# A Guide to Feeding Your Child Blended Foods through a Gastrostomy Feeding Tube

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# **Starting out with Blended Diet**

#### What to consider at the beginning?

When you are first looking to start giving a blended diet here are a few things you might want to consider:

- ❖ Time preparing and administering a blended diet will take more time, particularly initially when you are still getting used to it.
- ❖ What should I give All children are different, so have a think about your child's particular needs at the start to help you plan. For example, are there any specific dietary restrictions for allergies, does your child have increased calorie requirements, or need extra fluid, does your child tend to suffer from reflux. If in doubt your Dietitian can help advise you.
- ❖ Take it slow Don't feel rushed to eliminate any prescribed formula your child may be taking. Often making a gradual transition can help with tolerance. This may include initially using the formula feed to get your blends to the right consistency.
- ❖ Cost −Prescribed formulas are available on prescription, so it may be worth bearing in mind the cost associated with extra meals for the family when budgeting.
- ❖ Equipment It is recommended to have all the equipment needed to help safely administer your child's blended diet before starting. This may also carry some additional costs for you. (See section on what you might need)
- Convenience Giving a blended diet may need more planning when giving a feed out of the house. Please see our section on 'Managing holidays and days out' for our top tips to help with this.
- ❖ Flexibility Despite blended diet becoming a more popular choice of feeding, think about whether blended diet can be supported by all the different settings your child accesses, as it may be new to some services your child attends. We recommend that you discuss your wishes with the various parties involved. It maybe that some flexibility is needed around what/how your child can be fed in all the different places they may visit. Your dietitian will support you, but it may take a little time to ensure this can be supported safely, so having an alternative feed plan may be worth discussing with your dietitian.
- ❖ Support It would be advisable to discuss your thoughts and ideas of commencing blended diet with your child's dietitian and medical team. This is so all professionals are aware of your choice to feed blended diet and can support you with this decision. Your local Dietitian is supportive and approachable and can help in your decision making and planning.

#### What Should I Give

# When thinking about planning your child's blended meals, here are some ideas to think about when planning:

- Some families find that the easiest way to approach meal planning is to blend food that you are cooking for the rest of the family. Think about your own diet or your child's sibling's diet as a model of what to give. Try out those foods first rather than getting bogged down with fancy mixtures.
- Many parents and carers find stage 1 baby food pouches make it easy to begin.
  These are of the right consistency with no lumps. However, most of these are very
  low in calories (energy) so should be given in addition to the formula your child/the
  patient takes initially.
- We would recommend that you begin with one meal a day, rather than aiming to replace all meals and feed straight away. This gives you all time to get used to the new way of feeding.
- It may be helpful to think about your child's blended feed as a meal rather than replacing a feed that he/she may have previously had.
- Think about the priorities for your child and write them down
   For example:
  - Does your child have health issues affecting potential food tolerance such as an allergy?
  - Does your child suffer from reflux and more likely to vomit after a large amount of food?
  - ❖ Does your child have any specific issues that may affect nutritional intake?

    For example do they tend to have issues with iron deficiency or do they tend to get constipated?
  - Does your child need to gain weight are you and your medical team worried about this?
  - Do you need to be careful that your child doesn't gain too much weight?
  - ❖ Are there times of day when your child is less able to tolerate being fed?
  - Would you like your child/ would your child benefit from taking part in family meal times?
  - What's your budget?
  - ❖ How do you plan to allocate the time to prepare your child's blends?

It is a good idea to discuss these with your dietitian who may also have some considerations for you to think about together when planning your blended diet meals and feeding plan.

• Your dietitian will be able to give you more detailed information on the types and quantities of food required to meet your child's nutritional requirements.

Use a 'typical' meal pattern to guide you on when to give a blended diet –
eg Breakfast
Mid-morning snack

Lunch Mid-afternoon snack

Dinner

# Types of food:

The following gives guidance on foods which are easier to blend and those which are more difficult. This information was put together from parents who have given their child a blended diet.

Easier food to blend and to start feeding with	Harder, more difficult foods to blend to the correct consistency	
<ul> <li>Root vegetables (e.g. carrot, swede, parsnip)</li> <li>Slow cooked lean meats</li> <li>Fish with milky sauce</li> <li>Stewed fruit that goes soft after cooking e.g. apples, pears</li> <li>Quality meat that is minced (less gristle and stringy parts)</li> <li>Yogurt without bits</li> <li>Couscous/quinoa/potato/toasted bread</li> </ul>	<ul> <li>Seeds</li> <li>Nuts</li> <li>Fruit with skins and pith (e.g. oranges)</li> <li>Fruit with tiny seeds (e.g. raspberries – even with a high powered blender these small seeds miss the blades and can block an extension set)</li> <li>Fatty/ grisly meats</li> <li>Pasta/rice</li> </ul>	

NB Using a suitable high powered blender will help you to blend most food textures, but some foods may require additional blending time. To reduce risk of blockage with small seeds and pips, it is a good idea to sieve your blend through a fine metal sieve prior to giving or storing it.

# **Consistency of blended diet:**

Blended diet meals should be a smooth, thin puree or double cream consistency.

The correct consistency will:-

- Have no "bits" or lumps in it
- Run easily off a spoon
- Does not hold its shape
- Cannot be eaten with a fork as it drops through the prongs
- The prongs of a fork do not make a clear pattern on the surface
- A plastic teaspoon will stand upright when the head is fully covered

Thicker consistencies will be harder to push through. Care needs to be taken not to apply too much pressure when giving a feed to protect the valve on your child's button. Thinner textures may make it more difficult to achieve the required nutritional intake in a reasonable volume. The most important thing is to ensure the consistency is smooth. When you first start you may want to consider sieving the meal prior to giving it, so you can ensure it is completely smooth.

# Planning Your Child's meals - Keeping them balanced and nutritious

As for all children, it is important to choose a well balanced diet for your child who is receiving blended diet (BD). A nutritious diet will give your child the nutrients that they need to grow. Ensuring that your child has a good range of foods across the various food groups is as important for your child, as for one who is able to eat and drink normally. One of the main joys of choosing BD for your child is that they can take part in family meals and so thinking about the food that you give other children in your family is a good place to start.

However, blending food will naturally decrease the energy density of your child's meal and so it is often important to consider ways to ensure that the blend stays nutritious by considering what to dilute the blend with. Some children may tolerate varying quantities of blend at a meal and have other issues that may impact on feeding, so it's important to think about what may affect your child when planning his or her food intake for the day. Talk to your dietitian who can help support you.

Remember, all children are unique and it is important that you consider any additional needs that your child may have.

A sensible place to start is to ensure your child is receiving a range of foods from the various food groups as you would do with any other child in your family.

# Guide for achieving a healthy balanced diet for children:

The Eatwell Guide can help you ensure your child's diet is well balanced and this in turn helps to determine if they are getting enough nutrients. (Please note, the energy targets on here are for adults).

Don't worry about providing a balanced diet straight away. It may take time to fully transition, depending on your child, especially if they have been fed with formula for a long time and not experienced food in their tummy before. You may also decide that a mix of blends and formula may suit your child best. Your dietitian can give advice regarding the target feed calories for your child, portion sizes and feed rates.









# Potatoes, bread, rice, pasta, cereals and other starchy carbohydrates

A portion of these foods should be included in all main meal blends – at least 3 times a day.

A portion per feed for older children would typically equate to 2 slices of bread, a small bowl of cereal or 2-3 small potatoes, but portion sizes will vary on age and your child's feed volume tolerance, for example if you are feeding a toddler. You may wish to include more starchy carbohydrate foods in your child's blended feed if they are not having snacks. This will ensure they get the energy they need. Starchy carbohydrate foods also give your child B vitamins, fibre and some iron and zinc.

See portion size guidance section for more information



#### **Dairy and alternatives**

These foods are an important source of energy, protein and calcium. Ensure that your child has around 3 portions of a calcium rich food every day. If your child is on a dairy free diet, try to ensure you choose alternatives that contain calcium and speak to your dietitian for additional advice.

A portion is around 150ml of milk, 1 pot of yoghurt or a matchbox-sized piece of cheese.

Dairy foods also provide protein, B vitamins and iodine.



#### Meat, fish, eggs, pulses, nuts

Use foods from this food group added to the blended feeds to give around two portions a day. Three portions are recommended for older children and when using vegetarian or vegan protein foods. One portion is about the size of the palm of your child's hand, such as a small chicken breast or an egg. These protein rich foods contain iron, zinc, B vitamins and vitamin A. Some are also good sources of omega-3.



#### **Fruits and Vegetables**

Always try to add fruit and/or vegetables to blended feeds. Typically children require 5 portions of fruits and vegetables per day. A portion can easily be measured as a handful, such as 10 grapes or a small banana or two tablespoons of peas. Fruit and vegetables give your child vitamins A and C, fibre and some are good sources of iron. Generally fruit and vegetables can be quite filling, therefore always try to add high calorie foods to the same feed.

## **Energy**

Once established on full volumes of blended feeds, try to aim to match the energy content of the commercial feed to prevent your child gaining or losing weight on the blended diet. If you are trying to encourage your child to gain weight, your dietitian can help. As blending a portion of food requires fluid to be added to ensure the correct consistency, the energy density of the blended feed may be lower than what your child needs. You may need to consider adding energy rich foods to the blends to compensate for this, but not always. It will depend on your child's needs and feed volume tolerance.

Oils, spreads and other sources of fats and sugar – these foods are usually kept to small quantities in a normal mixed diet. However, as your child's blends may need additional energy density, you may rely more on adding foods from this food group to help achieve an energy dense blend.

#### General advice:

- Try to use sources of fats that also provide other nutrients e.g. avocado, full fat dairy products such as cheese, nut butters, and hummus.
- Get the balance right for your child. Children that suffer from reflux may find that a very fat- heavy blend can make reflux worse, as it takes a little longer to digest.
- Aiming for a mix of energy provided by carbohydrate and fat is a good idea to promote good tolerance and good weight gain.
- You may choose to add a particular or special type of oil or fat to your blends such
  as coconut oil, avocado oil, hemp oil etc. This is fine if you choose to do so, but
  standard olive or vegetable oil will also provide a similar amount of energy and are
  much cheaper to buy. Your child may tolerate one type of fat better than another,
  so discuss with your Dietitian if you would like some advice.
- Sugars or simple carbohydrates can also be useful to use in small quantities and
  may increase the variety of products you can buy readymade, if that is helpful. As
  with all children, limiting use of sugars is recommended. Giving blends via a
  gastrostomy however, will not affect your child's dental health. Choosing some
  sweeter foods in the diet for your child may help you to add in a nutrient dense
  dessert or low volume 'shot' after a main meal, to achieve a higher energy intake if
  needed.
- Some parents choose to use honey as a simple carbohydrate source, which is also a
  good texture to add into a blend. There are naturally occurring substances in honey
  that you feel may benefit your child, but in general, it is still a source of sugar and
  again, can be expensive.
- Blackstrap molasses/ black treacle are a source of sugar, but do also contain iron
  and some parents use this as a way to add iron into the blends. However, take care
  on the amount added, as there is little data available to help us understand how
  available this source of iron is to the body. If your child has issues with low iron

levels, it may be necessary to have a supplement, as advised and prescribed by your GP or Paediatrician. Aiming for a supply of iron rich foods from a mixed variety of foods is a good idea. Your dietitian can give you additional advice if needed.

#### **Fluid**

Try to ensure you match the fluid provision that your child had on their commercial feed including any flushes. You may need to give some additional water flushes as the fluid content of a blended feed is likely to be lower than a commercial feed. However, you can include some fluid from your child's blends when you are thinking about how many flushes to give. We would recommend you estimate 50% of your blend as fluid. Your dietitian can give you an idea as to your child's fluid requirement for their age and weight, to help guide you.

It is important for your child to stay well hydrated and a good way to keep an eye on this is to monitor the colour and appearance of their urine. Fairly light / straw coloured urine of normal appearance is what you are aiming for. If it becomes dark or strong smelling, this may be an indication that your child needs some additional fluid in their diet.

Also look out for other signs that may indicate your child needs more fluid:

- Dry skin or lips
- Increased level of constipation
- Increased risk of urinary tract infections

Ask your dietitian for advice regarding your child's fluid requirement.

Extra fluid can be given using water added to feeds, but it is often more advisable to use nutritious fluids such as milk, gravy or fruit juices to avoid diluting the nutritional content of the blended meal. This may be especially useful if you are trying to encourage your child to gain weight.

On warmer days or in centrally heated environments, it is advisable to give extra flushes of water and to check your child's urine to ensure they are hydrated.

#### **Vitamins and Minerals**

A vitamin/mineral supplement can help your child to meet their nutritional requirements, but may not be necessary, depending on your child's needs and feed volume tolerance. Your dietitian can help you determine whether this is needed and, if so, the right one for your child. Your dietitian can also help you identify good sources of particular nutrients that your child's blended diet may be lacking. It is also important not to add in too many supplemental products that can result in your child having excess nutrients.

# **Portion Sizes of Food for Blends**

The amount of food needed and the suggested volume for your blends will vary according to

- Age.
- The volume that your child can tolerate if this is an issue.
- Your child's activity level or the level of limb movements, for example.
- Some children with additional or complex needs can have higher or indeed lower energy requirements, so it is important to consider this when you are thinking about meals and snacks.
- Some children need more or less of certain foods to help control their condition e.g.
   Ketogenic Diet.
- You may want to be more cautious with volumes initially if your child is unable to communicate to you when they feel full up.

As all children and particularly those with additional or complex needs are so different, it is important to think carefully and also learn as you go. So, start at what you think is a sensible level, then adjust up or down as you go, depending on your child's tolerance and growth/ weight gain. Agreeing a plan to monitor your child's growth with your dietitian or healthcare team will be helpful for you.

It can be useful to think about portion sizes in relation to your child's hand size – this is a quick and easy way to estimate the average size of a portion as your child grows.

# **Hands-On Nutrition for Kids!**



If you would like some more specific advice on portions of foods for each age group, you could look at information available at:

- First steps nutrition for advice for under 5 year olds:
   <a href="https://www.firststepsnutrition.org/eating-well-early-years">https://www.firststepsnutrition.org/eating-well-early-years</a>
- <a href="https://www.cwt.org.uk/publications/">https://www.cwt.org.uk/publications/</a>
   Guidance on portion sizes including weights and photographs of foods in 4 different age groups: Eating Well: First Year of Life, 1-4year olds, 5-11 year olds and 12-18 year olds
- <a href="https://www.nhs.uk/live-well/eat-well/the-eatwell-guide/">https://www.nhs.uk/live-well/eat-well/the-eatwell-guide/</a>
- www.ndr-uk.org
   What's Enough A guide to Age Appropriate Food Portion Sizes

## **Transitioning to Blended Diet**

For many parents starting a blended diet is a way of 'normalising things', a means of enabling their child to receive the same foods that the rest of the family are eating. The blended diet via gastrostomy can start in a number of ways. Here are a few examples that other families used to start their child off.

#### Option 1

If you are uncertain if your child has unknown food allergies or intolerances, consider introducing one new food at a time. You might choose this option especially if you are weaning your child from formula milk or expressed breast milk onto a blended diet.

#### Option 2

Start with one meal at a time. Give a small amount of blended diet at the usual feeding time and top up the volume with commercial feed. Build up the blended amount and gradually reduce the commercial feed daily.

#### Option 3

Start with snacks, as these are between feeds and don't impact on the current feed regime. Introduce a commercial stage 1 puree weaning meal at a quieter time of day. This way you can test the practicality of giving a blended feed and also assess your child's tolerance. Then switch to a blended family meal matching the volume of the child's commercial feed, one meal at a time.

#### Option 4

Substitute the equivalent volume of a commercial feed with a blended family meal. It can be helpful to plate up their meal first if it helps you with gauging the appropriate portion size. Then you simply blend up the meal, using water or more nutritious fluids, to get your blend to the correct consistency and then slowly administer. If your child tolerates this, increase the number of blended meals every few days by substituting another commercial feed with a blended family meal.

#### **Option 5**

If you are concerned about how your child will tolerate the blended diet, slow down the rate at which you plunge the feed, perhaps taking small breaks during the feed. Then gradually increase it again when you are happy your child is tolerating it.

#### Option 6

If your child eats orally but requires topping up via their gastrostomy then we would recommend you plate up the amount you would like them to have, let them eat orally what they can, then blend the remainder and administer that via the gastrostomy.

#### Once established on blended diet...

- Some parents prefer to blend the meals for the day meal by meal.
- Some parents blend the full day's meals together and then divide it up for the day.
- Some parents blend the savoury meal with the dessert. This does not affect the nutrients in the blend.
- Some parents retain one or more commercial feeds to help meet their child's nutrient requirements or to make the diet more practically possible.
- If it becomes clear, after monitoring your child's growth, extra calories are required then
  this can be achieved by either increasing the portion size given to your child or adding
  extra calories to the meals you give. If volume tolerance is a challenge then you can
  consider fortifying your child's meals by adding in calorie boosts. (See section on how to
  add extra calories.)

# Administration of Blended Diet Feeds – Step-by-step Guide

#### THIS IS AN EXAMPLE only - your dietitian can advise on how to adapt this for your child:

Hands should be washed thoroughly. The following equipment is needed:-

- Cooled freshly boiled water or freshly drawn tap water for phase 1 & flushing
- 60ml syringe
- An extension set (if using a button)
- Feed
- Paper tissues

#### Phase 1 - Free Water (optional)

(this phase is optional but many parents report that it can help with tolerance)

- 1. Place the extension set into the button
- 2. Give 60-200ml of cooled freshly boiled water or freshly drawn tap water using the 60ml syringe
- 3. Remove extension set
- 4. Wait minimum 45 minutes

**Note:** Giving free-water at least 45 minutes before a blended feed MAY speed up gastric emptying, helping to clear any previous feed and gastric juices – preparing the stomach to receive food, as well as providing additional fluid.

#### Phase 2 – Feeding

- 1. Remove the extension set from the button and prime with cooled freshly boiled water or freshly drawn tap water
- 2. Re-fit the extension set
- 3. Draw up 60mls of feed and ensure no air has been accidentally drawn up into the syringe.
- 4. Wipe the sides of the syringe
- 5. Administer into the gastrostomy at roughly 1ml per second by gentle push on syringe plunger. *Tip:* Use the ml markers on the syringe barrel one second per ml
- 6. Repeat until all feed is finished

Aim for the blended feed to take approximately as long as the child or patient would take to eat the meal. As a guide if you were giving a full plate of food this should take roughly 20-30 minutes. It is often a good idea to give some blend and then rest for a few seconds before plunging carefully again. Make sure that your arm is well supported to avoid potential tugging on the gastrostomy tubing if you tire.

# Phase 3 – Flush

- 1. Flush using 30-60mls of cooled freshly boiled water or freshly drawn tap water to ensure the tube is cleared
- 2. Remove extension set
- 3. Close gastrostomy button cap
- 4. Wash up equipment including syringe and extension set

## **Guidelines for preparation, storage and reheating of blended feeds**

The same principles of preparing food for oral consumption apply to the preparation of BD enteral feeds.

It is recommended that patients/parents/carers complete on-line food hygiene training. This is readily available at minimal or no cost. Guidelines included here are based on national food safety guidelines. Please refer to Food Standards Agency for further information, www.food.gov.uk/food-safety.

#### **Preparation**

- Good hand washing techniques must be adopted, and hands washed prior to handling food or equipment.
- Cooking and liquidising equipment should be of a design which can be thoroughly cleaned, manufacturers' instructions on cleaning blenders should be followed.
- Surfaces on which food is prepared must be clean.
- Food must be stored correctly prior to cooking or use.
- Avoid undercooking food prior to liquidising.
- Prepare blended food as close as possible to the time of administration.
- A high powered blender (minimum 900W) is recommended for the preparation of blended diet e.g. Vitamix, Blendtec, Optimum. Basic jug blenders can cope with soft foods, but will limit choice and variety of foods offered.
- Until confident that the blender can produce a blend that is free from all lumps, it is recommended to additionally sieve the blend. For some blenders, it will be necessary to always sieve after blending with particular foods, e.g. certain types of meat, seeds, fruit with pips etc.
- Discuss with the dietitian the most appropriate liquid to achieve the correct consistency of feed in order to best meet the nutritional requirements desired.

#### Storage

If it is necessary to store food in the fridge for later administration, the following guidelines should be adopted:

- Store the food in a clean container with a lid or covered dish on the top shelf of the fridge.
- Cool food as rapidly as possible and store in the fridge as soon as is cool enough.
- Blended food should not remain at room temperature for more than 2 hours and should be discarded after this time if not used.
- Blended food that will not be used immediately may be refrigerated (below 5 °C) for up to 24 hours after preparation.
- It is preferable to have a fridge thermometer to monitor the temperature of the fridge.
- Blended food may be frozen (below -18 °C) for up to 1 month.

#### Reheating

Administering the feed at the desired temperature can be achieved in the following ways if it is not administered immediately after cooking.

#### For pre-cooked, mixed meals:

• Remove feed from fridge, transfer to a suitable container, and microwave until 'steaming hot' or 'piping hot' throughout (or if using a thermometer, a minimum of 70°C for at least 2 minutes). Stir well before serving. Allow to cool to body temperature (37°C) or below before feeding.

# For foods that would normally be eaten cold e.g. desserts, fruit blends or prepacked baby foods:

- Remove feed from fridge and stand on work surface for 30 minutes to allow this to come to room temperature (WHO 2007).
- Remove feed from fridge and place the container in a jug of hot water for no more than 10 minutes. Shake or stir before feeding.

#### **Defrosting**

- Frozen blends should be either defrosted in the fridge over night or on the defrost setting in a microwave.
- It should be reheated in accordance with the information above.
- Use defrosted feeds within 24 hours of removing from the freezer.

#### **Administering blends**

- Ensure syringes and other ancillaries used to administer blends are cleaned thoroughly in hot soapy water as per manufacturers' recommendations. Allow to air dry.
- Administer all pureed food via bolus method to prevent unnecessary hanging time.
- Flush tubes thoroughly pre and post feeds.
- Ensure stoma site and gastrostomy are clean before and after administration of feeds.

# Blenders and practicalities - what you might need

Before you invest in an expensive blender it may be worth trialling a readymade stage 1 baby pouch to see if home blended meals are tolerated and of benefit. Most of the equipment needed can be obtained easily and cheaply, but a good blender is a more expensive investment. Keep an eye out for refurbished ones for sale on Amazon, or second hand ones on eBay. Charities may be able to help fund a blender for your child. Ask your local team (Dietitian, Social Worker etc) for charity contact numbers.

#### **Equipment needed:**

• Blender: A high powered blender such as Vitamix, Blendtec, Optimum and Omni-blend will allow you to blend a greater variety of foods and claim to blend even tiny pips and seeds to a smooth paste. They are expensive industrial blenders; however other companies such as Nutri-bullet and Nutri ninja have recently produced very good economical blenders. You may need to blend for longer and be more careful when choosing foods to blend with cheaper blenders. A cheaper blender may also burn out quicker if used regularly, so may not be the best investment in the long-term.

Look at the volume of the jug or the variety of blender attachments to help you decide, as some come with very small jugs which are useful if blending for a young child, others have large volume jugs which will enable you to blend in bulk and freeze.

Check the blender's cleaning instructions as some indicate that you should not place the jug into a dish washer. In these cases, clean the blender in hot soapy water, rather than the dishwasher, to extend the longevity of the blender.

Always syringe feed from the jug rather than directly from the blender to avoid injury from the blender blades.

- Metal sieve with fine holes (approximately 1mm holes): Sieving the blended feed after blending will help to ensure all lumps are removed and reduce the chance of tube blockages. A smaller, conical shaped sieve helps reduce wastage and may be easier to use.
- **Syringes:** 60ml syringes are best to give the right pressure and hold a decent volume when giving a feed. Syringes that have a single/thin O ring (rubber washer inside the syringe), rather than thick double rings will last better and are easier to plunge. Dipping the plunger in cooking oil will help too.

- Extension sets: A right angled extension set helps to prevent blockage by catching stray lumps and is easier to plunge through.
- Freezer safe plastic **food containers**, bottles or pouches are all useful to store food in. You can buy refillable pouches on-line to pre-fill with blends for the freezer or fridge, or any leak-proof container can be used.
- **Paper towels** to place over the end of the upright syringe when you tap it to disperse the air bubbles (helps prevent the food squirting out the end).
- Pre-fill water in syringes, ready to flush the tube clean. Use freshly drawn tap water, unless instructed otherwise by your local team.
- Syringe caps, allow you to pre-fill syringes with blends and water.

## Working out how many calories are in your blended diet.

It may not be necessary to know the exact calorie content of a blended diet, especially if you look at the Eatwell Guide to help you with the nutrients and healthy balanced portion sizes, as you would when preparing a meal or snack for any person. (See earlier section on planning your child's meals).

Some parents and carers do prefer to know more about the calories in the blends, and this information can be useful if someone is either losing or gaining too much weight.

It is straight forward to work out the calories, once you get used to doing it, and there are different resources that can be used to help.

To work out the calories it is necessary to know the approximate weight /volume /handy measure of foods you are blending.

A meal with a lot of ingredients (e.g. lasagne) is more difficult to be accurate with, as you would need to know exact quantities of everything in it. In this situation you can approximate by using generic information about a certain dish, e.g. looking up the calorie content of standard lasagne.

#### **Calorie Counting Resources available.**

#### On-line:

<u>Apps:</u> My fitness pal, Fitbit, My Net Diary, Carbs and Cals (lists basic foods and plate photos of foods and meals to help assess quantities).

Search Engines: Google, Bing.

<u>Calorie Checker.nhs.uk</u> - database of calorie content of over 150,000 foods (many convenience foods and recipe dishes from UK supermarkets included).

Plus point -UK site.

#### **Written Resources:**

Websites, such as Amazon/ Waterstones list numerous books to aid with calorie counting.

Carbs and Cals (pocket counter): Chris Cheyette.

Pocket Calorie Counter: Carolyn Humphries.

## Sample BD menu and calculations

Example Toddler meal plan – 3 meals and 2 smaller snacks

Assuming: Age: 2 years Weight: 12kg

Activity level: mobile

**Estimated average requirements for energy:** 95kcals/kg = 1140kcals (NB this may vary considerably depending on lots of factors, so discuss with your dietitian who can agree a guide if you wish to plan kcal intakes).

**Sample meal plan volumes:** Breakfast – 180mls, lunch and dinner – 240mls, 2 snacks at

120mls.

12011115.	Food items/ recipe	Estimated	Estimated	Estimated kcals
	1 ood itellis/ recipe	volume	Kcals in total	per feed
		Volume	volume	per reed
Breakfast	Readibrek – 1 portion made up with 170mls full cream milk or substitute if dairy free (176kcal) 2 tsp honey (42kcal) 2 tsp nut butter (64kcal) ½ medium banana (50 kcal)	250mls	332kcals in 250mls	For 180ml feed = 239kcals (279 ÷ 250 x 150) Kcals/ml = 1.3kcal/ml
Mid morning	1 full fat fromage frais-90g/ml pot (90kcals) 2 tbsp pureed apricots and prunes - 40ml (100kcals)	130mls	190 kcals in 130ml	For 120ml snack feed = 175kcals Kcal/ml= 1.4kcal/ml
Lunch	Sandwich or toast – 2 slices bread (178kcals) Thickly spread butter -10g (72kcals) Hummus – 25g(42kcals) Puree vegetables – 50g/ml (15kcal) Olive oil – 2 tsp (81kcal) Milk or milk substitute added to correct consistency e.g.60mls (37kcal)	300mls	425kcals in 300mls	For 240mls lunch feed = 297kcal  Kcal/ml = 1.4kcal/ml

Mid afternoon	½ Avocado (138 kcal) ½ Banana (50 kcal) Milk or milk substitute – 50ml (30 kcal)	150mls	218kcals in 150mls	174kcal in 120mls Kcal/ml= 1.4 kcal/ml
Teatime/dinner	Casserole – homemade with meat and vegetables -150g (171kcal) Sweet potato – 50g (45kcal) Olive oil – 2 tsp/10ml (82kcal) 1 medjool date (61kcal) Water to dilute	300mls	419kcal in 300mls	275kcals in 240mls Kcal/ml = 1.1kcal/ml
Total	Approximately 1140kcals Total feed volume = 840mls  Fluids – estimate around 100mls/kg for the first 10kg and 50ml/kg for the second 10kg, so for 12kg = 1000ml + 100ml normal requirements (1100mls).  Could estimate 50 - 60% blends are fluids = 420 - 500mls  Would therefore need additional water flushes to make up around 600 - 680mls daily given as water flushes before and after feeds and in between as you would have drinks.  NB – many children have less volume than this.			

Please note – this is a sample meal plan and estimated volumes. It can help you think through how to plan the days feeds and calculate the estimated fluid and kcals, if you wish to, or if you are worried about your child's weight gain or intake.

The great joy of BD, however, is to puree family meals and not get too technical, unless you really need to.

# Increasing Energy Intake if your child is not gaining weight

Home blended diets are a great way to give your child all the healthy foods that will benefit their health and bowel function, but it's important that it isn't so healthy that the calorie and nutrient levels are too low.

#### **Check List:**

- \*Are portion sizes of some food groups too small? Focus on increasing protein and calories by including plenty of foods high in fat (use the Eatwell guide to see which foods in the protein and dairy food groups you could use more of). The list below will you give you more ideas of simple foods to add to blends to increase the nutritional content. Try to use foods that provide nutrients other than just 'empty' calories (so less sugar based food, such as jam or honey, and more protein rich ones, such as nut butter or cheese sauce).
- \*Are blends being over diluted? The aim is to make blends into a single to double cream consistency, so check that you aren't over diluting them with too much water. Perhaps you could blend with more nutritious fluids such as commercial tube feeds, infant formula, full fat cow's milk, any plant based milk (e.g. coconut, oat milk) rather than water.

\*Is the overall quantity of blended food given too little? Could you increase the volume?

The table below lists suggestions for nutritious foods to boost calories and protein.

There are approximately 100 calories per serving listed to give you an idea of how much to

use. Use these to get inspiration from your normal family foods.

	Household measure	Weight (g)/ Volume (mls)
Fridge		
Butter	1 tbsp.	15g
Full fat milk	11 tbsp.	165ml
Ricotta Cheese	4 tbsp.	60g
Full fat Cream cheese (eg	2 good tbsp.	35g
Philadelphia)		
Evaporated milk	5 tbsp.	75ml
Grated cheese	2 tbsp.	25g
Full fat yogurt	1 small pot	150g
Greek yogurt	2/3 pot	100g
Double cream	1 ½ tbsp.	25mls
Single cream	3 tbsp.	50mls
Hummus (check on the brand)	2 tbsp.	30g
Oat milk (Barista style – check	12 tbsp.	180mls
brand)		
Store cupboard		
Oil	1 tbsp.	15ml

Mayonnaise full fat	1 tbsp.	15g
Pesto	1 ½ tbsp.	20g
Salad cream	2 ½ tbsp.	35g
Satay sauce	2 heaped tbsp.	40g
Dried skimmed milk powder	2 tbsp.	30g
Chocolate Spread	1 heaped tbsp.	20g
Coconut cream	2 tbsp.	30ml
Coconut milk	3 tbsp.	45ml
Smooth peanut (or any nut) butter	1 heaped tbsp.	20g
Condensed milk	2 tbsp.	30g
Tahini	1 tbsp.	15g
Jam	2 heaped tbsp.	35g
Honey/Golden syrup	2 tbsp.	30g
Cacao Powder	5 tsp/ 1 ½ tbsp.	25g
Cocoa powder (unsweetened)	2 ½ tbsp.	40g
Dessert		
Ice cream	1 scoop	50g
Malt Loaf	1 slice	35g
Custard	5 heaped tbsp.	80g
Savoury		
Creamy white sauce	3 ½ tbsp.	50g
Scrambled egg (with added butter)	1 egg	60g
Quiche	1/12 family size	35g
Fruit & Nut		
Banana	1 medium	100g
Avocado	1/3 fruit or 4 tbsp.	60g
Nuts*	1 tbsp.	15g
Dried fruit* e.g. raisins	2 tbsp.	30g
Ground almonds	1 tbsp.	15g

<sup>\*</sup>Remember to sieve out pips, seeds and small lumps if you don't have a high powered blender and if you are at all concerned, sieve before you give.

# Reducing Energy Intake if your child is gaining too much weight

A good place to start is to check that your child is having a healthy balanced diet (refer to information sheets on Healthy Eating and Blended diet).

#### **Check List:**

- Is your child struggling to tolerate their milk feeds before blended diet? If this was the case, it may be that they do not need as many calories if they are now tolerating their blended diet well, so a straight, like for like calorie swap may be too much. Check with your dietitian for more guidance.
- Are portion sizes of some food groups too big? Check the information on
  portion sizes of the different nutrients in a healthy diet and getting the balance
  right. (See Healthy Eating and blended diet and the Eatwell guide to get a good
  balance of nutrients).
- Is the overall quantity of blended food given, too much? The balance of different nutrients in the blends may be good, but the amount (number of syringefuls) could be too much.
- Are you still using some of your child's original tube feeding formula to make
  up and provide fluid for the blended diet, or giving these in addition to the
  blended diet? It may not be needed anymore, or you may need to cut it down,
  but check with your dietitian if you are unsure about this. Talk to your dietitian
  about the energy requirements for your child. She may ask you to keep a food
  diary for a few typical days of what you are putting into your blends.

#### Possible fluid Options to replace formula:

- Cow's milk -full fat (if under 2 years of age) or full fat/semi skimmed.
- Plant based milks-choose milks fortified with calcium (sometimes have other vitamins and minerals in addition)
- Water /Stock -use to add fluid to main meals.
- Dilute fruit Juices
- Are you adding in fatty /sugary food items that will boost calories? Some families have concerns, when beginning the blended diet, about diluting out the calories in the blends (to make it thin enough) and their child losing weight due to an inadequate calorie intake. While this is important to take into consideration, it is sometimes easy to over fortify the blend with calorie boosting foods. Children's energy requirements are individual and if they are getting a well-balanced diet, but also gaining too much weight, it may be necessary to remove or reduce any additional energy boosters. In particular

solid fats and spreads (butter and margarine), oils (including coconut oil), dairy cream, honey, syrup, chocolate spread and sugar, as they don't provide many other valuable nutrients.

Check quantities of the fatty foods, that do contain other important nutrients, against the recommended portion guide, - e.g. avocado, full fat dairy products such as cheese, full fat yogurts, nut butters, and hummus. These are nutritious foods, but will boost the calories if portions are too generous.

#### Below is an example of making a simple change to alter the energy content of a meal.

This example is a typical breakfast for a young child, but with a few changes the energy content can easily be altered.

#### **Example: Breakfast Blend made up with tube feeding formula and banana:**

Food	Calories
1 Weetabix	58
200mls of 1kcals/ml tube feeding formula	200
Kids size banana	55
TOTAL	313 kcals

#### Breakfast Blend made up with full fat cow's milk and banana:

Food	Calories
1 Weetabix	58
200mls full fat cow's milk	130
Kids size banana	55
TOTAL	243 kcals

#### Breakfast blend made up with semi skimmed cow's milk and banana:

Food	Calories
1 Weetabix	58
200mls semi skimmed cow's milk	96
Kids size banana	55
TOTAL	209 kcals

# **Managing Problems**

## **Constipation**

You may have experienced frequent loose stools when on manufactured formula feeds and are now finding it difficult to pass stools, or vice versa. Some children can be prone to constipation on formula feeds, and a change in diet can lead to loose movements.

Often when blended feeds are commenced there can be a change in bowel movements and digestive symptoms. It is always a good idea to introduce a change of feeds slowly, to allow the digestive system to adapt. If changes are made too quickly, this can lead to discomfort and a rapid slowing down or speeding up of motility in the digestive tract.

#### Possible signs of constipation:

- Not opening your bowels at least 3 times a week
- Difficult to push out and either larger than usual, or like rabbit droppings
- The poo is often dry, hard or lumpy
- There can sometimes be watery overflow before or after passing the hard stool

#### Other signs to watch out for, especially if your child is not able to tell you what is wrong:

- Irritability/ unhappy
- Lack of energy
- Soiling
- A firm or distended tummy
- Increased reflux or vomiting

#### Tips to help manage constipation:

#### Improve fluid intake:

- When replacing formula with blends, the blends often have a much lower fluid content.
- Fibre helps produce a soft stool by acting as a sponge to absorb water, and thus soften it and helping to bulk it out. This makes it easier to pass and stimulate the bowels to work more effectively.
- Giving larger flushes after blends to help flush the tubes out thoroughly can help to improve fluid intake. However, if your child struggles with larger volumes, giving a pre meal water flush about 30-45 minutes beforehand is often well tolerated.
- If you are unsure of recommended amounts of fluids that are needed, ask your dietitian.
- Depending on the age, nutritional requirements and volume tolerance of fluids a
  variety of fluids can be administered including water, fruit juice, squash, milk shakes,
  smoothies, formula, tea or coffee (cooled to body temperature).
- Prune and pear juice have both been reported to help with constipation. Try giving either to relieve constipation or give on a regular basis to prevent constipation. Start

off with small volumes of 20-40ml, gradually increasing up to 100ml, dependent on age.

#### Improve fibre intake:

- One of the benefits of blended feeds, and one of the reasons why it is liked by families and patients, is because it allows foods rich in fibre to be administered and the ability to replicate a more normal diet.
- Increase foods rich in fibre gradually over a period of 1-2 weeks, if it is introduced too rapidly, then this can cause tummy pain and make the constipation worse or cause diarrhoea.
- Use high fibre breakfast cereals e.g. Weetabix, Ready Brek, porridge, Shreddies, Shredded Wheat.
- Include 1-2 vegetables with main meal blends. Salad vegetables can also be blended.
- Include fruit 2-3 times a day–
  - o fresh, dried, stewed or tinned to cereal
  - have a fruit-based dessert: pureed on own, with yoghurt/custard or with cake etc, dependent on energy requirements
  - o use a fruit blend for a snack
  - o prunes are particularly helpful for constipation
  - dried fruit is good as it adds a concentrated source of both fibre and calories in a small volume
  - blend with skins on of any fruits and vegetables you use, where they are edible, to increase the fibre content of the blend
- Use more beans and lentils, either on their own, or add to stews and casseroles in addition to meat. Baked beans and other tinned beans are quick without much preparation required.
- Seeds and nuts, especially linseeds, can help constipation, use 1- 3tsp/day of linseeds (just be mindful of them blending sufficiently to reduce the chance of blockages).
- Wholegrain pasta, bread and rice can be used, although these usually require additional fluid to be added and care will be needed to choose the right fluid.
- Avoid excessive amounts of cow's milk, if constipation is an issue.

#### Other tips:

- Use of fibre supplements e.g Optifibre, Hyfiber ask your dietitian.
- Use of probiotics these need to be tried for at least 4 weeks with Bifidobacterium lactis.
- Positioning if there is reduced mobility, sitting in a chair and use of a standing frame can help, as can bicycling legs to increase mobility.
- Hypotonia other types of medical conditions and some medication can slow down gut movements, and sometimes it is not possible to avoid medication to manage constipation.

# **Loose stools - things to consider:**

- If excessive amounts of fruits and vegetables and other fibre sources are not being given.
- Have antibiotics recently been prescribed?
- A trial of probiotics.

- Has a new food been introduced that they haven't had before?
- Speed of feed delivery is this too fast?
- If there is an excessive amount of fat fortification in the blends.
- Whether constipation medications need reviewing/reducing now you are giving a blended diet?

#### Reflux

Often when blended diets are started, a reduction of reflux and vomiting symptoms are reported. This is usually due to a thicker feed being administered.

Possible causes of an increase in reflux with blended diets could be:

- Constipation
- Feed volumes are too large, blend too dilute
- Speed of blend it is being pushed in too fast
- Blend is difficult to digest, eg too high in fats, due to excessive fortification

#### Tips to help manage reflux:

- gradually increase volumes given
- avoid blends being too thin
- administer blends slower
- try giving a free water bolus 30-45 minutes before blend is due
- try venting

# Managing tube blockages

The key to preventing tube blockages is the consistency of the feed. Until you are confident with your blender, sieve your blends to ensure they are lump free. The most common place for a blockage is in the extension set at the right angle, where it joins the button. This is the narrowest part of the whole feeding system; it is rare for the actual button to become blocked. It is easier to do things to prevent the blockage, than to have to change the feeding tube.

#### Prevention:

- use an industrial high powered blender
- sieve feeds
- aim for the consistency of double cream or a pouring custard consistency
- it may be helpful to flush with 5-10ml of water between syringes of feed, particularly if it is a thick blend
- ensure you flush thoroughly with a good volume of water at the end of administering blends. Children on blended feeds, often tolerate larger water flushes after feeds, aiming for 30-60ml water flushes

#### Clearing blockages:

try flushing with warm water

- use a push/pause and /or push /pull technique on the syringe to try to dislodge the blockage
- massage the tube if you can see the blockage
- remove the extension set from button, then extra pressure can be exerted on the syringe

# What to do if your child is ill

Illness should be treated the same as with any child who is eating normally.

#### If your child has a sickness bug /diarrhoea:

Most children wouldn't usually feel like eating, and would probably not keep their food down. Initially omit the blended diet if sickness/diarrhoea is present, <u>but always</u> continue to give plenty of fluid (water or Dioralyte) in its place to keep them well hydrated.

Water /Dioralyte can be given 2-3 hourly in the daytime, either as a gravity bolus (if tolerated) or via a feeding pump. Ask your dietitian if you need some guidance with volumes.

Once vomiting/ loose stools has subsided, introduce blends gradually using smaller volumes, and foods that are plain and easy to digest. Take care with large amounts of fruit/veg/smoothies. You may also need to still give some extra fluid at this stage.

Omit the high fat calorie boosters when reintroducing blended diet following illness, as these may be too rich and sickly. If normally needed, add them back in when your child has recovered.

If your child is having difficulties with tolerating their diet following illness, contact your dietitian

**Coughs and Colds** - carry on with a usual healthy blended diet, but be aware that you may just need to decrease amounts if your child is struggling with the volume (excess mucous production that comes with a cold may sit in the stomach, affecting volume tolerance and digestion).

Extra fluid flushes may also be needed, if volumes of blend are decreased.

**Admission to Hospital:** Check hospital re: local policy around feeding a child on a blended diet.

# **Travelling with Blended Diet - Advice from a parent, Tania Beale**

There are as many ways of doing Blended Diet on holiday as there are of doing it at home. How we do it depends what kind of holiday we are having. We have blended in tents, holiday cottages, and hotels, within the U.K. and overseas. There is always a way! There are two main challenges on holidays:

- getting there
- being there.

When on holiday within the U.K., my own personal preference is to take a batch of frozen blends with me, enough for the holiday, so I don't need to think about anything more than simply taking blends out of the freezer the night before and defrosting then in the fridge. However, this does depend on having enough freezer space both at home and on holiday, and being confident that we can keep all the blends safely frozen for the journey. We holiday with friends who also blend, so we bought a camping freezer between us, which will run from the car engine as well as a standard socket. This means we can bring frozen blends camping with us and keep them frozen until needed, just as we do at home. When staying in holiday cottages I pack the blends at the very last minute. If not using the freezer to transport, we use a standard cool box. I put the blends in an insulated bag with cool packs, then put the cool bag into a cool box, packing every inch of space with towels, sometimes adding frozen vegetables as additional cool packs. Fitting the lid snugly, the cool box then travels as far away from the heat vents in the vehicle as possible, and is not opened at all until we reach our destination. A freezer thermometer (because my friend is a scientist!) has shown that blends have stayed at a safe frozen temperature despite being out of the freezer for 8 hours this way; I haven't tried for longer. The key is to fill all the space in the cool box as extra insulation, and to not open the cool box at all until the blends can be put back into a freezer.

Whilst bringing frozen blends works for us, I know many families prefer to blend fresh. If travelling overseas, then the journey length makes carrying frozen blends impractical. Bringing the blender away means having the ability to blend meal by meal, or however suits you best, and enables you to adjust your child's blends day by day according to need. For example, when we took my daughter to Florida, she could only tolerate very small feeds in the heat of the day, but needed a lot of extra water.

Within the U.K., blending away from home is easy - plug in, add food, blend! We have blended in campsites and hotels; hotels I find harder than campsites as washing up in a hotel bathroom isn't so easy. An electric cool box makes hotel stays easier as we can keep fresh food chilled ready for blending, blend at a civilised hour not waking our neighbours, and store blends overnight. If camping, we now take our freezer, a camp fridge, and a microwave, but it is perfectly possible to blend safely without these, provided food is stored at a safe temperature before and after blending.

When travelling overseas, the distance makes taking frozen blends impractical. A socket converter will be enough to make the blender work in Europe, however if travelling to the USA you will also need a transformer as the voltage is different. You should be aware that the warranty on some blenders is invalid if the blender is taken out of the country.

Airlines should give you additional baggage allowances for medical equipment, including the blender, however when we flew to the USA, we bought a cheap blender over there along with a sieve. A more expensive option, which friends have used, is to preorder commercially prepared blends from either Functional Formularies or real food blends: https://www.functionalformularies.com/

#### https://www.realfoodblends.com/ Real Food Blends

These are shelf stable, long life, pre-prepared meals (not formula) designed for tube feeds. Expensive, but avoiding the need to blend or store food.

With longer distance travel, meals on the go can be a challenge, especially when flying. You will need a doctor's letter in order to take blends through security, and you should be prepared for the need to taste them to prove they are food, not explosives. Some people prefer to buy baby food pouches once they are through security, or to rely on powders such as Huel (https://uk.huel.com/), or shakeable or crushable dry foods.

Some suggestions collected from friends for 'no-blend' meals on the go. These are not necessarily for every day but useful when travelling, if out longer than planned or when an unfortunately timed spasm sends a full blend onto the floor:

- Breakfast drinks lots of these around these days.
- Tinned or fresh smooth soup with baby rice or a root veg baby pouch.
- Yoghurt, ripe mashed banana or a fruit smoothie, baby cereal.
- Custard pots.
- Soya pudding pots.
- Baby rusks in hot milk or water left to stand to soften.
- Stage one baby food jars or pouches.

Wherever we go, I have a few staples which travel with me.

- A clean empty bottle for mixing and shaking.
- A fork.
- A new spare syringe and extension set.
- A small bottle of oil.
- A jar of nut butter (smooth) or finely ground almonds (Sunbutter or tahini are nut free alternatives).
- Baby cereal.
- Small long life cartons of fruit juice.
- Baby food pouches.

The food tends to be used reasonably often, but if I have not used it within a month then I do make sure to check expiry dates and rotate as necessary.

## **Top Tips from Parents**

- Put your liquid in the blender before the food items
- Double blending can help if you have lots of residue left in your blend
- Keep blending for longer if you are not achieving the correct consistency keep going until its smooth.
- Investing in a good quality blender will help you.
- Choosing a blender with both smaller and larger jugs can help flexibility of blending both single meals and batch meals.
- When out and about investing in 'pouches to go' can be useful.
- Look on the labels of desserts and other items you can find some really energy dense ones if you need extra energy.
- Try out some of the blends yourself first to get an idea of flavours, texture.
- Look at your own diet and other children in the family it's easier to utilise these foods rather than making separate.
- Use an ice cube tray to freeze and store food in bags.
- When starting syringe slowly at first to get an idea of how well your child tolerates the meal.
- Giving blends slowly can increase the volume your child may tolerate.
- Be careful not to plunge too quickly this can cause some buttons valves to break and leak.
- Have a few 'go to' recipes for when you are short on time that are easy to prepare be kind to yourself!
- Add nut butter, avocado, chocolate/hazelnut spread for extra calories and low volume.
- Some blenders do not advise you put the jug into a dish washer.
- Work on getting the right consistency.
- Be kind to your hands a really thick blend may make them sore.
- You can use an old extension set, as long as it's clean, to suck up blends from a bowl into a syringe just snip the end off, attach to the syringe and dip into the blend.
- Try different milks if your child is dairy free coconut milk is great for thinning a blend; oat milk is good for cooking with
- If using baby food pouches for convenience when out look at the kcals first. The ones with added coconut tend to be higher.
- Slightly warming the blend can make it easier to administer and can require less liquid to thin it out.

# Links to useful support and information

The following websites can be a useful resource for getting started and are based on personal experiences of families already established with blended diets:

- <a href="https://renacahill.wixsite.com/blended-diet-online/blended-diet-tube-fed-children-uk">https://renacahill.wixsite.com/blended-diet-online/blended-diet-tube-fed-children-uk</a>
  - A website set up by a grandmother who cares for her grandson who started her journey with blended diets when there were limited resources and information available on blended diets and would like to share her wealth of information that she has acquired to support other families
- https://www.facebook.com/groups/278702472183551/?fref=nf
   Predominantly a group where parents and carers share their tips and experiences.
   Health professionals also use this group both as a resource and also to provide advice or to clarify questions raised by families
- http://www.foodfortubies.org/
  - A blended diet resource providing useful information for parents, carers, patients and professionals. An American website, so units different to the UK, eg cups used in recipes
- <a href="https://www.brainstars.co.uk/blended-diet-overview">https://www.brainstars.co.uk/blended-diet-overview</a>
   A charity set up to provide support to families with brain injuries. There is a section on getting started with blended diets.
- https://skiggle.co.uk
  - A website established to share excess supplies when perhaps your child may not require all of their items provided on deliveries any more if you have progressed off the pump. E.g. if you have an excess of giving sets, you can advertise them on here for another family to collect to reduce wastage.

#### **Guidance on food safety:**

https://www.nhs.uk/live-well/eat-well/how-to-store-food-and-leftovers/https://www.nhs.uk/live-well/eat-well/how-to-prepare-and-cook-food-safely/https://www.nhs.uk/live-well/eat-well/10-ways-to-prevent-food-poisoning/https:/food.gov.uk/food-safety

#### **Instagram:**

 Natural tube feeding - a registered dietitian in Canada posts useful advice and recipes to help get started with blended diets

#### **Books**

- Complete tube feeding: Everything you need to know about tube feeding, tube nutrition and blended diet by Eric Aadhaar O' Gorman
- Homemade blended formula by Marshe Dunn Klein

# **Your Local Contacts:**

Dietitian	
Community Children's Nurse	
Home Delivery	
Other	