

Nutritional Management of Chyle Leaks

Introduction

Your doctor has recommended a very low-fat diet for the treatment of a chyle leak. The information in this leaflet is designed to provide you dietary advice for chyle leak management. Your doctor will let you know how long you need to be on this diet.

What is a chyle leak?

Chyle is a milky fluid produced from the digestion of fat. Chyle is transported around the body by the lymphatic system, if there is damage to the lymphatic system chyle can collect in different parts of the body such as chest, heart and abdomen. In order to reduce the production of chyle and allow the damage to heal you need to follow a very low-fat diet.

Possible causes of chyle leak

- Trauma to the body such post-op complications e.g., cardiothoracic surgery or Oesophagectomy
- Non- trauma such as malignancy, lymphoma, congenital, tuberculosis, pancreatitis.

Management of chyle leak

- The preferred treatment of chyle leaks includes medication and following a low-fat diet. This can help to reduce symptoms and chyle production.
- In some cases chyle leaks may require surgery or drainage to reduce symptoms.
- As chyle is produced from fat, reducing the amount of fat you eat can help reduce chyle production. A very low-fat diet contains less than **10g total fat per day**.

- If you need to follow a very low-fat diet for longer than 2 weeks you should introduce 1 teaspoon of walnut or sunflower oil to your diet every day to provide essential fatty acids omega 3 and 6. Please note do not use supplements containing omega 3 or 6 as these will contribute to your overall fat intake.
- You should take a multivitamin containing fat soluble vitamins A,D,E and K while on the very low-fat diet.
- Medium chain triglyceride (MCT) oil can be used for cooking, note do not cook with MCT oil on high heat as it will burn and affect the taste of food.
- If you have a feeding tube your feed may be changed to a feed containing MCT fats. In some cases IV nutrition (TPN) can be used to completely bypass the digestive system.

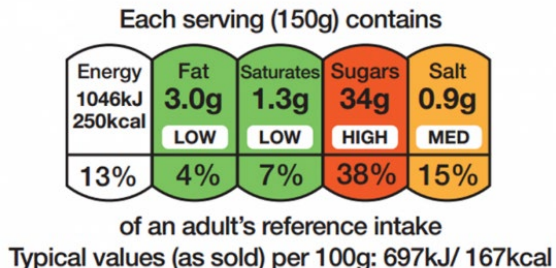
Reading labels

Aim for less than 10g fat per day. Choose foods that are less than 0.5g fat per serving on food labels.

Traffic light

Green = low **Amber** = medium **Red** = High

Choose foods where the fat label is **green**. Avoid foods that are labelled red or amber on food labels.



	Allowed	Avoid
Dairy Products	<p>Skimmed milk</p> <p>Very low-fat/ fat free cheese</p> <p>Very low-fat/fat free yogurt (consider 0.2g/100g for yogurt)</p> <p>Very low-fat/fat free ice-cream</p> <p>Skimmed milk powder</p> <p>Fat free protein powder</p>	<p>Full cream/semi-skimmed milk</p> <p>Cream</p> <p>Ice-cream</p> <p>Full fat yogurt</p> <p>Butter</p> <p>Cheese</p> <p>Creamy desserts</p>
Protein	<p>White fish e.g. cod, whiting, plaice, haddock</p> <p>Tuna (in brine or spring water)</p> <p>All shellfish</p> <p>Crab stick/seafood stick</p> <p>Chicken, Turkey (no skin)</p> <p>Most beans tinned, dried, fresh e.g. baked beans, butter beans, kidney beans, chickpeas</p> <p>Red and green lentils</p> <p>Quorn</p>	<p>Oily fish e.g. salmon, sardines, mackerel</p> <p>Tinned fish in oil</p> <p>Battered or breaded fish/chicken</p> <p>Processed meat e.g. salami, corned beef, burgers, pate</p> <p>Red meat and pork</p> <p>Soy bean/Edamame beans/Fried beans</p> <p>Hummus</p> <p>Tofu</p>

	Allowed	Avoid
Eggs	Egg white	Egg Yolk
Fruit and Vegetables	Most fresh, frozen and tinned fruit and vegetables Dried fruit	Avocado Olives No vegetables prepared with fat containing sauces e.g. cauliflower cheese Potato salad/coleslaw
Fats/Nuts	MCT oil	Butter, Margarine, Low fat spread, Lard All nuts All nut butters/spreads
Carbohydrates	Pasta Rice Noodles Plain cereal e.g. cornflakes, rice crispies, Weetabix. Rice cakes, corn cakes, crispbreads White or brown bread Potatoes Chapatti/naan made with MCT oil	Pastries Ready break Cereals containing chocolate/nuts Bread containing nuts/seeds Naan bread, chapatti, focaccia Chips/roast potato Fried Rice

	Allowed	Avoid
Confectionary	Jam, marmalade, sugar, honey, syrup Boiled sweets/ mints Ice Lolly Jelly popcorn	Chocolate/chocolate spread Toffee/fudge/tablet Cake Biscuits Crisps
Sauces	Tomato sauces Mint sauce Soy sauce Brown sauce Piccalilli Gravy made without fat Herbs, spices, stock cubes	Mayonnaise Salad cream Cheese based sauces Creamy salad dressings e.g. Caesar salad, thousand island dressing, creamy French dressing, ranch etc
Drinks	Squash Fruit juice Fizzy drink Tea and coffee (made with water and skimmed milk)	Hot chocolate Horlicks/Ovaltine Milk/Milkshakes Bovril

Suggested meal plan

Breakfast

Cornflakes with skimmed milk

OR

Porridge made with skimmed milk

OR

Toast with honey / marmalade (no butter)

Mid-morning snack

Fat free yogurt with fruit

Lunch

Sandwich containing 2x slices of bread and slice turkey/chicken or tuna, salad (no dressing/mayo)

OR

Vegetable soup with a plain roll

Dinner

Baked potato with tuna/baked beans

OR

Chicken with rice and vegetables / Pasta with chicken, veg and tomato sauce

Bed time snack

Ice lolly or jelly

If you have any questions or concerns while following very low-fat diet, please do not hesitate to contact department.

Your contact:

Telephone No.:

Date:

Some information taken from NHS Gloucestershire Hospitals with permission.