

# **Regional Paediatric Dietetic Care Pathways**

**(Dietetic Booked Elective Work)**

**Revised Edition September 2020**

<b><u>Contents</u></b>	<b><u>Page No.</u></b>
Introduction	3
Guiding principles for use of the care pathways	4
Algorithm for Elective Care Pathways for Children Referred to Paediatric Dietetic Service	5-6
Paediatric care pathway for the:	
1. Dietary Management of Faltering Growth	7
2. Dietary Management of Coeliac Disease	9
3. Dietary Management of Milk Free Weaning Diets	10
4a. Paediatric care pathway for breast feeding dietary exclusion trial due to Infant with suspected Cow's Milk Allergy (CMA).	12
4b. Paediatric care pathway for the management of a breastfeeding mother who requires a cow's milk free diet	14
5 Dietary Management of IgE and non-IgE mediated food allergies	15
6. Dietary Management of IgE and non-IgE mediated food allergies	16
7. Nutritional Support Requiring Specialised ACBS Borderline Products, NG or PEG feeds	17
8a. Dietary Management of Active/Symptomatic Crohns Disease	19
8b. Dietary Management of Active/Symptomatic Ulcerative Colitis (UC)	21
9. Dietary Management of Obesity	22
10. Dietary Management of General Food Allergy/Food Hypersensitivity (Non-IgE)	26
11. Patients Referred from UK and/or Ireland Specialist Treatment Centres	27
12. Dietary Assessment to Confirm/treat Dietary related Vitamin and Mineral Deficiencies	28
13. Paediatric care pathway for the dietary management of selective eaters.	29
Paediatric References	31
Bibliography	33

## **Introduction**

Enclosed within this document are regionally agreed dietetic care pathways for paediatric patients within **dietetic booked elective services**.

Elective patients are monitored under the DHSSPS target that states:

‘no patient will wait longer than 13 weeks from referral to commencement of AHP treatment’.

An **elective** service is where patients require a booked appointment for the dietetic service. It does not include inpatients or patients seen in the Emergency Department.

A **dietetic booked** elective service is where it is the Nutrition and Dietetic service that holds the responsibility for booking and controlling the management of the patients within the Nutrition and Dietetic service.

Whilst there may be Trust variation in operationally how services are delivered (i.e. booked elective, non-booked elective including Consultant led services and via multi-disciplinary teams) the pathways for the clinical management of these patient groups remains largely the same. These booked elective services may be delivered in a variety of settings such as community centres, GP surgeries, out-patient clinics or a domiciliary setting.

Where there are additional specialist services for elective services within Trusts – separate care pathways will be developed.

## Guiding principles for use of the care pathways

These care pathways have been developed to ensure a minimum safe standard of clinical care, using the current evidence base. They are to be used as a guide for Dietitians but professional judgement must always determine the content of treatment provided. If there are variances to dietetic care, these should be justified in the patients nutritional care plan.

Pathways should be used in conjunction with other disease specific nutritional care pathways, as appropriate. Clinical priority dictates which pathway the patient will follow.

Before commencement of any care pathway it is essential to confirm whether the patient/client is currently under the care of the dietetic service.

Although dietary treatment commences at the initial appointment it may not be possible to cover all the treatment/education components at initial assessment. Staging this process across visits may be necessary.

For all initial appointments the Dietitian should outline the format of the appointment, length of appointment and, where appropriate, the duration of the treatment. Be careful how this is communicated with the patient so that expectations are not unduly raised, as individuals may not require to follow the full pathway outlined.

These care pathways are primarily designed for the care of patients in the clinic setting. Where care is undertaken in the domiciliary setting, an additional 15 minutes intervention time is required. Travel allocation is as agreed at Trust operational level.

UK-WHO growth charts (0-4years or Low Birthweight growth charts) are to be used for infants and children born on or after 1st October 2010. UK-WHO growth charts 2-18 years (RCPCH 2012) became widely available locally in 2013, replacing UK 1990 growth charts. However children who have been plotted to date using UK 1990 growth charts may remain in use for all other children.

Use of interpreters: the clinical time listed does not allow for when interpreters are required for patient consultations. Allow additional time per appointment, as required and agreed at Trust operational level.

### **Safeguarding Children and Young Adults:**

If a patient/client has significant need or is deemed as vulnerable or at risk, the Dietitian should follow up non-attendance or no response to partial booking process with the GP/Referrer/Social Worker/Relevant Key Worker/Health Visitor/carer/patient to determine any issues that may be preventing attendance.

Children who are under Child Protection/Safeguarding Children Services should not be treated any differently to other children referred for clinical care and treatment.

### **Record keeping**

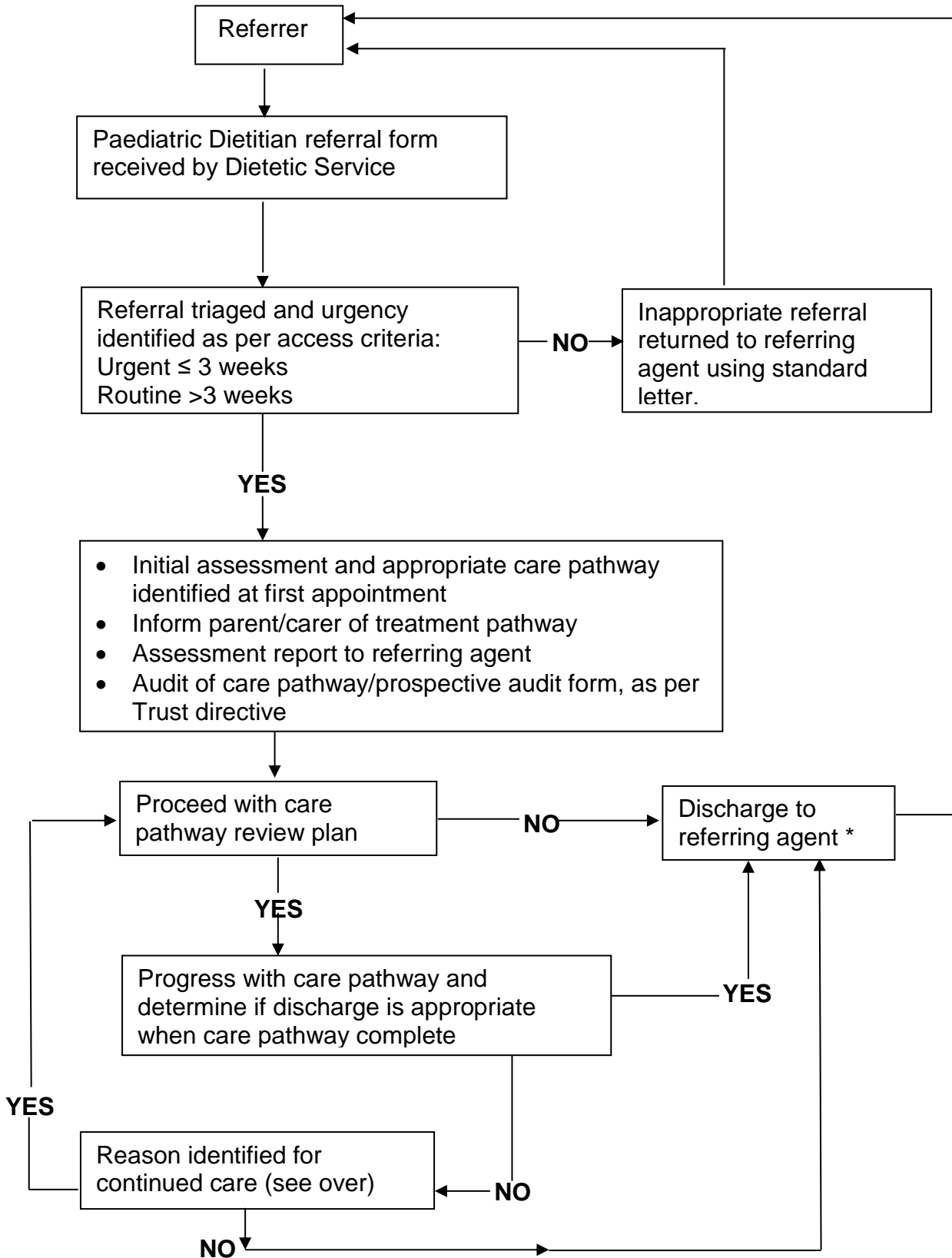
Ensure the nutritional care plan is documented in the patient's dietetic record, as per Trust policies and guidance.

Allocated times for new and review appointments includes all associated clinical administration including write up, letters and phone calls in relation to that specific appointment.

<b>URGENT REFERRALS</b> <b>AIM: To be seen within 3 weeks of receipt of referral</b>	<b>ROUTINE REFERRALS</b> <b>AIM: to be seen within 13 weeks of receipt of referral</b>
<ol style="list-style-type: none"> <li>1. Faltering growth A fall across; <ul style="list-style-type: none"> <li>• ≥1 centile spaces, if birthweight was &lt; 9<sup>th</sup> centile</li> <li>• ≥2 centile spaces, if birthweight was between the 9<sup>th</sup> and 91<sup>st</sup> centiles</li> <li>• ≥3 centile spaces, if birthweight was above the 91<sup>st</sup> centile</li> <li>• when current weight is &lt;2<sup>nd</sup> centile for age, whatever the birthweight (1).</li> </ul> </li> <li>2. Newly diagnosed Coeliac disease</li> <li>3. Allergy: Weaning advice for infants &gt;17 weeks and &lt;52 weeks who have confirmed Cow's Milk allergy (CMA)</li> <li>4. Maternal dietary exclusion trial for breastfed CMA infant</li> <li>4a. management of breastfeeding mother on cow's milk free diet</li> <li>5. IgE mediated reaction to 1 or more foods</li> <li>6. Non-IgE multiple food exclusion</li> <li>7. Nutritional support requiring specialised ACBS Borderline products, NG or PEG feeds</li> <li>8. Inflammatory Bowel Disease <ul style="list-style-type: none"> <li>8a Active/symptomatic Cohn's disease requiring dietary management</li> <li>8b Active/symptomatic Ulcerative Colitis (UC) requiring dietary management</li> </ul> </li> </ol>	<ol style="list-style-type: none"> <li>1. Coeliac disease requiring new dietary assessment and education</li> <li>2. Allergy: Weaning advice for infants &lt;14 weeks who have confirmed CMA</li> <li>3. Obesity: Defined as BMI &gt;98<sup>th</sup> centile, using paediatric BMI chart</li> <li>4. Food allergy/ Food hypersensitivity (Non-IgE) e.g. trial exclusion diet</li> <li>5. Transfer of nutritional care from UK and/or Ireland Specialist Treatment Centres</li> <li>6. Dietary assessment to confirm / treat dietary related vitamin and mineral deficiencies</li> <li>7. Dietary assessment of feeding problems due to sensory, oro-motor or developmental concerns</li> </ol>

NOTE: Diabetes is not part of the dietetic booked elective access criteria as these referrals arise via unscheduled care

## Algorithm for elective clinical care pathways for children referred to Paediatric Dietetic services



\* Referrers, along with other appropriate health care professionals such as GPs/ Paediatricians/ Health visitors should be sent a letter advising them if a patient has declined or not attended an appointment and therefore has been discharged from the service, as per operational procedures. All the aforementioned and appropriate health care professionals should be forwarded a treatment summary letter following initial consultation and any further consultations which result in a significant treatment change or outcome. Copy of discharge letter (DNA/ CNA) to Parents/ Guardians; Health Visitor, Community Children's Nurse and Social Worker (if known/identified) for Children known to be on Child Protection Register.

## 1. Paediatric care pathway for the dietary management of faltering growth

**Referral:** Faltering growth – a fall across:

- 1 or more weight centile spaces, if birthweight was below the 9<sup>th</sup> centile
  - 2 or more weight centile spaces, if birthweight was between the 9<sup>th</sup> and 91<sup>st</sup> centiles
  - 3 or more weight centile spaces, if birthweight was above the 91<sup>st</sup> centile
- or when current weight is below the 2<sup>nd</sup> centile for age, whatever the birthweight (1).

<b>Appointment</b>	<b>Methodology/Targets</b>	<b>Discharge criteria</b>
<p><b>Initial assessment</b></p> <p><b>60 mins</b></p>	<ul style="list-style-type: none"> <li>▪ Assess growth history from available measurements</li> <li>▪ Measure and record current weight and length/height in PHCHR</li> <li>▪ Assess relevant biochemistry</li> <li>▪ Use appropriate centile chart for age, gender and condition (if born premature please indicate number of weeks and use *corrected age in weeks and provide with BLISS Weaning your premature baby (2017) leaflet and recommend/ensure they are on the appropriate supplementation eg Fe, Vit D as per Trust policy); if concerns about infant's length or child's length/height obtain the biological parents' heights if possible and work out the mid-parental height centile; if &gt;2 years of age determine the BMI centile (a BMI below the 2<sup>nd</sup> centile may reflect either undernutrition or a small build, a BMI below the 0.4<sup>th</sup> centile suggests probable undernutrition (1))</li> <li>▪ Assess early feeding history, when solids commenced, transition through textures, if oro-motor assessment completed, meal and fluid intake and routine, assess nutritional intake from reported diet history against EAR/SACN/ESPGHAN (2); consider protein: energy ratio for catch up growth</li> <li>▪ Identify calorie deficit: fat and protein</li> <li>▪ Aim to correct nutritional deficit by most appropriate means: food first, food fortification or nutritional supplementation for catch up growth</li> <li>▪ Weight check via Health visitor as per agreed timescale e.g. twice weekly</li> <li>▪ Provide parents/ guardians with Dietetic contact details to be used in the event of any concerns arising between initial assessment and 1<sup>st</sup> review</li> <li>▪ Arrange prescription</li> </ul>	<p>Achieved appropriate growth centiles since point of referral</p> <p>Parent/Carer declines further input</p>
<p><b>1st review</b> Within 2 weeks aged under</p>	<ul style="list-style-type: none"> <li>▪ Reassess nutritional intake and nutritional deficit when compared with requirements</li> <li>▪ Assess growth</li> </ul>	<p>Appropriate growth centile achieved without the aid of</p>

1 year (via HV weight or clinic)  45 minutes  >1 year 1 <sup>st</sup> review dependent on degree of faltering growth 2-8 weeks dependent on clinical judgement  2 - 8 weeks 45 mins	<ul style="list-style-type: none"> <li>▪</li> </ul>	oral nutritional supplements  Non-compliant or non- attendance
<b>2<sup>nd</sup> review clinic/telephone</b>  1 - 6 weeks 45 mins	<ul style="list-style-type: none"> <li>▪ Review tolerance and dietetic intervention</li> </ul>	As above
<b>2<sup>nd</sup>/3<sup>rd</sup> review</b> (depending on need for telephone, as above)  2 – 8 weeks 45 mins	<ul style="list-style-type: none"> <li>▪ Reassess nutritional intake and nutritional deficit when compared with requirements</li> <li>▪ Assess growth</li> </ul>	As above
<b>3<sup>rd</sup>/ 4<sup>th</sup> review via telephone</b>  1 – 6 weeks <b>mins</b>	<ul style="list-style-type: none"> <li>▪ Review tolerance and dietetic intervention</li> </ul>	As above
<b>3<sup>rd</sup>/4<sup>th</sup> review (depending on need for telephone as above)</b>  2 – 8 weeks <b>mins</b>	<ul style="list-style-type: none"> <li>▪ Reassess nutritional intake</li> <li>▪ Discharge or if requiring medium - long term support transfer to nutritional support care pathway</li> </ul>	As above

PHCHR = Parent Held Child Health Record book.

**\*For infants born between 32 and 36 weeks gestation, correction should stop at 1 year. Preterm infants aged <32 weeks should be corrected until aged 2 years. (SACN/ ESPGHAN guidelines)**

NICE Clinical Guideline NG75 (September 2017), Faltering growth: recognition and management of faltering growth in children <http://www.nice.org.uk/guidance/ng75>. Nutritional Requirements for Children in Health and Disease. Great Ormond Street Hospital for Sick Children NHS Trust. 2018. 7<sup>th</sup> edition.

## 2. Paediatric care pathway for the dietary management of Coeliac disease

**Referral:** Coeliac Disease – newly diagnosed/requiring new dietary assessment and education.

<b>Appointment</b>	<b>Methodology/Targets</b>	<b>Discharge criteria</b>
<b>Initial assessment</b>  60 minutes	<ul style="list-style-type: none"> <li>▪ Educate on appropriate dietary changes to establish gluten free diet</li> <li>▪ Nutritional assessment (include calcium and vitamin D requirements for age group)</li> <li>▪ Importance of lifelong dietary compliance and avoiding cross-contamination risk of gluten</li> <li>▪ Discuss: gluten free prescription products and monthly entitlements; gluten free product sample request forms and resources; non-prescribable products; Coeliac UK and membership application; eating out, school meals/lunches, birthday parties</li> <li>▪ Examine relevant available biochemistry e.g. haemoglobin and advise</li> <li>▪ Consider use of a multivitamin/mineral preparation for the first 3 months on the gluten free diet.</li> </ul>	Self-discharge  Parent/carer declines further input
<b>1<sup>st</sup> review</b>  <b>12 weeks</b>  45 minutes	<ul style="list-style-type: none"> <li>▪ Nutritional and growth assessment as above</li> <li>▪ Compliance with gluten exclusion</li> <li>▪ Discuss gluten free prescription products and monthly entitlements</li> <li>▪ Check symptoms, growth, micronutrient status and dietary adherence.</li> </ul>	As above
<b>2<sup>nd</sup> review</b>  <b>14 weeks</b>  45 minutes	<ul style="list-style-type: none"> <li>▪ Nutritional and growth assessment as above</li> <li>▪ Compliance with gluten exclusion</li> <li>▪ Prescription products and monthly entitlements</li> <li>▪ Check symptoms, growth, micronutrient status and dietary adherence</li> <li>▪ Consent for patient discharge to group education database for continued review (if available); or one-to-one annual review arrangements as per Trust arrangements.</li> </ul>	As above
<b>Annual review</b> (as per Trust arrangements)  45 minutes	<ul style="list-style-type: none"> <li>▪ Update on new literature and products.</li> <li>▪ Address other issues e.g. excessive or poor weight gain and advice as per initial assessment</li> <li>▪ Age appropriate advice would be given</li> <li>▪ Check symptoms, growth, micronutrient status and dietary adherence</li> <li>▪ Liaise with adult team at point of adolescent transition phase to adult service.</li> </ul>	As above

ESPGHAN recommends – asymptomatic children can also be diagnosed without the need for biopsy, using the same criteria as in pts with symptoms (>10 times normal limit tTGA and EMA positive) – hoping to avoid biopsy in majority of children.

[3] [4] [5] [6]

**3. Paediatric care pathway for the dietary management on introduction to milk free solids for infants diagnosed with cow's milk allergy.**

**Referral:** Introduction of solids for infants less than 52 weeks who have confirmed Cow's milk allergy

Appointment	Methodology/Targets	Discharge criteria
<p><b>Initial assessment</b></p> <p>60 minutes</p>	<ul style="list-style-type: none"> <li>▪ Obtain consent for assessment/treatment.</li> <li>▪ Assessment of available growth history (PCHR).</li> <li>▪ Nutritional assessment to include full diet history and ensuring age appropriate introduction of solids.</li> <li>▪ Assessment of RNI for all major nutrients with emphasis on calcium, Iron and vitamin D (2)</li> <li>▪ Allergy focused history to include:               <ul style="list-style-type: none"> <li>○ Born full term or preterm</li> <li>○ C section or normal delivery</li> <li>○ Family history of Atopic disease</li> <li>○ Presenting symptoms – Reflux, bowel issues, eczema, vomiting, any blood in stools, respiratory, irritability etc</li> <li>○ Age of onset, speed of onset, what food and how much?</li> <li>○ Details of previous management eg. Medications, thickeners etc.</li> <li>○ Infants feeding history- age of weaning, breast or formula fed</li> <li>○ Details of any foods that are avoided and why</li> <li>○ Any response to the elimination and reintroduction of foods (7,8,11)</li> </ul> </li> <li>▪ Consider home milk challenge to confirm diagnosis for non-IgE CMA if this has not already occurred, as per HSC infant feeding guidance [7]</li> <li>▪ <b>IgE mediated reactions should not be home challenged, however should be referred to Paediatrician.</b></li> <li>▪ Determine treatment plan: continue on breast milk (mother assessed &amp; advised as per pathway 4) <b>or</b> extensively hydrolysed formula or amino acid based formula</li> <li>▪ Advise on the introduction of age-appropriate foods to ensure cow's milk protein exclusion and educate on reading food labels and diary alternatives that can be used</li> <li>▪ Advise on the introduction of other allergens</li> <li>▪ Ensure Calcium requirements are met and advise on additional vitamin supplementation as required. [13]</li> <li>▪ Check if patient has any additional queries</li> </ul>	<p>Successful milk challenge and reintroduction.</p> <p>DNA/two consecutive CNA's</p> <p>Patient does not consent to treatment</p> <p>Patient declines further input</p> <p>Patient not ready to commit to treatment programme/non compliance</p> <p>Treatment completed</p>

	<ul style="list-style-type: none"> <li>▪ Provide relevant written information with contact details</li> <li>▪ Arrange review, if required</li> <li>▪ Complete relevant report to referrer/ GP and/or Health care professional.</li> </ul>	
<b>1<sup>st</sup> review</b> Infant aged 6-9 months  <b>or 4-8 weeks if there are concerns with faltering growth</b>  45 minutes	<ul style="list-style-type: none"> <li>▪ Reassess tolerance of appropriate formula and nutritional adequacy of diet</li> <li>▪ Assessment of growth</li> <li>▪ Ensure other allergens have been introduced</li> <li>▪ Ensure progression with textures</li> <li>▪ Reassess need for vitamin/mineral supplementation.</li> <li>▪ Assess if accidental exposure</li> <li>▪ Discuss home milk challenge for non-IgE patients(7)</li> <li>▪ Check if patient has any additional queries</li> <li>▪ Provide relevant written information with contact details</li> <li>▪ Arrange review, if required</li> <li>▪ Complete relevant report to referrer/GP and/or Health care professional.</li> </ul>	As above
<b>2<sup>nd</sup> review</b> Infant aged 12 months  45 minutes	<ul style="list-style-type: none"> <li>▪ Reassess nutritional adequacy of diet</li> <li>▪ Reassess growth</li> <li>▪ Assess progress with home milk challenge</li> <li>▪ Assess if formula is required and advise on suitable alternatives.</li> <li>▪ Ensure additional vitamin supplementation.</li> <li>▪ Assessment of major nutrients such as calcium and advice on appropriate fortified products.</li> <li>▪ Check if patient has any additional queries</li> <li>▪ Provide relevant written information with contact details</li> <li>▪ Arrange review, if required</li> <li>▪ Complete relevant report to referrer/GP and/or Health care professional.</li> </ul>	As above
<b>3<sup>rd</sup> review</b> 3-6months after previous review  45 minutes	<ul style="list-style-type: none"> <li>▪ Reassess nutritional adequacy of diet</li> <li>▪ Assess progress with home milk challenge</li> <li>▪ Ensure calcium and vitamin requirements are being met.</li> <li>▪ Check if patient has any additional queries</li> <li>▪ Provide relevant written information with contact details</li> <li>▪ Arrange review, if required</li> <li>▪ Complete relevant report to referrer/GP and/or Health care professional.</li> </ul>	Discharge

[7] [8] [9] [10] [11] [12] [13]

**4a. Paediatric care pathway for breast feeding dietary exclusion trial due to Infant with suspected Cow's Milk Allergy (CMA).**

**Referral:** Maternal dietary exclusion trial for breastfed CMA infant.

Appointment	Methodology/Targets	Discharge criteria
<p><b>Initial assessment</b></p> <p>60mins</p>	<ul style="list-style-type: none"> <li>• Obtain consent for assessment/treatment</li> <li>▪ <b>Allergy focused history from birth, (refer to guidelines e.g. iMAP 2017, NI Feeding guidelines (2014), NICE (2016).</b> <ul style="list-style-type: none"> <li>- Include: Family history of atopy.</li> <li>- Birth details, Growth centiles, Feeding history (feed changes, reasons for and response to changes). Presenting symptoms, age of onset, suspected allergens, Timing from intake to symptoms occur, And if re-currence on repeated exposure.</li> <li>- Detail changes in diet or management to date and any apparent response to such changes.</li> </ul> </li> <li>▪ If the breastfed infant only presented after consuming cow's milk formula or milk in their weaning diet; Transfer to Pathway 3 and allow normal maternal diet.</li> <li>▪ If history supports a 2-4week milk free trial, proceed.</li> <li>▪ Nutritionally assess the maternal and infant diet if weaned. Note if including calcium rich foods, eggs, fish, nuts, soya. Note specific foods avoided and why.</li> <li>▪ Compare dietary intake with calculated or reference Nutritional requirements for key nutrients; such as calories, calcium, vitamin D. Check for dietary sources of Iodine and omega-3 fats. Encourage specific food sources of any nutrients at risk.</li> <li>▪ Assess if prescribable or over the counter supplements are indicated to correct or prevent nutrient deficits. Requirements are 1250mg calcium and 10 µg vitamin D daily for women during lactation. Refer to local prescribing guides. e.g NATECAL D3 (600mg calcium, 10 µg Vitamin D) [7]. For Breast fed infants advise a supplement of 8.5-10 µg Vitamin D from birth (HSC, PHA 2017). Seek Pharmacist advice if needed.</li> <li>▪ Agree the level and duration of dietary restriction. Usually 2-4 weeks milk free trial (iMap 2017). Occasionally, Eggs or Soya products may need restricted. Avoid unnecessary restrictions.</li> </ul>	<p>DNA/two consecutive CNA's</p> <p>Patient declines appointment</p> <p>No nutritional concerns in mother and her treatment is complete. Transfer Infant to Pathway 3.</p> <p>Mother ceases breastfeeding.</p> <p>Successful milk challenge and reintroduction.</p> <p>Patient does not consent to treatment</p>

	<ul style="list-style-type: none"> <li>▪ Provide written dietary information and educate how to avoid agreed allergens, how to read food labels. Identify safe alternative foods, recipe ideas, milk free calcium rich foods.</li> <li>▪ If exclusive breastfeeding is not possible or desired, choose the most appropriate milk free formula based upon the nature of symptoms.</li> <li>▪ If Mild-moderate non-IgE milk allergy, consider Extensively Hydrolysed products. Amino acid formula is first line for infants with severe reactions to traces of milk protein, infants who have severe gut symptoms with growth faltering. Refer to most recent guidelines ( HSC 2014 NI Infant Feeding Guidelines, iMAP 2017).</li> <li>▪ Assess for Home Challenge to confirm diagnosis. Do not re-challenge Infants with Severe acute IgE symptoms.</li> <li>▪ Confirm the diagnosis as per protocols (e.g. NI Feeding guidelines or iMAP 2017). Simply introduce cow's milk sources into the mother's diet over a period of 1 week.</li> <li>▪ <b>Refer to the care pathway 3 for the dietary management of milk free weaning diets to ensure the child continues to have review.</b></li> <li>▪ If Infant receives prescribable products, ensure PROACTIVE dietary review to maximise opportunities to "step down" infant prescribable products.</li> </ul>	
<b>REVIEW 4-6 weeks</b>	<ul style="list-style-type: none"> <li>▪ Review outcome of re-challenge to confirm diagnosis and step down prescribable products where appropriate. Discharge or plan review if necessary.</li> </ul>	
<b>Review</b>	<ul style="list-style-type: none"> <li>▪ If multiple foods remain excluded, review nutritional adequacy and to plan further re-challenges.</li> </ul>	

[7]

**4b. Paediatric care pathway for the management of a breastfeeding mother who requires a cow's milk free diet**

**Referral:** Maternal dietary exclusion trial for breastfed CMA infant.

Appointment	Methodology/Targets	Discharge criteria
<p><b>Initial assessment</b></p> <p>60 minutes</p>	<ul style="list-style-type: none"> <li>▪ Refer to care pathway 4 for assessment of the infant</li> <li>▪ Full Nutritional and dietary assessment of the mother</li> <li>▪ Discuss exclusion of cow's milk protein.</li> <li>▪ Educate on reading food labels to assist allergen avoidance, and diary alternatives.</li> <li>▪ Need for challenge to confirm diagnosis discussed with the mother [8,11]</li> <li>▪ If mum wishes to stop breast feeding or would like a formula for use whilst introducing solids, an extensively hydrolysed or amino acid formula should be advised</li> <li>▪ Consider need for micronutrient supplementation: Calcium and Vitamin D requirement for lactation is 1250mg calcium and 10 µg Vitamin D daily</li> <li>▪ Specify deficit, if indicated, and how to resolve from calcium enriched foods (breads, cereals, milk substitute) or suitable supplements over the counter or prescribable options are available [7]</li> </ul>	<p>Patient declines appointment</p> <p>Successful milk challenge and reintroduction.</p>
<p><b>1st review</b></p> <p>4-12 weeks after initial appointment</p> <p>45 minutes</p>	<ul style="list-style-type: none"> <li>▪ Assess mothers weight</li> <li>▪ Review progress/symptom resolution</li> <li>▪ Query need for additional dietary exclusions</li> <li>▪ Ensure calcium and vitamin requirements are being met</li> <li>▪ <b>*Refer to the care pathway for the dietary management of introducing milk free solids to ensure the child continues to have review</b></li> </ul>	

## 5 & 6. Paediatric care pathway for the dietary management of IgE and non-IgE mediated food allergies

**Referral:** IgE and non-IgE mediated reaction to one or more foods.

Appointment	Methodology/Targets	Discharge criteria
<p><b>Initial assessment</b></p> <p>60 minutes</p>	<ul style="list-style-type: none"> <li>▪ Obtain consent for assessment/treatment.</li> <li>▪ Assessment of available growth history (PCHR).</li> <li>▪ Nutritional assessment to include full diet history and ensuring age appropriate introduction of solids.</li> <li>▪ Allergy focused history to include:               <ul style="list-style-type: none"> <li>○ Born full term or preterm</li> <li>○ C section or normal delivery</li> <li>○ Family history of Atopic disease</li> <li>○ Presenting symptoms –Reflux, bowel issues, eczema, vomiting, any blood in stools, respiratory, irritability etc</li> <li>○ Age of onset, speed of onset, what food and how much?</li> <li>○ Details of previous management eg. Medications, thickeners etc.</li> <li>○ Infants feeding history-age of weaning, breast or formula fed</li> <li>○ Details of any foods that are avoided and why</li> <li>○ Any response to the elimination and reintroduction of foods(7,8,11)</li> </ul> </li> <li>▪ Assessment of RNI for all major nutrients with emphasis on calcium, Iron and vitamin D (2)</li> <li>▪ Document skin or blood tests, if available, for identified allergen</li> <li>▪ Document current medical treatment should an adverse reaction occur</li> <li>▪ Advice to family/carer regarding appropriate exclusion of identified dietary allergens to include contamination.</li> <li>▪ Provide dietary advice that is individually tailored taking into account overall requirements, likes and dislikes. Provide advice regarding alternatives that can be sourced locally or online</li> <li>▪ Details of available support groups eg anaphylaxis UK/allergy UK</li> <li>▪ <b>IgE mediated reactions should not be home challenged without recommendation from Paediatrician.</b></li> </ul>	<p>DNA/two consecutive CNA's</p> <p>Patient does not consent to treatment</p> <p>Patient declines further input</p> <p>Patient not ready to commit to treatment programme</p> <p>Treatment completed</p>

	<ul style="list-style-type: none"> <li>▪ Home challenge for Non-IgE food allergies to be discussed and reviewed as appropriate (BDA FASG diet sheets)</li> <li>▪ Check if patient has any additional queries</li> <li>▪ Provide relevant written information with contact details</li> <li>▪ Arrange review, if required</li> <li>▪ Complete relevant report to referrer/GP and/or Health care professional.</li> </ul>	
<p><b>1<sup>st</sup> review</b> (timeframe dependent on specific food allergen e.g. if 1 food allergy review may be within 3-12 months, if however multiple allergies more regular review required as clinically indicated or in liaison with MDT)</p> <p>45 minutes</p>	<ul style="list-style-type: none"> <li>▪ Nutritional assessment of the individual's nutritional intake for growth and age</li> <li>▪ Assess nutritional adequacy of diet</li> <li>▪ Compliance with exclusion of dietary allergens</li> <li>▪ Assess for any new food allergy concerns or any accidental exposures</li> <li>▪ Ensure rescue treatment carried at all times</li> <li>▪ Discuss food labelling, contamination, support groups</li> <li>▪ Check if patient has any additional queries</li> <li>▪ Provide relevant written information with contact details</li> <li>▪ Arrange review, if required</li> <li>▪ Complete relevant report to referrer/GP and/or Health care professional.</li> </ul>	As above
<p><b>Further reviews</b> as clinically required and as per MDT approach</p> <p>45 minutes</p>	<ul style="list-style-type: none"> <li>▪ Nutritional assessment of the individual's nutritional intake for growth and age</li> <li>▪ Assess nutritional adequacy of diet</li> <li>▪ Compliance with exclusion of dietary allergen</li> <li>▪ Assess for any new food allergy concerns or any accidental exposures</li> <li>▪ Ensure rescue treatment carried at all times</li> <li>▪ Discuss food labelling, contamination, support groups</li> <li>▪ Check if patient has any additional queries</li> <li>▪ Provide relevant written information with contact details</li> <li>▪ Arrange review, if required</li> <li>▪ Complete relevant report to referrer/ GP and/or Health care professional.</li> </ul>	As above

[11] [12] [14]

## **7. Paediatric care pathway for nutritional support requiring specialised ACBS borderline products, NG or PEG feeds**

**Referral:** Nutritional support requiring specialised ACBS Borderline products, NG or PEG feeds

30-60 minutes

**Initial assessment** to determine level of nutritional support (oral nutritional supplements (ONS) or enteral nutrition):

- Assessment of growth history (PHCHR “Red Book”) from available measurements: centile chart for actual age, gender and condition.
- Nutritional assessment from reported diet history in comparison with nutritional requirements for weight and age group [2].
- Children with neurodisabilities should have nutritional requirements determined using height age (if available) [1]. In practice the energy requirement for children with neurodisabilities is often no more than 90% of EAR/SACN for actual age and often may be less. Actual age should be used for micronutrient estimations aiming to achieve LRNI as the minimum.
- Consider dysphagia; aspiration risk; assessment by Speech & Language Therapist
- Identify nutritional deficit and appropriate nutritional support route (oral or enteral).
- Identify projected duration of nutritional support based on category listed
- If applicable, undertake full risk assessment for use of liquidised food via NG/PEG [16].
- Ensure risk assessment for overnight feeding has occurred (GAIN Guidelines) [15]

### **Review criteria:**

- Telephone reviews may be provided rather than face: face, as per clinical judgement
- Review should be required in accordance with changing nutritional requirements for age, growth and tolerance
- Regimen should be monitored and amended accordingly, to ensure optimal nutrition is achieved to support the individual’s quality of life
- Agree appropriate timescale for weight checks with parent/carer/ community healthcare professional prior to next planned review
- **N.B.** Dietitian will work closely with other MDT members for enterally fed children
- If child < 2yrs: a review at 1-2 weeks until 6 months of age and then 1-2 monthly until established and a telephone contact with HV/MDT
- If child > 2 yrs and stable: a review at 6 - 12 months with a telephone contact with health professional.

<p><b>Short term &lt; 6months e.g. :</b></p> <ul style="list-style-type: none"> <li>▪ NG feeding during acute illness</li> <li>▪ NG feeding post-operatively</li> <li>▪ ONS ACBS products or Enteral feeding due to faltering growth</li> <li>▪ Pre surgical requiring improved nutritional status or weight gain</li> <li>▪ Diagnosed Infant feeding difficulty resulting in faltering growth.</li> </ul>	<p><b>Medium term of 6-12 months e.g. :</b></p> <ul style="list-style-type: none"> <li>▪ Pre-cardiac surgery infant</li> <li>▪ Feeding problem with associated faltering growth infant or child</li> <li>▪ Preterm infant.</li> </ul>	<p><b>Lifelong/long term &gt;1year intervention e.g. :</b></p> <ul style="list-style-type: none"> <li>▪ Nil orally due to medical condition (physical disability, dysphagia, aspiration risk, genetic condition)</li> <li>▪ ONS (ACBS) or Enteral nutrition due to inadequate oral nutritional and fluid intake</li> <li>▪ PEG may be placed due to anticipated need for long term enteral nutrition &gt; 1 year.</li> </ul>
<b>Review appointments:</b>	<b>Methodology/Targets</b>	<b>Discharge criteria</b>
<p><b>1<sup>st</sup> review</b>  <b>Telephone or face-to-face</b></p> <p>1 - 2 weeks (enteral)</p> <p>4-8 weeks (oral)</p> <p>45 minutes</p>	<ul style="list-style-type: none"> <li>▪ Reassess growth on centiles</li> <li>▪ Reassess nutritional regimen in comparison with weight gain for nutritional requirements and fluid</li> <li>▪ Nutritional product tolerance and level of oral intake, as appropriate</li> <li>▪ Establish if nutritional products are required to continue and advise appropriate daily quantity</li> <li>▪ Consider permitted level of oral nutritional intake, as applicable.</li> </ul>	<p>Meeting nutritional requirements orally.</p> <p>Parent/carer declines further input.</p> <p>No nutritional concerns and treatment complete.</p>
<p><b>On-going reviews either by telephone/ face-to-face</b></p> <p>4-8 weeks until stable (enteral) or as clinically indicated</p> <p>3-6 months (oral) until stable or as clinically indicated</p> <p>45 minutes</p>	<ul style="list-style-type: none"> <li>▪ Review depending on weight gain target being achieved</li> <li>▪ Reassess as per previous review process</li> <li>▪ Discharge as per algorithm.</li> </ul>	<p>Meeting nutritional requirements orally.</p> <p>Self-discharge.</p>

**Additional information**

**1. Use of Liquidised Food with Enteral Feeding Tubes**

Option 2 RISK ASSESSMENT

Risk Assessment Template for Enteral Tube Administration of Liquidised Diet.

<http://www.peng.org.uk/pdfs/hcp-resources/risk-assessment-template.pdf>

[15] [16]

**8a). Paediatric care pathway for the dietary management of active/symptomatic Crohns Disease**

**Referral:** Inflammatory Bowel Disease:

8a) Active/symptomatic Crohns Disease requiring dietary management.

Appointment	Methodology/Targets	Discharge criteria
<p><b>Initial assessment</b></p> <p>60 minutes</p>	<ul style="list-style-type: none"> <li>▪ Growth history for age – plot on appropriate growth chart and consider weight loss &amp; reduced height velocity.</li> <li>▪ Nutritional assessment to assess current dietary intake and eating pattern/behaviours.</li> <li>▪ Symptoms at presentation, including presence of oral disease, bowel habit, anorexia, abdominal pain, site/s of inflammation.</li> <li>▪ Review patient’s investigation results including TPN profile (particularly if risk of refeeding), full blood count, iron profile, upper &amp; lower endoscopy and Small Bowel Series (to assess extent of disease &amp; area/areas of GIT affected), CRP &amp; ESR (raised during active disease), faecal calprotectin and vitamin D.</li> <li>▪ Estimate nutritional intake from reported diet history compared against estimated average requirements – SACN/Schofield: adjust requirements (120%) to allow for weight gain as required. Consider risk of refeeding syndrome and discuss with parents/carers and patient.</li> <li>▪ Diagnosis is often during puberty vital to ensure correct nutrition and treatment to optimise growth.</li> <li>▪ Exclusive Enteral Nutrition (EEN) is first line treatment in newly diagnosed Crohns Disease (Nice, 2012; BSPGHAN, 2010; ECCO/ESPGHAN, 2014).</li> <li>▪ EEN is the complete avoidance of food (see below) for a period of 6-8 weeks. All nutritional requirements are provided in “liquid” diet.</li> <li>▪ There is no consensus on what other fluids are allowed during EEN, examples of foods allowed include 7 Up, Sprite, boiled sweets, ice lollies.</li> <li>▪ The aim of treatment with EEN is to induce remission, aid mucosal healing, reduce inflammation and provide optimum nutrition to promote growth and development.</li> <li>▪ A polymeric feed is the feed of choice and is a more palatable option than elemental feeds – the latter only being used with a co-existing CMPA. Choose appropriate feed that is specifically for use in Crohns Disease and contains a natural anti-</li> </ul>	<p>Dietary intervention inappropriate</p> <p>Parent/carer declines further input</p> <p>No nutritional concerns and treatment complete – particularly if steroid treatment</p>

	<p>inflammatory factor. The feed can be concentrated between 1.0 – 1.5 kcal/ml.</p> <ul style="list-style-type: none"> <li>▪ Children &lt; 5 years use age appropriate polymeric feed if required.</li> <li>▪ The option of an NG tube should be considered if the patient is unable to drink the required volumes of feed.</li> <li>▪ Introduce feeds (oral/NG/combination) over 3/4 days with a total avoidance of food from day 1/2. Provide recipe, contact details, 3 day feed supply, GP letter &amp; prescription.</li> <li>▪ Request parent to telephone weekly with weight and tolerance/compliance updates for duration of diet.</li> <li>▪ Failure in compliance/failure of EEN will require discussion with MDT.</li> <li>▪ TPN may be required in rare cases of extensive disease/post op/malabsorption.</li> </ul>	
<p><b>1<sup>st</sup> review</b>  <b>Telephone review</b>  1 week   45 minutes</p>	<ul style="list-style-type: none"> <li>▪ Assess EEN intake, weight, compliance, clinical wellbeing, bowel habit, biochemistry including CRP, ESR, Hb and any other issues identified i.e. mood.</li> </ul>	As above
<p><b>2<sup>nd</sup> review</b>  <b>Face to face</b>   2 - 6 weeks   45 minutes</p>	<ul style="list-style-type: none"> <li>▪ Assess supplement intake, weight, compliance, clinical wellbeing, any other issues identified i.e. mood.</li> <li>▪ Repeat biochemical parameters i.e. CRP, ESR, Hb</li> <li>▪ Discuss food reintroduction as per information below. Introduce low residue, low fat foods over a 3 day period whilst weaning volumes of supplements daily i.e. introduce 1 light meal daily</li> <li>▪ Recommend continuing supplement at 25% of energy requirement (may prolong remission).</li> <li>▪ Gradually relax the diet over the next weeks to increase fibre rich foods and normalise the diet – promoting healthy eating.</li> <li>▪ Consider commencing multivitamin if deemed necessary upon dietary assessment.</li> </ul>	As above
<p><b>3<sup>rd</sup> review</b>  <b>Face to face</b>  2-6 weeks   45 minutes</p>	<ul style="list-style-type: none"> <li>▪ Check tolerance to oral intake and nutritional requirements and discharge as per criteria.</li> </ul>	As above

**8b). Paediatric care pathway for the dietary management of active/symptomatic  
Ulcerative Colitis (UC)**

**Referral:** Inflammatory bowel disease:

8b) active/symptomatic Ulcerative Colitis (UC) requiring dietary management .

Appointment	Targets of Nutritional intervention	Discharge criteria
<p><b>Initial assessment</b></p> <p>60 minutes</p>	<ul style="list-style-type: none"> <li>• Growth history for age – plot on appropriate growth chart and consider weight loss &amp; reduced height velocity.</li> <li>▪ Nutritional assessment to assess current dietary intake and eating pattern/behaviours.</li> <li>▪ Symptoms at presentation, including presence of oral disease, bowel habit, anorexia, abdominal pain, site/s of inflammation.</li> <li>▪ Review investigation and biochemical findings including endoscopy findings to assess extent of disease.</li> <li>▪ Estimate nutritional intake from reported diet history compared against estimated average requirements – SACN/Schofield, adjust requirements to allow for weight gain as required i.e. 120 %.</li> <li>▪ Consider risk of refeeding syndrome, particularly with excessive diarrhoea, prolonged reduced intake.</li> <li>▪ Identify appropriate intervention:               <ul style="list-style-type: none"> <li>▪ Fibre modification</li> <li>▪ Food fortification</li> <li>▪ Oral nutritional supplements</li> <li>▪ Vitamin and mineral supplements</li> <li>▪ Probiotics.</li> </ul> </li> </ul>	<p>Dietary intervention inappropriate</p> <p>Parent/carer declines further input</p> <p>No nutritional concerns and treatment complete</p>
<p><b>1<sup>st</sup> review</b></p> <p>12 weeks</p> <p>45 minutes</p>	<ul style="list-style-type: none"> <li>▪ Reassess nutritional intake, growth and nutritional intervention</li> <li>▪ Consider clinical wellbeing</li> <li>▪ Discharge as per algorithm and transfer to nutrition support care pathway, as necessary.</li> </ul>	<p>As above</p>

## 9. Paediatric care pathway for the dietary management of obesity

**Referral:** Obesity defined as BMI > 98<sup>th</sup> centile using paediatric BMI chart. **Dietetic Care Pathway for Obesity Management (Paediatrics)**

Appointment	Targets of Nutritional intervention	Discharge Criteria
<p><b>Initial appointment</b></p> <p>60 minutes</p>	<p><b><u>Opening introduction</u></b></p> <ul style="list-style-type: none"> <li>▪ Explain reason for referral and pathway, including number of sessions and attendance/discharge criteria</li> <li>▪ Obtain consent for assessment/treatment.</li> </ul> <p><b><u>Classification of clinically obese:</u></b> Current weight and height. BMI &gt;98<sup>th</sup> centile using gender specific paediatric BMI chart</p> <p><b><u>Clinical Assessment</u></b> Presenting symptoms, medical history, medication, relevant bloods</p> <p><b><u>Social History</u></b> Support networks e.g. family, friends, carers. After schools clubs etc</p> <p><b><u>Diet History</u></b></p> <ul style="list-style-type: none"> <li>▪ Establish current eating habits:               <ul style="list-style-type: none"> <li>- Dietary intake – eg ‘typical day’ approach</li> <li>- Meal / eating patterns – weekdays &amp; weekends, number of meals &amp; snacks, any food swapping/skipping meals, takeaways/eating out</li> <li>- Portion sizes, e.g. ‘seconds’ at school/after school clubs</li> <li>- Any supplements taken? Seasonal or age appropriate?</li> <li>- Any cultural influences on diet?</li> <li>- Calorie dense liquids</li> </ul> </li> </ul> <p><b><u>Behaviour Lifestyle Assessment</u></b> <b>Suggested areas to cover may include the following:</b></p> <ul style="list-style-type: none"> <li>▪ Gain understanding of patient’s and parent/guardian thoughts on referral</li> <li>▪ Explore importance, level of readiness to adopt change</li> <li>▪ Explore motivation to change, confidence in making changes e.g. willingness &amp; ability to change</li> <li>▪ Explore patient and parent/guardian understanding of their weight and the diagnosis in more detail e.g. extent to which patients feel weight is under their control and possible reasons for weight gain</li> <li>▪ Explore any beliefs about eating, physical activity and weight gain that are unhelpful if the person wants to lost</li> </ul>	<p>DNA/two consecutive CNA’s</p> <p>Patient does not consent to treatment</p> <p>Patient declines further input</p> <p>Patient not ready to commit to treatment programme/non compliance</p>

weight (helps build confidence and motivation) e.g. what might make losing weight difficult.  
NB/ To engage more directly with children  $\geq 12$  years depending on capability

### **Weight Management Dietary Interventions**

- Tailor dietary changes to food preferences and allow for a flexible and individual approach to reducing calorie intake
- Do not use unduly restrictive and nutritionally unbalanced diets, because they are ineffective in the long term and can be harmful
- Encourage people to improve their diet even if they do not lose weight, because there can be other health benefits
- The main requirement of a dietary approach to weight loss is that total energy intake should be less than energy expenditure

Consider the following:

- Improving eating behaviours e.g. establish structured and regular meal pattern
- Nutritionally adequate diet – base intake on the eatwell guide, as age appropriate. Focus on frequency, amount and type of foods eaten eg food proportions as per eatwell guide, portion sizes, lower calorie alternatives
- Food labelling advice

### **Activity**

Establish current level of exercise/activity – type and frequency.

### **Physical Activity advice:**

- Encourage patient to increase their level of physical activity;

### **Early years (under 5's) – for infants who are not yet walking;**

- Physical activity should be encouraged from birth, through floor-based play, including tummy time, reaching for and grasping objects, pulling, pushing and playing with other people and water-based activities, including, baby swimming sessions in safe environments. All under 5's should minimise the amount of time spent being sedentary, including time in infant carriers or seats, in walking aids or baby bouncers and reducing time spent in front of TV or other screens

### **Early years (under 5's) – for children who are capable of walking;**

- Aim to be physically active daily for at least 180 minutes (3 hours), spread throughout the day. All under 5's should minimise the amount of time spent

	<p>being sedentary for extended times. Activities include; energetic play, chasing games, running, walking to and from school/play park.</p> <p><b>Children and young people 5-18 year olds:</b></p> <ul style="list-style-type: none"> <li>▪ Aim for at least 60 minutes every day, include muscle and bone strengthening activities 3 times/week. Examples include; bike riding, playground activities, fast running, sports such as swimming or basketball. Muscle and bone strengthening activities include; swinging on playground equipment, hopping and skipping, gymnastics or tennis.</li> </ul> <p><b>All patients:</b> Aim to reduce the amount of time they spend inactive, such as watching television, using a computer or playing video games.</p> <p>Fact sheets available from:  <a href="https://www.gov.uk/government/publications/uk-physical-activity-guidelines">https://www.gov.uk/government/publications/uk-physical-activity-guidelines</a></p> <p>Consider local initiatives including park run, deals from local leisure centre.</p> <p><b><u>Weight Loss Targets</u></b></p> <ul style="list-style-type: none"> <li>▪ If appropriate – discuss individual and <i>realistic</i> weight loss goals and manage expectations</li> <li>▪ Aim for most children is weight maintenance, with height growth leading to a natural decrease in BMI</li> <li>▪ For over 7 years slow weight loss may be advised 0.5kg/month (Clinical Paediatric Dietetics 3<sup>rd</sup> ed)</li> <li>▪ For some older children, and particularly those with very severe and extreme obesity, a weight loss of around 0.5-1kg per month is acceptable (Stewart,2015 in Clinical Paediatric Diabetes 4<sup>th</sup> ed: 803)</li> </ul> <p><b><u>Choose appropriate weight management intervention option(s) and weight loss target</u></b></p> <ul style="list-style-type: none"> <li>▪ Agree 2-3 SMART goals/develop a change plan – may include physical activity, portion control etc</li> <li>▪ Consider reward chart or non food rewards e.g. magazine, trip to park/ swimming voucher etc</li> <li>▪ Problem solving (as arises) – to help patients cope with various emotional / social situations (refer to Behaviour change techniques summary)</li> <li>▪ Encourage family support (where available)</li> <li>▪ Is vitamin supplementation required</li> <li>▪ Literature - provide supporting literature</li> <li>▪ Provide contact details</li> <li>▪ Agree decision for review</li> </ul>	
<b>1<sup>st</sup> review</b>	<ul style="list-style-type: none"> <li>▪ Clinical assessment including weight/BMI</li> </ul>	

<p>4 -6 weeks 45 minutes</p> <p><b>2<sup>nd</sup> review</b></p> <p>2-4 weeks 45 mins</p>	<ul style="list-style-type: none"> <li>▪ Evaluation of agreed aims/ targets</li> <li>▪ Review activity – type and frequency of activity/exercise</li> <li>▪ Consider if vitamin and mineral supplement due to age/winter months</li> <li>▪ Praise successes – however small – at every opportunity to encourage the person through the difficult process of changing established behaviour</li> <li>▪ If appropriate – reassess readiness to change</li> </ul> <p><b><u>Way Forward</u></b></p> <ul style="list-style-type: none"> <li>▪ Agree further SMART goals/continue to work on plan of change/ discuss rewards</li> <li>▪ Continue to explore barriers to change and difficulties with losing weight</li> <li>▪ Consider local Trust group support</li> <li>▪ Encourage use of websites and apps as useful tools eg NHS Choices, NHS Change4life, choose to live better, to access menus and recipe ideas etc.</li> <li>▪ Literature - provide supporting literature</li> <li>▪ Agree decision for review.</li> </ul>	<p>DNA/two consecutive CNA's</p> <p>Patient does not consent to treatment</p> <p>Patient declines further input</p> <p>Patient not ready to commit to treatment programme/non compliance</p> <p>Treatment completed</p>
<p><b>3<sup>rd</sup> review</b></p> <p><b>2-4 weeks</b></p> <p>45 minutes</p>	<ul style="list-style-type: none"> <li>▪ Clinical Assessment Weight/BMI</li> <li>▪ Evaluation of agreed aims/ targets</li> <li>▪ Review activity – type and frequency of activities/exercise</li> </ul> <p><b><u>Way Forward</u></b></p> <ul style="list-style-type: none"> <li>▪ Agree target of weight loss or weight maintenance</li> <li>▪ Encourage people to eat a balanced diet in the long term, consistent with other healthy eating advice</li> <li>▪ Signposting – consider ongoing support via, for example, supermarket tours, weight loss groups, exercise groups, support worker review etc</li> <li>▪ Literature - provide supporting literature</li> <li>▪ Agree decision for discharge</li> </ul> <p><b>At discharge:</b> update GP and Paediatrician and/or other members of the MDT</p>	<p>As above</p>

[23] [24]

## 10. Paediatric care pathway for the dietary management of general food allergy / food hypersensitivity (Non-IgE)

**Referral:** Food allergy/ Food hypersensitivity (Non-IgE) e.g. trial exclusion diet.

Appointment	Methodology/Targets	Discharge criteria
<b>Initial assessment</b>  60 minutes	<ul style="list-style-type: none"> <li>▪ Nutritional assessment of the individual's nutritional intake for growth and age</li> <li>▪ Document symptom details and grade of reaction (gastrointestinal, skin, etc) from parent/carer: age of onset, speed of reaction and signs, duration and severity, frequency, how much allergen ingested (refer to NICE guidelines 2011; HSC Infant feeding guideline, 2014 [7] &amp; MAP Guideline 2013) [8]</li> <li>▪ Document skin or blood tests, if available, for identified allergen</li> <li>▪ Document current drug treatment should an adverse reaction occur</li> <li>▪ Advice to family/carer regarding appropriate exclusion of identified dietary allergens</li> <li>▪ Educate on reading food labels to identify safe food substitutes</li> <li>▪ Identification of substitute foods and exclusion of allergens</li> <li>▪ Agree level of food exclusion and time frame for review based on allergen &amp; when challenge likely to occur</li> <li>▪ Details of available support groups</li> <li>▪ NB If a single food allergen such as egg, wheat, soya the patient may be discharged. However if multiple allergens on-going review may be required.</li> </ul>	Self-discharge.  Dietary exclusion determined inappropriate.  Successful self-food challenge and reintroduction  If single food allergen and no further review required
<b>1<sup>st</sup> review</b> 4-8 weeks (dependent on number of allergens excluded and impact on nutritional status) 45 minutes	<ul style="list-style-type: none"> <li>▪ Reassess nutritional intake, micronutrients and growth</li> <li>▪ Food challenge as appropriate.</li> </ul>	As above
<b>2<sup>nd</sup> review</b> 4-8 weeks (on-going review as necessary) 45 minutes	<ul style="list-style-type: none"> <li>▪ Reassess nutritional intake, micronutrients and growth</li> <li>▪ Food challenge as appropriate.</li> </ul>	As above

**N.B. Circumstances for food challenge will be dependent on each individual.**

BSACI guideline for the diagnosis & management of cow's milk allergy 2014.

BSACI guideline for the diagnosis & management of egg allergy 2014.[7] [8] [11] [12]

## 11. Paediatric Dietetic care pathway for patients referred from UK and / or Ireland Specialist Treatment Centres

**Referral:** Transfer of nutritional care from UK and/or Ireland Specialist Treatment Centres.

Appointment	Methodology/Targets	Discharge criteria
<b>Initial assessment</b>  60 minutes	NB In advance of initial assessment, liaise with the Dietitian in the Specialist centre to obtain most up-to-date information and proposed treatment plan from specialist unit, as applicable.  If no specialist treatment care pathway available follow as below: <ul style="list-style-type: none"> <li>▪ Assessment of growth history (PHCHR) from available measurements</li> <li>▪ Biochemistry if available</li> <li>▪ Use of appropriate centile chart for actual age, gender and condition</li> <li>▪ Assessment of nutritional intake from reported diet history against EAR/SACN [2]</li> <li>▪ Aim to correct nutritional deficit by most appropriate means: food fortification or supplementation for catch up growth</li> <li>▪ Liaise with MD Team in writing as required.</li> </ul>	Appropriate weight gain and growth centiles in proportion and no further nutritional issues
<b>1<sup>st</sup> review</b>  Up to 8 weeks (dependent on age and clinical condition)  45 minutes	<ul style="list-style-type: none"> <li>▪ Reassess nutritional intake</li> <li>▪ Assessment of growth as above</li> <li>▪ Enter appropriate care pathway, as required.</li> </ul>	Appropriate weight gain and normal growth centiles achieved  No further nutritional issues  Self-discharge
<b>On-going reviews, as necessary</b>	<ul style="list-style-type: none"> <li>▪ As above until optimal nutritional requirements/ status achieved.</li> </ul>	As per above Non-compliant

[2]

**12. Paediatric care pathway for dietary assessment to confirm / treat dietary related vitamin and mineral deficiencies**

**Referral:** Dietary assessment to confirm / treat dietary related vitamin and mineral deficiencies

Appointment	Methodology/Targets	Discharge criteria
<p><b>Initial assessment and discharge</b></p> <p>60 minutes</p>	<ul style="list-style-type: none"> <li>▪ Nutritional assessment of the individual's nutritional intake for growth and age [2]</li> <li>▪ Assess biochemistry and medical condition, as applicable</li> <li>▪ Depending on nutritional status/ deficiency tailor dietary advice accordingly</li> <li>▪ If indicated e.g. ASD patients, consider onward referral to other disciplines such as OT (for sensory issues), S&amp;LT (feeding assessment) or clinical psychology (non-dietary behavioural aspects)</li> <li>▪ Consider supplementation and communicate with medical colleagues</li> <li>▪ NB. If at nutritional risk (due to a highly restricted diet) patients may need to be offered a review appointment and concerns highlighted to medical colleague.</li> </ul>	<p>Treatment complete</p> <p>Self- discharge</p>

[25]

### **13. Paediatric care pathway for the dietary management of selective eaters.**

**Referral:** Dietary assessment for feeding difficulties due to sensory issues, developmental delay or oro motor problems.

<b>Appointment</b>	<b>Targets of nutritional intervention</b>	<b>Discharge criteria</b>
<p><b>Initial assessment</b></p> <p>60 minutes</p>	<ul style="list-style-type: none"> <li>▪ Obtain Consent for assessment/treatment</li> <li>▪ Nutritional assessment of the individuals nutritional intake for growth and age in comparison to anticipated nutritional requirements for age (GOSH Seventh edition 2018)</li> <li>▪ Ensure:               <ul style="list-style-type: none"> <li>○ a structured routine with meals and snacks at similar times each day. Discourage grazing/irregular snacking</li> <li>○ an adequate fluid intake and routine</li> <li>○ foods included from each of the four main food groups.</li> </ul> </li> <li>▪ If a food group is lacking, discuss ways to introduce.</li> <li>▪ Determine if a particular type/texture of food is identified as preferred e.g. crunchy, bland, particular colour etc. and work on expanding this range</li> <li>▪ Remember the desensitisation hierarchy e.g. seeing–smelling–touching–tasting–eating</li> <li>▪ Advise ways to achieve a nutritionally balanced diet and expand range of foods taken, as appropriate</li> <li>▪ Identify if potential for vitamin and mineral deficiency and advise re dietary sources and supplementation, if required (GOSH 2018)</li> <li>▪ It may be necessary to refer to occupational therapy if sensory issues are causing aversions to certain foods</li> <li>▪ If a range of textures are not managed SLT assessment may be required</li> </ul>	<p>Treatment completed</p> <p>Patient/carer declined further input</p>

	<ul style="list-style-type: none"> <li>▪ Establish clear treatment goals in agreement with child and parents</li> <li>▪ Consider providing food diary for completion prior to follow up.</li> </ul>	
<b>1<sup>st</sup> Review</b> 6-8 weeks 45 minutes	<ul style="list-style-type: none"> <li>▪ Reassess nutritional intake, growth and nutritional intervention</li> <li>▪ Consider providing food diary for completion prior to follow up.</li> </ul>	Treatment completed  No recommended changes tried or implemented – no change  Self-discharge
<b>2<sup>nd</sup> Review</b> 6-8 weeks 45 minutes	<ul style="list-style-type: none"> <li>▪ Reassess nutritional intake, growth and nutritional intervention</li> <li>▪ Consider providing food diary for completion prior to follow up.</li> </ul>	As above

[2] [23]

## **Paediatric References**

- [1] (2015) Clinical Paediatric dietetics, 4<sup>th</sup> edition, Chapter 28, page 764, Smith, Z.
- [2] Nutritional Requirements for Children in Health and Disease. Great Ormond Street Hospital for Sick Children NHS Foundation Trust. 2018. 7<sup>th</sup> edition.  
Note addition of SACN (2011) Table 3 Guide to energy requirements in clinical practice, was added to resource since 2013.
- [3] Coeliac UK Suites A-D, Octagon Court, High Wycombe, Bucks, HP11 2HS.  
[www.coeliac.co.uk](http://www.coeliac.co.uk)
- [4] Dietitians working in paediatric gastroenterology in the UK are encouraged to join the Associated Members group of the British Society of Paediatric Gastroenterology, Hepatology and Nutrition (BSPGHAN). [www.bspghan.org.uk](http://www.bspghan.org.uk)
- [5] Murch S et al. Joint BSPGHAN and coeliac UK guidelines for the diagnosis and management of coeliac disease in children. *Archives of Disease in Childhood* 2013;98:806-811.
- [6] <https://www.coeliac.org.uk/document-library/1465-joint-bspghan-and-coeliac-uk-guidelines-2013/?return=/healthcare-professionals/management/>
- [7] Brown T et al (Jan 17), Health and Social Care Board Infant Feeding Guidelines. [http://niformulary.hscni.net/Formulary/Adult/PDF/PrimaryCareInfant\\_Feeding\\_GuidelinesWeb.pdf](http://niformulary.hscni.net/Formulary/Adult/PDF/PrimaryCareInfant_Feeding_GuidelinesWeb.pdf)
- [8] The iMAP Guideline (Milk Allergy in Primary Care). Venter C, Brown T, Shah N, Walsh J, Fox AT. Diagnosis and management of non-IgE-mediated cow's milk allergy in infancy – a UK primary care practical guide. *Clin Transl Allergy* 2013;3(1):23. Available at: <http://www.ctajournal.com/content/3/1/23>.
- [9] [www.cowsmilkallergyguidelines.co.uk](http://www.cowsmilkallergyguidelines.co.uk) (Website for iMAP For health professional only who need to register to access site). MAP is the UK's first, evidence-based management guideline specifically for cow's milk allergy (CMA).
- [11] NICE Clinical Guideline 116 (February 2011), Food allergy in children and young people: Diagnosis and assessment of food allergy in children and young people in primary care and community settings <http://guidance.nice.org.uk/CG116>.
- [12] Allergy Care Pathways for Children with Food Allergy 2011. Royal College of Paediatrics and Child Health. [www.rcpch.ac.uk/allergy/foodallergy](http://www.rcpch.ac.uk/allergy/foodallergy) (The College's care pathway for food allergy is presented in two parts: an algorithm with the stages of ideal care, and; a set of competences required to diagnose).
- [13] Department of Health. Vitamin D – Advice on supplements for at risk groups (2012) <http://www.dhsspsni.gov.uk/hss-md-5-2012.pdf>
- [15] Guidelines and Audit Implementation Network (2015) Guidelines for caring for an infant, child or young person who requires enteral feeding. <https://www.rqia.org.uk/RQIA/files/4f/4f08bb34-7955-49ea-adf1-9de807d3da66.pdf>

[16] Use of Liquidised Food with Enteral Feeding Tubes (BDA Guidance, October 2019) [https://www.bda.uk.com/improvinghealth/healthprofessionals/policy\\_statement/policy\\_statement\\_liquidisedfood](https://www.bda.uk.com/improvinghealth/healthprofessionals/policy_statement/policy_statement_liquidisedfood)

[17] Griffiths, AM et al. Meta analysis of enteral nutrition as a primary treatment of active Crohn's disease. *Gastroenterol*, 1995,105-67.

[18] Beattie, M et al. Childhood Crohn's disease and the efficacy of enteral diets. *Nutr*, 1998, 14 345-50.

[20] ISPAD Clinical Practice Consensus Guidelines 2009 Diabetes education in children and adolescents Swift PGF. *Pediatric Diabetes* 2009; 10 (Suppl. 12): 51-57.

**Note 2014 reviewed version awaited.**

[21] The Complete IDDSI Framework Detailed Definitions (IDDSI 2.0) July, 2019) [http://ftp.iddsi.org/Documents/Complete\\_IDDSI\\_Framework\\_Final\\_31July2019.pdf](http://ftp.iddsi.org/Documents/Complete_IDDSI_Framework_Final_31July2019.pdf)

[22] NICE Clinical Guideline 99: Constipation in children and young people. Diagnosis and management of idiopathic childhood constipation in primary and secondary care, May 2010. [Guidance.nice.org.uk/cg99](http://guidance.nice.org.uk/cg99).

[23] NICE Clinical Guideline 43(2006) Obesity: Guidance on the prevention, identification, assessment and management of overweight and obesity in adults and children. Page 38, and Clinical Paediatric dietetics, 3<sup>rd</sup> Edition (2007) page 589. Obesity: Identification, Assessment and Management of Overweight and Obesity in Children, Young People and Adults: Partial Update of CG43. Nov 2014

[24] SIGN (2003) Management of Obesity in Children and Young people. A National Clinical Guideline, Edinburgh.

[25] <https://www.bda.uk.com/foodfacts/Autism>

[26] Lippincott Williams & Wilkins *Journal of Pediatric Gastroenterology and Nutrition* 42:596, May 2006, Philadelphia Medical Position Paper Feeding Preterm Infants After Hospital Discharge A Commentary by the ESPGHAN Committee on Nutrition.

[27] ESPGHAN Committee on Nutrition: Carlo Agostoni, Tamas Decsi, Mary Fewtrell, Olivier Goulet, Sanja Kolacek, Berthold Koletzko, Kim Fleischer Michaelsen, Luis Moreno, John Puntis, Jacques Rigo, Raanan Shamir, Hania Szajewska, Dominique Turck, and Johannes van Goudoever. **Complementary Feeding: A Commentary by the ESPGHAN Committee on Nutrition.** *J Pediatr Gastroenterol Nutr* 2008; 46: 99-110.

[28] BLISS Weaning your premature baby (9<sup>th</sup> edition) 2017.

## **Bibliography**

Nutritional Requirements for Children in Health and Disease. Great Ormond Street Hospital for Sick Children NHS Trust. Seventh Edition, 2018. (GOSH, 2018).

Note addition of SACN (2011) Table 3 Guide to energy requirements in clinical practice, was added to resource in 2013.

Guideline for the diagnosis and management of Coeliac Disease in Children. Coeliac Working Group of BSPGHAN.

Clinical Paediatric Dietetics, 4<sup>th</sup> edition. Shaw, V Wiley Blackwell 2015

BSACI guideline for the diagnosis & management of cow's milk allergy 2014.

BSACI guideline for the diagnosis & management of egg allergy 2014.

ISPAD Clinical Practice Consensus Guidelines 2009 Diabetes education in children and adolescents Swift PGF. Paediatric Diabetes 2009; 10 (Suppl. 12): 51-57.

**Note 2014 reviewed version awaited.**

NICE Clinical Guideline 43 (2006): Obesity guidance on the prevention, identification, assessment and management of overweight and obesity in adults and children.

SIGN (2003) Management of Obesity in Children and Young people. A National Clinical Guideline, Edinburgh.

Coeliac UK Suites A-D, Octagon Court, High Wycombe, Bucks, HP11 2HS.  
[www.coeliac.co.uk](http://www.coeliac.co.uk)

Dietitians working in paediatric gastroenterology in the UK are encouraged to join the Associated Members group of the British Society of Paediatric Gastroenterology, Hepatology and Nutrition (BSPGHAN). [www.bspghan.org.uk](http://www.bspghan.org.uk)

Department of Health. Vitamin D – Advice on supplements for at risk groups (2012).  
<http://www.dhsspsni.gov.uk/hss-md-5-2012.pdf>

Journal of Pediatric Gastroenterology and Nutrition 42:596, May 2006 Lippincott Williams & Wilkins, Philadelphia Medical Position Paper Feeding Preterm Infants After Hospital Discharge A Commentary by the ESPGHAN Committee on Nutrition  
BLISS Weaning your premature baby (7<sup>th</sup> edition) 2011.

NDR 2017 resources How to Get it right! (Paediatric Diabetes Pack).  
<http://www.ndr-uk.org/published-resources.html#paediatricdiabetes>

NICE Clinical Guideline 116 (February 2011), Food allergy in children and young people.

NICE Clinical Guideline 99: Constipation in children and young people. Diagnosis and management of idiopathic childhood constipation in primary and secondary care, May 2010.  
[Guidance.nice.org.uk/cg99](http://Guidance.nice.org.uk/cg99).

Fiocchi A et al. World Allergy Organisation (WAO) Diagnosis and Rationale for Action Against Cow's Milk Allergy (DRACMA) Guidelines: WAO Journal April 2010; 3 (4): 57-161.

Paediatric Dietetic Regional Care Pathways. REVIEWED September 2020 Page 33 of 34

Brown T et al (2014), Health and Social Care Board Infant Feeding Guidelines -Feb 2014.  
[http://www.hscboard.hscni.net/medicinesmanagement/Prescribing%20Guidance/045%20Infant\\_Feeding\\_Guidelines\\_Feb%202014.pdf](http://www.hscboard.hscni.net/medicinesmanagement/Prescribing%20Guidance/045%20Infant_Feeding_Guidelines_Feb%202014.pdf)

Boys/Girls UK Growth chart 2-18years RCPCH Department of Health, Copyright RCPCH 2012. [www.growthcharts.RCPCH.ac.uk](http://www.growthcharts.RCPCH.ac.uk)

<https://www.bda.uk.com/foodfacts/Autism>