and with pharmacy regarding suitable, age-appropriate available alternatives to Forceval**. Some options to consider might be:
    b. Liquid multi-vitamin (such as Abidec multivitamin drops for babies and children)
    c. Chewy mulit-vitamin/mineral (such as Centrum fruity chewables)
    d. Vitamin spray (such as BetterYou MultiVit oral spray)
    e. Vitamin sprinkles (such as Nutrigen Vitamixin)
    f. Spatone liquid iron (if applicable)

g. Chewable calcium (such as calcichew (if applicable))
h. Intravenous vitamin and mineral support may provide an alternative administrative route which is well absorbed. This should be discussed with your medical and pharmacy colleagues.
i. Transdermal vitamin patches are not currently recommended due their weak evidence base. It would be up to the individual treating team whether they wish to consider these if there are no other viable alternatives.

2. Side-room admissions rather than admission to a general bay/ward are generally preferable as these reduce the sensory input.

Recovery-limiting behaviours

The full supervision of meals is routinely recommended and required for eating disorder admissions including parental meal observation and limited bathroom access (particularly unsupervised). However as sensory eating difficulty admissions are not driven by weight/shape concern and weight loss, the following should be discussed with the YP and family, and agreed as medically safe by the ward:

- Is there a risk of vomiting as a sensory regulation mechanism? If so, how can this risk be managed / minimised, and what would need to be put in place to support this?

Full parental meal supervision is also not routinely indicated in this patient co-hort. Instead, the following questions should be considered to help support the creation of an ideal eating environment for the young person and reduce their anxiety:

1) *Do they prefer to eat with other people?*
2) *Do they like you to talk to them? Encourage their eating? Do they prefer to eat in silence?*
3) *Do they prefer to watch their favourite TV show, use a tablet device or listen to music whilst eating?*
4) *Does it help to wear noise cancelling headphones?*
5) *Does it help to eat alongside reading, puzzles or other distractions such as tablets and radio?*
6) *Does it help when the person with them models eating (eats the same food with them)? Or do they prefer to eat alone?*
7) *Do they prefer it when someone sits next to them? In front of them?*
8) *Does their chair have to face the door? Or a specific direction?*
9) *Can other people touch/prepare their food? Such as others removing lids from food pots.*
10) *Does it help to eat standing, or sitting on a physiotherapy ball for meals?*

Consider options such as how the food can be presented with a routine appearance, how it can be made more acceptable (e.g., using specific branded products / kept separate on the plate) and the type of crockery and cutlery used. The following checklist can be used to support the re-feeding menu. It should be completed with the patient and their family and is intended to support their experience and provide guidance to the ward staff:

Reasonable adjustment	Tick if 'Yes'
I would like to bring in and use my own plate / bowl / cutlery/ straw from home	
(if applicable) I would like my milk served separately from my cereal portion	
(if applicable) I would like my beans served separately from my toast	
(if applicable) I would like my butter served separately from my bread/toast so I can add this myself	
(if applicable) I would like my sandwich filling to be served separately	
(if applicable) I would like my fruit cut up rather than served whole	
(if applicable) I would like any 'hot food' to be served cold	
(if applicable) I would like drinks to be served cold from the fridge	
(if applicable) I would like my jacket potato and filling to be served separately	
(if applicable) I would like my baked beans to be ( ) brand	
(if applicable) I would like my biscuits to be ( ) brand	

(if applicable) I would like my cereal to be ( ) brand	
(if applicable) I would like my bread to be ( ) brand	
(if applicable) where a meal has 2 items I would like these to be served separately rather than put in front of me at the same time. This may mean I have lots of 'eating episodes' but this helps me to avoid feeling too full and reduces my anxiety	
(if applicable) Where possible, I would like my parent to be in charge of bringing me my specified meals and snacks so that they can give me these at more consistent/precise times each day	
(if applicable) Where possible, within health and safety restrictions, I would like to request that my own preferred foods, are brought onto the wards	
(if applicable) I would like to request that all my foods remain separate and don't touch one another	
(if applicable) I would like to request a milk alternative e.g. soya/almond/oat/rice/pea/coconut/other (please specify:)	

If there is an agreement that there will be no meal-time supervision, consideration should be given as to what safeguards can be used to inform medical staff of any potential concerns (e.g., monitoring that food is not being thrown away).

Further information on supporting sensory eating difficulties can be found: PEACE Pathway – Supporting Eating Difficulties

The use of a wheelchair and bed rest should only be initiated if it is medically necessary for patient safety. This is because confined and restricted movement for a neurodiverse person can be extremely difficult and whilst movement could be recovery-limiting, it is not driven by recovery-sabotage. As such, we recommend discussing with the YP and family about how their sensory needs are regulated then consider and agree safe options for this. Examples might include (but are not limited to):

- Permitting 1 minute of pacing in the room before / after meals
- Facilitate an environment to allow eating standing up
- The use of physiotherapy balls can aid movement whilst limiting energy expenditure

Self regulation strategies

Self-regulation strategies vary greatly between individuals and will be highly dependant upon the individual sensory profile of the YP. This is best completed by a specialist sensory Occupational Therapist (OT) assessment. However, in all cases, the starting point should always be to ask and listen to the YP and their family about their experiences and which strategies they use to help them/their child to self-regulate. Although this is not an exhaustive list, and won't apply to all YP, some examples of strategies which can help include:

- Allowing compassionate space for stimming (some examples include: rocking, tapping, finger-flicking, arm/leg flapping, humming and word repetition) in a way which accepts and doesn't draw attention to this behaviour, nor asks for it to stop.
- Using fidget / spinning toys or blu-tack / moulding clay
- Using weighted blankets / weighted lap pads
- Using temperature extreme objects (such as hot water bottles or ice-packs) or supporting the use of fans (due to noise / skin-feel)
- Using chewing toys / jewellery
- Using deep breathing strategies or the grounding 5,4,3,2,1 technique (naming 5 things you can see, 4 things you can touch, 3 things you can hear, 2 things can smell and 1 thing can taste)
- Using sunglasses in all environments or supporting rooms with blinds/curtains to open/close
- Using noise cancelling headphones or noise filtering ear-buds, or using white noise machines / background sound
- Using engaging activities such as puzzles, art and modelling
- Using radio / background music

Examples listed above could be brought onto the ward by the family or may be supported by your OT Department. However, all additional items will need to be in agreement with the acute ward health and safety policy.

Accessible Communication

It is important to consider that reasonable adjustments are made in your communications with the YP and family to ensure this is as accessible and helpful as possible. Some examples of communication adjustments include:

- Using simple and direct language
- Asking clear, non-ambiguous questions and tailoring these to the age of the YP
- Asking only one question at once
- Slowing down verbal speech
- Accepting that there may be a communication delay and allowing a purposeful pause between your question and expecting a response
- Using communication devices
- Using visual aids to help explanations
- Following-up verbal communication with clear, written information and plans

Naso-gastric (NG) tube feeding considerations

If the insertion of a nasogastric tube (NGT) is necessary for medical purposes, allowing the neurodivergent person to be in a sensory safe environment (e.g., dimmed lighting, quiet, as few people present as possible and ideally with individuals whom the person is familiar with) during the procedure may be beneficial and reduce distress. The insertion of a nasogastric tube can be extremely overwhelming from a sensory perspective (e.g., touch, taste, interoceptive discomfort and/or pain) and minimising environmental stressors may mitigate its anxiogenic nature for the neurodivergent patient (Cobbaert and Rose, 2023).

Anticipatory and/or mitigating measures (e.g., discussing the possibility of NGT intervention with the patient at the beginning of their admission in anticipation of the need for emergency intervention) could also be of benefit (Fuller *et al*., 2023).

Where possible, supporting the explanation of the nasogastric tube process with visual aids (such as pictures and/or videos) and ensuring tailored age-appropriate information, would be of benefit in reducing anxiety.

Further information on paediatric restrictive practice and nasogastric feeding can be found from: Paediatric restrictive practices and nasogastric feeding guidance (ngt-restrictive-practice.nhs.uk)

Safeguarding

Ward and clinical staff should be aware that due to the high anxiety and distress exhibited by the young person, carers may find it difficult to adhere to the prescribed care plan around food and safety management. In rare cases, this can be become a safeguarding issue and will need to be sensitively addressed according to your localised safeguarding policy.

Example for re-feeding a patient using an NG tube feed

Use a 1kcal per ml fibre-containing feed initially, appropriate to the age/weight of the child

		1 kcal per ml feed type	Pack Size	Total kcals provided per day
For patients who are high risk of refeeding syndrome (see Table 1), start on these meal plans	**High risk plan - Day 1**	1,000 mls at 50 mls/hour for 20 hours	1L	1,000kcal
	High risk plan - Day 2	1,200 mls at 60 mls/hour for 20 hours	1.5L	1,200kcal
For high-risk patients complete high risk plans day 1 & 2 before continuing onto standard plans below starting at Day 1-2				
For patients at lower risk of refeeding syndrome	**Day 1-2**	1,400 mls at 70 mls/hour for 20 hours	1.5L	1400kcal
	Day 3-4	1,640 mls at 82 mls/hour for 20 hours	1L x 2	1640kcal
	Day 5-6	1280 mls at 80 mls/hour for 16 hours **(note: change to 1.5kcal/ml feed)**	1.5L	1,920kcal

Most patients should start at Day 1-2 (1400kcal) of this feeding programme unless there are significant contraindications (see Table 1 on page 1).

Please refer to the Trust's own NG feeding policy. Give 30ml water as flushes before and after each feed. If the patient is not drinking an adequate amount to meet their fluid requirements, additional flushes can be given, aiming for total fluid to meet requirements as calculated.

Continuous feeding over 20 hours is recommended during the first 7-10 days or whilst an individual is medically unstable, to manage the risk of hypoglycaemia and hyper-sensitive interoception.

Use the appropriately sized ready to hang bottles of feed. If there is a rest period built into the feeding regimen, disconnect and remove all feeding equipment, including syringes, at these times.

Example for refeeding a patient using oral nutrition supplements

Feed to be used: Use a 2.4kcal per ml sip-feed appropriate to the age / weight of the child.

	For patients who are high risk of refeeding syndrome (see Table 1), start on these meal plans			**For patients at lower risk of refeeding syndrome**		
	High risk plan - Day 1	**High risk plan - Day 2**		**Day 1-2**	**Day 3-4**	**Day 5-6**
Breakfast	85mls	105mls	**For high risk patients complete high risk plans day 1 & 2 before continuing onto standard plans below starting at Day 1-2**	105mls	125mls	145mls
Mid-Morning	20mls	20mls		60mls	60mls	95mls
Lunch	125mls	125mls		145mls	165mls	165mls
Mid-Afternoon	20mls	85mls		85mls	85mls	95mls
Evening Meal	125mls	125mls		125mls	165mls	165mls
Supper	40mls	40mls		65mls	85mls	125mls
Totals	**1000kcal**	**1200kcal**		**1400kcal**	**1650kcal**	**1900kcal**

Most patients should start at Day 1-2 (1400kcal) of this feeding programme unless there are significant contraindications (see Table 1).

Reasonable adjustments:

As they are nutritionally incomplete, and high in carbohydrate load, the following supplements should not be used unless in consultation with the dietitian to assess the total re-feeding and nutritional risk: Ensure Plus Juice, Paediasure Juice, Polycal, or Fortijuice sip-feed versions.

Neutral flavours (e.g., neutral/vanilla) may be better tolerated so it would be advisable to order these varieties to have in stock. It would also be recommended that they are served cold.

If a sensory-restrictive person cannot tolerate single large/doses of supplement, consider splitting these into smaller, more frequent doses with the reiteration of good dental hygiene practice. This can better suit those feeling extreme fullness or associated nausea.

Example meal plan for re-feeding a patient using a sensory restrictive food menu

The equivalent "mls" of nutritional supplement (use an age appropriate 2.4kcal/ml sip feed) are shown under each prescribed meal or snack. The full replacement volume of the meal or snack (as shown) should be given to the patient if all or part of the prescribed meal is missed.

	For patients who are high risk of refeeding syndrome (see Table 1), start on these meal plans			**For patients at lower risk of refeeding syndrome**	
	High risk plan - Day 1	**High risk plan - Day 2**		**Day 1-2**	**Day 3-4**
Breakfast	3 tbsp / 1 small box cereal + 100ml whole milk	3 tbsp / 1 small box cereal + 100ml whole milk + 1 carton orange juice / half glass of other fruit juice	**For high risk patients complete high risk plans day 1 & 2 before continuing onto standard plans below starting at Day 1-2**	3 tbsp / 1 small box cereal + 100ml whole milk + 1 carton orange juice/ half glass of other fruit juice	3 tbsp / 1 small box cereal + 200ml whole milk + 1 carton orange juice / half glass of other fruit juice
2.4kcal/ml sip feed equivalent	85 mls	105 mls		105 mls	125 mls
Mid-Morning	100 mls whole milk OR 1 piece of fruit	100 mls whole milk OR 1 piece of fruit		1 x white toast with l portion butter	1 x white toast with l portion butter
2.4kcal/ml sip feed equivalent	20 mls	20 mls		60 mls	60 mls
Lunch	1 cheese sandwich on white bread OR 2 x toast with 2 portions butter and half can baked beans or 1 microwave snap pot	1 cheese sandwich on white bread OR 2 x toast with 2 portions butter and half can baked beans or 1 microwave snap pot		1 cheese sandwich on white bread OR 2 x toast with 2 portions butter and half can baked beans or 1 microwave snap pot + 1 piece of fruit	1 cheese sandwich on white bread OR 2 x toast with 2 portions butter and half can baked beans or 1 microwave snap pot + 1 packet plain crisps
2.4kcal/ml sip feed equivalent	125 mls	125 mls		145 mls	165 mls
Mid- Afternoon	100 mls whole milk	Non-diet yogurt OR 1 pack crackers with 1 portion cheese		Non-diet yogurt OR 1 pack crackers with 1 portion cheese	Non-diet yogurt OR 1 pack crackers with 1 portion cheese
2.4kcal/ml sip feed equivalent	20 mls	85 mls		85 mls	85 mls
Evening Meal	1 cheese omelette with mashed potatoes and vegetable choice OR 1 tin heinz tomato soup with 2 slices of white bread and 2 portions of butter OR 1 jacket potato with 1 portion of butter and 1 portion of cheese or ½ can baked beans	1 cheese omelette with mashed potatoes and vegetable choice OR 1 tin heinz tomato soup with 2 slices of white bread and 2 portions of butter OR 1 jacket potato with 1 portion of butter and 1 portion of cheese or ½ can baked beans		1 cheese omelette with mashed potatoes and vegetable choice OR 1 tin heinz tomato soup with 2 slices of white bread and 2 portions of butter OR 1 jacket potato with 1 portion of butter and 1 portion of cheese or ½ can baked beans	1 cheese omelette with mashed potatoes and vegetable choice OR 1 tin heinz tomato soup with 2 slices of white bread and 2 portions of butter OR 1 jacket potato with 1 portion of butter and 1 portion of cheese or ½ can baked beans + 1 tub ice-cream
2.4kcal/ml sip feed equivalent	125 mls	125 mls		125 mls	165 mls
Supper	100mls whole milk + 1 digestive biscuit	100mls whole milk + 1 digestive biscuit		100mls whole milk + 2 digestive biscuits OR 200mls hot chocolate made only with whole milk	100mls whole milk + 2 digestive biscuits OR 200mls hot chocolate made only with whole milk + 1 digestive biscuit
2.4kcal/ml sip feed equivalent	40 mls	40 mls		65 mls	85 mls
Estimated kcals	**1000kcals**	**1200kcals**		**1400kcals**	**1650kcals**

Most patients should start at Day 1-2 (1400kcal) of this feeding programme unless there are significant contraindications (see Table 1 on page 1).

Reasonable adjustments:

This sensory restrictive menu is based on the PEACE Pathway menu (PEACE Pathway - The PEACE Menu) intended to give a broadly sensory-accepted menu preference at specific mealtimes. However, this will not meet the unique restricted preferences of all patients, and in many cases, will require specific foods to be brought in from home (e.g., branded items) due to catering limitations. As such, sensory-restrictive patients are not limited to only these food choices, and it would be inappropriate to assume the sensory food preferences of individuals without comprehensive assessment. As such, they may choose from the general 'emergency re-feeding food plan' which includes all the variety of usual hospital food for their full menu, or only a certain meal or snack.

Alternative/usual milk options are also permitted on this sensory restrictive plan

A sensory restrictive vegan re-feeding meal plan is provided in Appendix 3.

With thanks

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Owl Blue

Review Date

This document is due for review on: **1st February 2024**

If you wish to share any comments or feedback about this document, or suggest any ways that the project could be expanded upon, please contact: clare.ellison@cntw.nhs.uk

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Glossary of Terms

ARFID	Avoidant Restrictive Food Intake Disorder
ECG	Echocardiogram
IV	Intravenous
MEED	Medical Emergencies in Eating Disorders
NG	Naso-Gastric
NGT	Naso-Gastric Tube
OT	Occupational Therapy
TV	Television
YP	Young Person

Appendix 1

MEED Risk Assessment Framework Crib Sheet Guide

	RED	AMBER	GREEN
% W4H / m%BMI	< 70%	70-80%	>80%W4H
Weight loss	Recent weight loss ≥1kg/week x2/52 in undernourished pt/rapid weight loss	Recent weight loss of 500-999g/week for 2/52 in an undernourished patient	Recent weight loss of up to 500g/week or fluctuating weight
Pulse	<40 bpm	40-50 bpm	>50 bpm
Cardio Vascular Health	**Standing systolic BP <0.4th centile** with recurrent syncope + **postural systolic drop >20mmHg / increase in HR >30BPM (35BPM in >16 years)**	**Standing systolic BP <0.4th centile** with occasional syncope; **postural systolic drop >15mmHg / increase in HR ≤30BPM (35BPM in >16 years)**	Normal standing systolic BP for age and gender with reference to centile charts. Normal orthostatic cardiovascular changes. Normal heart rhythm
ECG abnormalities	QTc >460 ms (girls) or 450 ms (boys) and any other significant ECG anomaly	QTc >460ms (girls) or 450 ms (boys) & no other ECG anomaly. Taking QTc prolonging medication	<460ms (female) or 450 (boys)
Dehydration status	Fluid refusal Severe dehydration	Severe fluid restriction, moderate dehydration	Minimal fluid restriction, mild dehydration
Temperature	<35.5°C Tympanic <35°C Axillary	<36°C	>36°C
Biochemical abnormalities	Hypophosphataemia* + falling phosphate. Hypokalaemia (<2.5 mmol/l). Hypoalbuminaemia. Hypoglycaemia (<3mmol/l). Hyponatraemia. Hypocalcaemia. Transaminases (>3x normal range). DM: HbA1C >10% (86mmol/mol). ***Note differences in normal phosphate level by age:** **3–10 years, 1.2–1.8mmol/L;** **10–15 years, 1.1–1.75mmol/L;** **>15 years, 0.8–1.45mmol/L.**		
Haematology	Low WCC (<3.8) Haemoglobin (<10g/L)		
Purging Behaviour	Multiple daily vomiting and/or laxative abuse	Regular (≥3x/week) vomiting and/or laxative abuse	
Disordered eating behaviours	Acute food refusal <500kcal/day x≥2 days		
Engagement with management plan	Violent when parents try to limit behaviour or encourage food/fluid intake. Self harm. Parents unable to implement prescribed meal plan	Poor insight into eating problems, lacks motivation. Parents / carers unable to implement prescribed meal plan	Some insight into problems, some motivation. Ambivalence but not active resistance
Activity and exercise	High levels dysfunctional exercise (>2hrs/day) in context of malnutrition	Moderate levels dysfunctional exercise in the context of malnutrition (>1hr/day)	Mild levels of dysfunctional exercise in the context of malnutrition (<1hr/day)
Musculo-Skeletal Squat/ Sit up test	Unable to complete sit-up or squat without using arms as leverage (alert)	Unable to complete sit-up or squat without using arms to balance (concern)	Able to complete sit-up and squat without difficulty
Other clinical state	Life-threatening medical condition	None life-threatening physical compromise	Evidence of physical compromise
Mental Health State	Self-poisoning, suicidal ideas with moderate to high risk of completed suicide	Cutting or similar behaviours, suicidal ideas with low risk of completed suicide	

Full MEED guidance can be found: [college-report-cr233-medical-emergencies-in-eating-disorders-(meed)-guidance.pdf (rcpsych.ac.uk)]

Appendix 2

Calculating Median BMI

Median BMI based on age (based on the 50th percentile)

Age	Median BMI Girls	Median BMI Boys
5	15.5	15.5
6	15.5	15.5
7	15.6	15.8
8	16	15.9
9	16.2	16
10	17	16.3
11	17.3	17
12	18	17.4
13	18.9	18
14	19.3	18.8
15	20	19.3
16	20.2	20
17	20.8	20.5
18	21.1	21

To calculate m%BMI

Calculate young persons current BMI (weight/height^2)

m%BMI = (Current BMI ÷ median BMI) x 100

Alternatively you can open the excel spreadsheet linked below to calculate % weight for height:

Weight for height tool.xls

Appendix 3

Example meal plan for re-feeding a patient using a sensory restrictive vegan food menu

	For patients who are high risk of refeeding syndrome (see Table 1), start on these meal plans		For high risk patients complete high risk plans day 1 & 2 before continuing onto standard plans below starting at Day 1-2	For patients at lower risk of refeeding syndrome	
	High risk plan - Day 1	**High risk plan - Day 2**		**Day 1-2**	**Day 3-4**
Breakfast	3 tbsp / 1 small box cereal + 100ml soya milk	3 tbsp / 1 small box cereal + 100ml soya milk ½ glass of fruit juice		3 tbsp / 1 small box cereal + 100ml soya milk ½ glass fruit juice	3 tbsp / 1 small box cereal + 100ml soya milk 1 glass of fruit juice
Fortisip Plant Based	135 mls	165 mls		165 mls	200 mls
Mid-Morning	100 mls soya milk OR 1 piece of fruit	100 mls soya milk OR 1 piece of fruit		1 x white toast with 1 portion vegan spread or ½ tbsp peanut butter	1 x white toast with 1 portion vegan spread or ½ tbsp peanut butter
Fortisip Plant Based	35 mls	35 mls		100 mls	100mls
Lunch	1 can Heinz vegetable soup with x2 slices of white bread and x2 portions of vegan spread. OR 2 x toast with x2 portions vegan spread and half can baked beans or 1 microwave snap pot	1 can Heinz vegetable soup with x2 slices of white bread and x2 portions of vegan spread. OR 2 x toast with x2 portions vegan spread and half can baked beans or 1 microwave snap pot		1 can Heinz vegetable soup with x2 slices of white bread and x2 portions of vegan spread. OR 2 x toast with x2 portions vegan spread and half can baked beans or 1 microwave snap pot + 1 piece of fruit	1 can Heinz vegetable soup with x2 slices of white bread and x2 portions of vegan spread. OR 2 x toast with x2 portions vegan spread and half can baked beans or 1 microwave snap pot + 1 packet plain crisps
Fortisip Plant Based	200mls	200mls		235mls	265mls
Mid-Afternoon	100ml soya milk.	200ml soya milk 1 small vegan cereal bar.		200ml soya milk 1 small vegan cereal bar.	200ml soya milk 1 small vegan cereal bar.
Fortisip Plant Based	35 mls	135 mls		135 mls	135 mls
Evening Meal	Peanut butter sandwich (2 slices of bread). OR 1 can Heinz vegetable soup with x2 slices of white bread and x2 portions of vegan spread. OR X 1 jacket potato with x1 portion of vegan spread and ½ can baked beans.	Peanut butter sandwich (2 slices of bread). OR 1 can Heinz vegetable soup with x2 slices of white bread and x2 portions of vegan spread. OR X 1 jacket potato with x1 portion of vegan spread and ½ can baked beans.		Peanut butter sandwich (2 slices of bread). OR 1 can Heinz vegetable soup with x2 slices of white bread and x2 portions of vegan spread. OR X 1 jacket potato with x1 portion of vegan spread and ½ can baked beans.	Peanut butter sandwich (2 slices of bread). OR 1 can Heinz vegetable soup with x2 slices of white bread and x2 portions of vegan spread. OR X 1 jacket potato with x1 portion of vegan spread and ½ can baked beans. + 1 small vegan cereal bar
Fortisip Plant Based	200 mls	200 mls		200 mls	265 mls
Supper	100mls soya milk + 1 digestive biscuit.	100mls soya milk + 1 digestive biscuit.		100mls soya milk + 2 digestive biscuits. OR 200mls vegan hot chocolate made only with soya milk.	200mls soya milk + 2 digestive biscuits. OR 200mls vegan hot chocolate made only with soya milk. + 1 digestive biscuit
Fortisip Plant Based	65 mls	65 mls		100 mls	135 mls
Estimated kcals	**1000kcals***	**1200kcals**		**1400kcals**	**1650kcals**

Most patients should start at Day 1-2 (1400kcal) of this feeding programme unless there are significant contraindications (see Table 1 on page 1).