



Metabolic.ie

National Centre for Inherited Metabolic Disorders

WEANING YOUR BABY



ON A GALACTOSAEMIA DIET

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INTRODUCTION

Galactosaemia is a rare, inherited, metabolic disorder.

Galactose is a sugar found in lactose, it is found in all animal milks. People with galactosaemia lack the enzyme needed to break down galactose. This in turn causes too much galactose to build up in the blood.

The treatment for galactosaemia is a low galactose diet. The main source of galactose is lactose, therefore lactose has to be excluded from the diet. It is recommend that dietary treatment is for life.

Lactose is found in 4 main types of food:

1. Cow's milk
2. Products made from cow's milk
3. Any mammalian milk including breast milk, goat's milk or sheep's milk
4. Manufactured foods which contain cow's or other mammalian milk

This booklet provides you with practical tips and suggestions for weaning on a galactosaemia diet.

BEGINNING WEANING



Weaning should begin when your baby is between 4-6 months. If your baby is premature weaning maybe delayed to between 5-7 months from birth.

Weaning is the process of gradually introducing solid food in addition to your babies soya infant formula.

Weaning is a step by step process, allowing you and your baby time to get used to each stage before moving on to the next.

Introducing solid food before 4 months (17 weeks) is not recommended for nutritional and developmental needs. It should not be delayed beyond 6 months as the soya infant milk alone does not provide enough nutrients and energy to meet your baby's needs. Remember that all babies are different. Some babies may be ready to wean sooner than others.

Signs of Readiness to Wean

Watching others with interest when they are eating

Putting toys and other objects in their mouth

Chewing fists

Being hungry between milk feeds even when larger milk feeds have been offered

Sitting with support and has good neck control

GETTING STARTED

- The first stage of weaning is to allow your baby to get used to taking food from a spoon. For this reason use a small, shallow plastic spoon as this makes the process easier



- Have a good supply of bibs to hand
- Allow your baby to make a mess
- Ensure your baby is well supported in a sitting position - a car seat can be useful to begin with and then progress to a high chair as soon as your baby can manage to sit unsupported



- Go at your baby's pace — don't rush!
- When introducing solids choose a time when both you and your baby are relaxed
- If the food is rejected after a few attempts just try again the next day. Your baby has to adjust from sucking to get milk, to taking food from a spoon, this can be confusing and may take a bit of time
- Do not add any food e.g. baby rice/baby rusk to the soya infant milk in the bottle
- Do not add sugar or salt to your baby's food
- Try to offer a variety of foods to help your baby develop different tastes
- Enjoy the experience!



FIRST TASTES

Now is the time to introduce vegetables and fruit into your baby's diet. This is 'window of opportunity' where your baby is open to accept a variety of foods with different textures and flavours.

It is important for your baby to develop a taste for vegetables and fruit because eating habits learned in early childhood are likely to continue through life.



WHAT TO EXPECT

Your baby will probably make some odd facial expressions when trying a new taste for the first time. Don't be put off by this as it does not necessarily mean babies don't like it. It is simply because they are surprised by the unfamiliar taste.



To help your baby to learn, keep offering the new flavour over a few weeks. If your baby does not accept a new food, **offer it on at least 10 occasions** several days apart before deciding that your baby does not like it. You could try offering this food again after a few weeks.



WHAT TO FEED FIRST

Start by giving solid food at one feed during the day. Your child may only take 1-2 teaspoons to begin with. You can gradually build up the amount from there.

Suitable first foods offered are vegetables and fruit.

Babies have a natural desire for sweet tastes; therefore it is best practice to introduce savoury purees first.

Vegetable Purees

All vegetables can be pureed and offered to your baby. Some vegetables can be made into a puree easier than others. Some good first options include carrots, sweet or regular potatoes, turnip, parsnips, butternut squash, cauliflower, courgette and broccoli.

Fruit Purees

Pureed fruit can be offered also, some examples that puree easily include apples, pears, peaches, nectarines, mangos and melon.

Other Foods

Dairy free cereals such as baby rice can be given as a first food or added to pureed fruit or vegetables to thicken them.

How to make pureed vegetables & fruit

Cook vegetable or fruit until tender and soft.

Some ripe fruits need no cooking. Liquidise or pass through a metal sieve with a fork to remove all small lumps and form a smooth texture. Water or soya infant formula can be added to the puree to make it more runny.



WHAT TO FEED FIRST

Once your baby is managing to take a full spoon-feed (5-10 teaspoons), you can introduce soft, well cooked meat, poultry, egg and fish. Peas, beans and lentils can be pureed and mixed with vegetables.

Once the first spoon feed is established a second and then a third spoon feed can be introduced in the day.

As your baby starts to eat more solid foods , you can expect the amount of soya infant formula to reduce. Aim for 500-600mls (17-20oz) per day.

GLUTEN

Gluten is a protein found in wheat, rye, barley and oats. E.g. bread, pasta, crackers and cereals.

The best time to introduce gluten in your baby's diet is after 17 weeks and before 30 weeks to decrease the risk of developing coeliac disease and type 1 diabetes later in life.

Start with a very small amounts of gluten-containing foods and gradually increase.

Week 1	Week 2	Week 3	Week 4
Offer a small amount every 3 days e.g. ½ slice bread, 1-2 spoons of cereal or 2-3 pasta shapes	Offer a small amount every 2 days	Offer a small amount every day	Offer daily at more than 1 meal

IRON & CALCIUM

IRON

The iron stores that your baby is born with is almost depleted at 6 months so it is extremely important that the weaning diet includes enough iron-containing foods to prevent iron-deficiency anaemia.

Red meat which includes beef, lamb, mutton, pork are very good sources of iron. Other useful iron rich foods include eggs, beans, cereals with added iron and dark leafy green vegetables.



CALCIUM

Soya infant formula is your baby's main source of calcium. As your baby starts to take less of their infant soya milk it is important to introduce calcium rich foods as spoon feeds.

Once your baby turns 1 year old they should change from soya infant formula to soya milk, fortified with calcium.

Calcium is important in building strong teeth and bones.

Good sources of calcium suitable in the galactosaemia weaning diet include:

- Soya infant formula
- Soya yoghurt enriched with calcium
- Soya custard enriched with calcium
- Suitable cheeses (ask your dietitian)
- Calcium fortified cereals e.g. Ready Brek
- Soya milk enriched with calcium

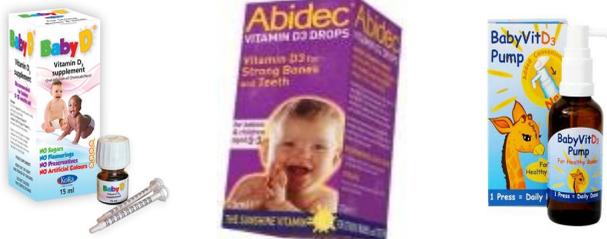


VITAMIN D

All infants in Ireland are advised to take (5µg) of vitamin D3 every day, for the first year of life. This is no different for your baby. Additional vitamins and minerals are not required.

There are a number of suitable infant vitamin D3 products available to buy in Ireland. The number of drops or amount of liquid required daily is different for each product. Read the product instructions carefully and ask your pharmacist for advice if needed. **Only one dose per day should be given.**

Vitamin D helps your baby use calcium to build and maintain strong teeth and bones.



MEDICATIONS

Medications may contain lactose as a filling or bulking agent. Ask your doctor or pharmacist to check this for you. Capsules and syrups are not usually a problem but still need to be checked for added lactose.

Please note information about lactose content does not appear on drug labels unless large quantities are present.

TEETH

- Soya infant formula and water (cooled boiled water up to 1 year) are the most tooth friendly drinks.
- Transitioning from a bottle to a beaker helps minimise tooth decay.
- Sugary drinks e.g. squash, fizzy drinks and juices and sugary snacks e.g. biscuits, sweets will damage your baby's teeth.
- Teeth should be cleaned gently with a soft toothbrush and water daily
- Flouride toothpaste is not suitable for children under the age of 2. After 2 years, a pea-sized amount of toothpaste can be used.
- Do not allow your baby to suck on a bottle continuously overnight as this can cause tooth decay.



INTRODUCING THE BEAKER

At about 6 months it is time to start thinking about introducing your baby to a beaker. By the time your baby has reached their first birthday he/she should be taking their infant soya formula or soya milk from a cup or beaker.



The type of beaker used should be free flowing so that when your baby gently sucks at the spout liquid comes out easily. The beaker should also have a handle on both sides so the your baby can hold it steady using both hands.

At first your baby will find it difficult to drink from a beaker but with some practice (at every meal) they will quickly learn to drink successfully from it.

Spills and accidents will occur, but this is all part of the learning process. Remain patient and positive.

What Should You Put in the Beaker

Soya infant Formula

Cool boiled water

Avoid giving juice of any type to your baby, getting them used to drinking water at this early age will get them into good habits for life. It will also reduce their risk of developing tooth decay

6-9 MONTHS

Once your baby becomes used to pureed foods, its time to move on to stronger flavours and thicker textures.

Soft mashed foods containing soft lumps can now be introduced. It may take some time for your baby to get used to different textures, so be patient.

Soft finger foods can be given from 6-9 months of age. Ensure your baby is fully supported and in an upright position. Never leave your baby alone when eating in case of choking.

Give your baby a spoon with a thick handle to grasp while you are spoon feeding with another spoon.

Suitable Finger foods:

Soft ripe vegetables and fruits e.g. parboiled carrots, sweet potato, parsnip sticks, broccoli and cauliflower florets, melon, orange, apple, pear, peach, kiwi, batons of suitable cheese*.

Rusks, mini rice cakes, toast fingers, mini bread sticks

*Ask your dietitian for a list of suitable cheeses

Sample Meal Plan:

Breakfast

Dairy free cereal e.g. Weetabix, Readybrek, porridge made with soya infant formula

Soya Infant Formula from a beaker/bottle

Mid – morning

Finger foods &/or soya yoghurt/ custard

Lunch

Mashed potato/rice/pasta/with vegetables and meat/poultry/fish

Soya Infant formula from a beaker/bottle

Mid afternoon

Finger foods &/ or suitable cheese

Teatime

As per lunchtime meal

Soya Infant formula from a beaker/bottle

Supper

Soya Infant formula from a beaker/bottle

REMEMBER!

Offer soya infant formula from a beaker/sippy cup

9-12 MONTHS

Now is the time to further increase the variety of foods and tastes.

Introduce chunky mashed texture moving onto chopped, bite size pieces.

Aim to use suitable family foods for your baby, ensuring there is no added salt or sugar.

Encourage self feeding where possible.

If your baby is hungry provide healthy finger foods between meals (see list below)



REMEMBER!

Offer soya infant formula from a beaker/sippy cup

Suitable Finger foods:

Continue to offer soft ripe vegetables and fruits. Include suitable cheese*, soft cooked pasta, pancakes*, toast fingers*, mini breadsticks*, scones*, garlic bread*, rusks, mini rice cakes.

* Check ingredients for lactose

Sample Meal Plan:

Breakfast

Dairy free cereal e.g. Weetabix, Readybrek, porridge made with soya infant formula or mashed fruit with soya yoghurt, fingers of toast with dairy free spread

Soya Infant Formula from a beaker/bottle

Mid – morning

Soya Infant Formula from a beaker /bottle & offer finger food

Lunch

Minced or chopped pasta, couscous, rice, potatoes with vegetables and meat/poultry/ fish/egg. Offer finger foods. Soya Infant Formula from a beaker/bottle.

Mid afternoon

Soya Infant formula from a beaker /bottle & finger food

Teatime

As per lunchtime meal, offer finger foods

Soya Infant Formula from a beaker/bottle

Supper

Soya Infant formula from a beaker/bottle

	BIRTH to 4 MONTHS	4 to 6 MONTHS
YOUR BABY CAN ...	<ul style="list-style-type: none"> Suck and swallow liquids Push tongue out 	<ul style="list-style-type: none"> Sit with support Hold head steady Keep food in mouth and swallow
FOOD OPTIONS	Avoid all solid food until at least 17 weeks.	<ul style="list-style-type: none"> Pureed vegetables Pureed fruit Dairy free baby cereals e.g. baby rice
FOOD PREPERATION		<ul style="list-style-type: none"> Mix pureed fruit , vegetables and suitable baby cereals with water or soya infant formula.
DRINKS	<ul style="list-style-type: none"> Soya Infant Formula Feed to appetite 	<ul style="list-style-type: none"> Soya Infant Formula Feed to appetite Between feeds, cool boiled water if warm weather or constipated
TEXTURE		<ul style="list-style-type: none"> Smooth, thin puree with no lumps

6 to 7 MONTHS	7 to 9 MONTHS	9 to 12 MONTHS
<ul style="list-style-type: none"> Sit without support Begin to chew food 	<ul style="list-style-type: none"> Use a cup with help Grasp and hold onto things 	<ul style="list-style-type: none"> Grasp and hold onto things Begin to self-feed
<ul style="list-style-type: none"> Thick pureed vegetables & fruit Cereals such as weetabix, readybrek, baby rice Thick puree meat, fish, & poultry 	<ul style="list-style-type: none"> Starting with mashed vegetables/fruit/meat/fish/poultry/pulses/egg Finger food of well cooked vegetables e.g. broccoli floret, carrot batons Suitable cheese cubes <p>(Ask your dietitian for a list of suitable cheese)</p>	<ul style="list-style-type: none"> Cooked chopped vegetables Chopped fruits Soft cooked meats e.g. chicken, turkey Soft cooked pasta Fingers of buttered bread or toast Rice cakes
<ul style="list-style-type: none"> Don't add salt or sugar to any foods Dairy free baby rice can be added to foods to make a thicker consistency 	<ul style="list-style-type: none"> Try to cut soft fruit and vegetables into batons as they are easier for your baby to hold 	<ul style="list-style-type: none"> Offer finger foods at each meal Allow baby to hold own spoon whilst feeding them
<ul style="list-style-type: none"> Start offering your baby soya infant formula from a small sippy cup Water 	<ul style="list-style-type: none"> Continue to offer your baby soya infant formula from a small sippy cup Water 	<ul style="list-style-type: none"> Continue to offer your baby soya infant formula from a small sippy cup Water
<ul style="list-style-type: none"> Thicker puree 	<ul style="list-style-type: none"> Minced/mashed with soft lumps Soft finger food 	<ul style="list-style-type: none"> Chopped up foods Harder finger foods

READING FOOD LABELS

The following are a list of ingredients that contain milk and are therefore **NOT** suitable for patients with Galactosaemia:

Milk	Skimmed milk
Skimmed milk powder	Yoghurt
Butter	Cream
Lactose	Milk solids
Milk protein	Milk fat
Non-fat milk solids	Separate milk solids
Whey	Hydrolysed whey protein
Whey syrup sweetener	Hydrolysed whey sugar
Vegetarian whey	Casein
Caseinates	Hydrolysed casein
Sodium caseinates	Calcium caseinates
Cheese powder	Buttermilk
Milk fat	Animal fat
Artificial cream	Lactose free products
Margarine (unless dairy free)	
Cheese (unless known to be suitable)	
Shortening containing skimmed milk or whey	
Artificial sweeteners called tagatose and lactitol	

**We have a wallet sized card
with this information**

Ask your dietitian for a copy



LACTOSE FREE
PRODUCTS ARE
NOT SUITABLE AS
THEY CONTAIN A
SOURCE OF
GALACTOSE

READING FOOD LABELS

Products which state they have been “made in a factory where milk products are made” or “may contain traces of milk” **are safe** to use. Provided there is no milk or milk derivative in the ingredient list.

Some ingredients sound as though they contain lactose but they do not contain lactose– these foods **ARE** suitable

Lactic Acid E270	Stearoyl lactylates
Sodium lactate E325	Potassium lactate E325
Calcium lactate E327	Lysacin
Monosodium glutamate	Cocoa butter
Glucona delta lactone	Ghee
Butter oil	Butter fat

WARNING:

Even if a manufactured food is lactose free the first time you buy it, always recheck the label the next time to make sure it still is lactose free. Sometimes the manufacturer’s change the ingredients they add to food.

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February 2016

