

Department of Dermatology, Allergy and Skin Surgery

Patient Information – Milk Free Diet for children

Milk free diet

Your child has been advised to follow a milk free diet. Your child may have an allergy or intolerance to cow's milk proteins. Many children will grow out of this as they get older.

Reading labels

All pre-packaged food bought in the U.K. is covered by European wide food labelling legislation. Manufacturers must list all ingredients and identify any allergens, including milk in the ingredient list, these should be in **bold or highlighted**. Food items that do not have labels or are sold loose may contain milk or milk products e.g. bakery, delicatessen items and should be avoided. Milk and it's derivatives are present in many manufactured foods (see list below).

Avoid any foods that contain the following:

Dairy Products	Ingredients
Butter, butter oil, buttermilk, cheese	Casein (curds), caseinates, hydrolysed casein, calcium of sodium caseinate
Cow's milk	Cheese powder
Condensed milk	Galactose
Cream, artificial cream	Lactalbumin
Crème Fraiche	Lactoferrin
Custard	Lactoglobulin
Evaporated milk	Lactose* (milk sugar)
Fromage frais	Milk powder, milk protein, modified milk
Ghee	Nisin preparation
Ice cream	Rennet
Margarine	Whey, whey syrup, hydrolysed whey
Quark Sour cream, Yogurt	Whey protein

Lactose* Please discuss with your Dietitian to the extent of avoidance. It must be stated on the label if the food contains additives derived from milk.

Always check the label and the ingredients list as manufacturers may change their ingredients.

Safe & compassionate care,

every time

Milk substitutes

In infants and young children cow's milk and dairy foods form a major part of their daily nutritional intake, they are rich sources of energy, protein, calcium, iodine, vitamin A and riboflavin.

If milk and dairy foods are excluded from the diet, a substitute will be needed to provide the nutrition your child needs for healthy growth and development.

Milks to Avoid:

Avoid milks from other four legged animals such as **Goat's, Sheep's, Buffalo's** milk as these will have a similar proteins to cow's milk.

Avoid **Lactose free** milks and formula's as these all contain cow's milk protein.

Avoid **Soya formula** under 6 months of age due to the phytoestrogen content. Reactions to soya is common in delayed type reactions to cow's milk allergy, this is less common in immediate type reactions.

Avoid **Rice milk** under 4½ years due to its naturally occurring arsenic content. (Department of Health 2010).

Suitable milk alternatives for an infant:

Breast feeding: Breast feeding provides the best nutrition for your baby. If your baby is reacting to cow's milk protein through your breast milk you will also need to follow a milk free diet and supplement your diet with calcium and vitamin D. (At least 1000mg of calcium and 10mcg of vitamin D).

Formulas:

Hypoallergenic formulas

Infants who are solely infant formula fed or who have some infant formula in addition to breast milk will need their milk to be changed to a low allergy infant formula. Most babies will be prescribed an extensively hydrolysed formula (Aptamil Pepti, Althera, Nutramigen LGG, Similac Alimentum). These formulas still contain cow's milk protein, but the proteins have been broken down, therefore the body is unlikely to react to them. Occasionally babies also react to these formulas; in this case they may be given an Amino Acid formula (Alfamino, Nutramigen Puramino, Neocate LCP, Neocate Syneo). These formulae are not based on cow's milk and the protein is completely broken down.

Children should stay on a milk free formula as a main milk drink until they are 1 year old of age. If your child does not tolerate cow's milk or soya at 1 year of age this may need to be continued for a longer period of time.

Suitable milk alternatives for older children:

There are many alternative dairy free milks available in supermarkets and health food shops e.g. soya, oat, coconut, pea, hemp, and nut milks. These can be used in cooking or in cereal from 6 months of age providing the child has not previously reacted to these foods. Choose a milk which has been fortified with calcium.

These milks may be used in older children as a main source of milk but many are low in calories, protein, vitamin and minerals.

If advised you can trial calcium enriched soya milk in cooking and on cereal from 6 months of age. Alpro 1-3 years soya milk is nutritionally appropriate as a sole milk source from twelve months of age. Please note with the exception of Alpro 1-3 years soya milk, alternative dairy milks should be not used under two years as main milk source but can be used to prepare cereal and family meals.

How much substitute to give to meet calcium requirements?

Under one year of age:

Most babies will need to consume 600ml (20floz/1pint) of formula a day to meet their nutritional requirements.

One to three years of age:

Calcium requirements are reduced at this age. Usually 300ml (10floz/1/2 pint) of a fortified milk substitute should be enough. Although more is usually needed if they are still on a formula milk as these have less calcium than supermarket milk alternatives. Less milk is required if the child is having other calcium sources.

Four to ten years of age:

Calcium requirements are increased at this age. Usually 600ml (20floz/1pint) of fortified milk substitute is required. Less milk is required if the child is having other calcium sources.

If you are concerned that your child may not be meeting their calcium requirements please see BDA calcium fact sheet for more information:

<https://www.bda.uk.com/foodfacts/Calcium.pdf>

Vitamin and minerals supplements : The government recommends the following:

Babies under 1 year of age:

Breast fed babies under 6 months should be supplemented with vitamin D (8.5-10mcg vitamin D/day)

Breast fed babies 6 months -1 year should be supplemented with a vitamin supplement containing vitamins A, C and D every day (10mcg vitamin D per day).

Formula fed infants receiving less than 500ml of formula per day should be supplemented with a vitamin supplement containing vitamins A, C and D every day (10mcg vitamin D per day).

Children 1-5 years

Children should take a vitamin supplement containing vitamins A, C and D every day (10mcg vitamin D per day).

Everyone over 5 years:

Everyone should consider taking a vitamin D supplement of 10mcg per day especially during winter months.

Breast feeding mothers:

Breast feeding mothers should take a vitamin D supplement (10mcg/day). If they are following a milk free diet they will also need to take a calcium supplement (1000mg/day).

Iodine:

Milk and dairy products are the main sources of iodine. Try to include fish and eggs regularly as these are rich sources. If your child cannot eat eggs or fish try to find a milk alternative which is fortified with iodine. See BDA iodine fact sheet for more information: <https://www.bda.uk.com/foodfacts/iodine.pdf>

Foods Allowed and to Avoid - remember to check labels

Food	Allowed	Avoid/ Check label
Meat, Fish and Alternatives	Plain fresh or frozen meats including, chicken, turkey, beef, pork, lamb, liver, kidney, bacon. All fish/ shellfish fresh, frozen, tinned. Soya mince Tofu Lentils/ beans	Burgers, sausages, meat balls, meat loaf, pies, quiche, luncheon meat, sliced ham, tinned meat, pate and meat paste. Breaded/ battered products, e.g. nuggets, fish fingers. Fish in sauces. Ready meals. Check Quorn products.
Milk and dairy products	Substitute as recommended. Milk free formula Soya, oat, nut, coconut, pea, hemp milk (choose calcium enriched). Soya/ coconut/ nut based cheese for children and infants over 6 months. Soya/ coconut/ nut based yogurts Soya/ coconut ice creams Soya/ coconut/ oat/ rice creams	Milk – cow, goat, sheep and buffalo. Dried, evaporated and condensed milk. Cream, coffee creamers. Lactose free milk All cheese – including hard, cream, cottage, curd, processed cheeses and cheese spreads. Paneer. Rice cheese (contains milk protein)
Eggs	Boiled, poached, fried	Yorkshire pudding, quiche, scotch eggs, omelette and scrambled egg
Bread	Wholemeal, granary and white bread.	Milk bread, bagels, crumpets, muffins, croissants and brioche. Naan bread, chapattis made with fat. Pizza Breadsticks, crispbread crackers.
Cereals	Wheat, rye, barley, oats, rice, maize, corn, sago, tapioca, semolina, arrowroot, buckwheat. Original Ready Brek, Cornflakes, Frosties, Rice Krispies, Weetabix. Custard powder, arrowroot, cornflour. Spaghetti and other plain boiled pasta. Milk free baby cereals	Chocolate flavoured cereals, and muesli type cereal. Baby cereals containing milk. Pasta in sauce Pastry Pizza

Foods Allowed and to Avoid - remember to check labels

Food	Allowed	Avoid/ Check label
Biscuits and cakes	Biscuits, rusks and crackers. Checked as milk free. Homemade cakes, biscuits, crackers made with milk free ingredients. Manufactured cakes and biscuits if known to be milk free e.g. Rich Tea, Party Rings, Ginger Nut *check ingredients.	All other biscuits, crackers cakes and doughnuts.
Fruit and vegetables	All fresh, frozen, tinned or dried fruit, vegetables and pulses. Dhal and lentils. Baked beans. All plain salad and vegetables. Plain potato, mashed potato with milk free margarine and milk substitute.	Some vegetables tinned in sauce e.g. coleslaw, potato salad. Potato croquettes, instant potato, potato waffles, potato shapes. Ordinary mashed potato, chips and crisps (check flavourings) Fruit pie fillings, fruit fools, fruit mousses.
Fats and oils	Milk free margarine, supermarket own brand milk free margarine, Tomor, Flora dairy free, Pure, Vitalite Dairy Free, Koko dairy free Lard and suet. Oils e.g. sunflower oil, corn oil, olive, rapeseed.	Butter, ordinary margarine/ spread, ghee.
Desserts	Homemade puddings e.g. rice, semolina, custard made with milk substitute. Pies, crumbles, sponges made with milk free ingredients. Fresh fruit, tinned fruit in juice or syrup. Jelly. Soya yoghurts, ice cream, cream, soya desserts if recommended by Dietitian for children and infants over 6 months. Coconut milk yoghurts, cream and ice cream.	Fromage frais, yoghurt, ice cream, custard, blancmange. Milk puddings, pancakes. Dessert mixes. Pies, crumbles, sponges, pastries, unless known to be milk free.

Foods Allowed and to Avoid - remember to check labels

Food	Allowed	Avoid/ Check label
Sugar and preserves	Jam, marmalade, honey (over 1 year old). Sugar, golden syrup, treacle. Marmite, Bovril.	Lemon curd, chocolate spread.
Confectionary	Boiled and jelly sweets, pastilles, lollies. Dairy free chocolate (check the label)	Chocolate, white, milk and plain (Plain chocolate may contain some traces). Fudge, toffee, butterscotch, fruit chews. Butter or toffee popcorn.
Drinks	Water, mineral water, fruit juice, fruit squash, fizzy drinks. Tea, coffee and cocoa made with milk substitute. 'Milkshake' made with milk substitute and fresh fruit or milkshake powder/syrup.	Instant white tea, instant hot chocolate, malted milk drinks e.g. Ovaltine, Horlicks. Milkshake and some milkshake powders/syrups.
Miscellaneous	Home made soups, sauces, tomato ketchup using milk free ingredients. Tomato based pasta sauces, sweet and sour sauces. Sauces made with milk substitute. Salt, pepper, herbs, spices, mustard, baking powder. Yeast, food essences, food colourings, gravy mixes, stock cubes, chutneys. Oil based salad dressings. Sugar	Tinned or powder soups, ready meals, sauces, chutneys and condiments. Coated nuts, dry roasted nuts. Some artificial sweetener powders. Sauces made with milk.
Medicines		Check all medicines and tablets are milk free. Certain antibiotic syrups contain lactose. If in doubt ask your doctor or pharmacist.

Recipes

Fruit Smoothie (1 serving)

½ banana or 60 g (2 oz) fruit e.g. strawberries, raspberries, apricots or milkshake syrup

200 mls (7 fl oz) milk substitute

Blend ingredients together in liquidiser until smooth.

Pour into glass.

Milk Free Rice Pudding (2 servings)

3 rounded tablespoons or 30 g (1 oz) flaked rice

300 mls (10 fl oz) milk substitute (sweet so no sugar needed)

Place all ingredients in a pan and bring to boil.

Simmer for 10 minutes. Stir occasionally. Allow to thicken.

Basic White Sauce

30 g (1 oz) milk free margarine

30 g (1 oz) plain flour

300 ml (10 fl oz) milk substitute

Seasoning to taste.

Place ingredients in a pan.

Heat, whisking continuously until sauce thickens and is cooked. Season.

Milk Free Custard (2 servings)

2 rounded teaspoons custard powder

200 ml (7 fl oz) milk substitute (sweet so no sugar needed)

Mix the custard powder with a few teaspoons of milk substitute to a smooth paste.

Add the milk substitute.

Place into a pan and heat whisking all the time until the custard thickens and just comes to the boil.

Chocolate Custard

As above but add ½ level teaspoon cocoa powder and 1 level teaspoon sugar to the custard mix.

Jelly Mousse (4-6 servings)

1 strawberry or raspberry jelly

300 mls (½ pint) boiling water

300 mls (½ pint) milk substitute

Gently heat the milk substitute in a pan to boiling point, use to dissolve half the jelly.

Dissolve the other half of the jelly in boiling water.

Pour each jelly into separate bowls until cool. Refrigerate.

When the jellies are nearly set, take the milk substitute jelly mix and whisk well for 2 minutes.

Place whisked milk substitute jelly on top of the other jelly and return to the fridge until completely cold.

Recipes:

Many recipes from ordinary cook books can be used provided ingredients are checked and appropriate substitutes used e.g. milk free margarine in place of butter, recommended milk substitute instead of milk.

A few simple recipes are included in this leaflet.

Supermarket lists:

Most large supermarkets hold lists of 'own brand' products free from cow's milk. These can be obtained by contacting customer services or the company directly.

Eating out: Contact restaurant before you go or check their website to see if they can cater for your allergy, then speak to your waiter on arrival to check that they are aware. If you are in doubt, choose to go elsewhere. Self-service/ buffet areas will have a risk of contamination. At children's parties it may be helpful to take your own milk free foods.

Travel tips: Plan ahead and contact your travel agent/ tour operator/ airline to let them know of the allergy. More information is found on the Allergy UK and Anaphylaxis Campaign Website, see useful websites (on page 10).

Medicines: Many medicines contain lactose, but most children will not need to avoid as the contamination with cow's milk protein is minimal. Contact your Pharmacist or Dietitian if you think your child has reacted to a certain medicine.

Cross contamination: Cross contamination can occur whilst preparing foods. If you need to avoid traces of milk, ensure that all surfaces, chopping boards, pots, pans and cooking utensils are well cleaned using hot soapy water. Use separate containers for jams, margarines etc.

Introduction of other allergen foods:

From 6 months of age it is important to start introducing other allergen foods.

Other allergens include: wheat, soya, eggs, peanuts, tree nuts (not whole or coarsely chopped nuts), fish, and sesame. Delaying these foods after 12 months may increase a child's risk of developing an allergy to that food.

As a precaution, when you first introduce these foods, you should introduce them one at a time for three days, if your baby has no symptoms then the next food can be introduced. Once an allergen has successfully been introduced it is recommended that you include them in your child's diet regularly, ideally at least twice a week to ensure that they remain tolerant to that food.

When introducing a new food, ensure the child is well and free from illness. It is a good idea to give the food early on in the day so the child can be observed whilst awake. If you are concerned that your baby is reacting to a certain food, stop giving that food and seek medical advice from a health professional.

Useful websites:

Patient support:

www.allergyuk.org A charity organisation providing information for people with allergies. //

Tel: 01322 619898

www.anaphylaxis.org.uk: A charity organisation providing information and support for people with severe allergies and information about adrenaline auto-injectors. Tel: 01252 542029.

www.nhs.uk/conditions/food-allergy: NHS choices allergy and intolerance advice.

www.bda.uk.com: The British Dietetic Association provides fact sheets on food allergy and intolerance. Tel: 0121 2008080

Online Products finder service:

www.foodmaestro.me and www.spoon.guru: helps you find “free from” products.

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How can I help reduce healthcare associated infections?

Infection control is important to the well-being of our patients and for that reason we have infection control procedures in place. Keeping your hands clean is an effective way of preventing the spread of infections. We ask that you, and anyone visiting you, use the hand sanitiser available at the main entrance of the hospital and at the entrance to every clinical area before coming in to and after leaving the clinical area or hospital. In some situations hands may need to be washed at the sink using soap and water rather than using the hand sanitiser. Staff will let you know if this is the case.

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If you require a translation or alternative format of this leaflet please call Dermatology on 01494 734604

Author: NR/NL

Issue date: August 2019

Review date: August 2021

Leaflet code: DERM-024

Version: V2.0