

**Patient
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Nutritional management of chyle leaks

Introduction

The information in this leaflet will give you diet and lifestyle advice to help with chyle leak management.

What is a chyle leak?

Chyle is a milky substance produced as a by-product of fat digestion. Chyle is normally carried around the body by the lymphatic system. If there is a break in this system, chyle can collect in different parts of the body such as the chest, heart, and abdomen and can cause you to become unwell.

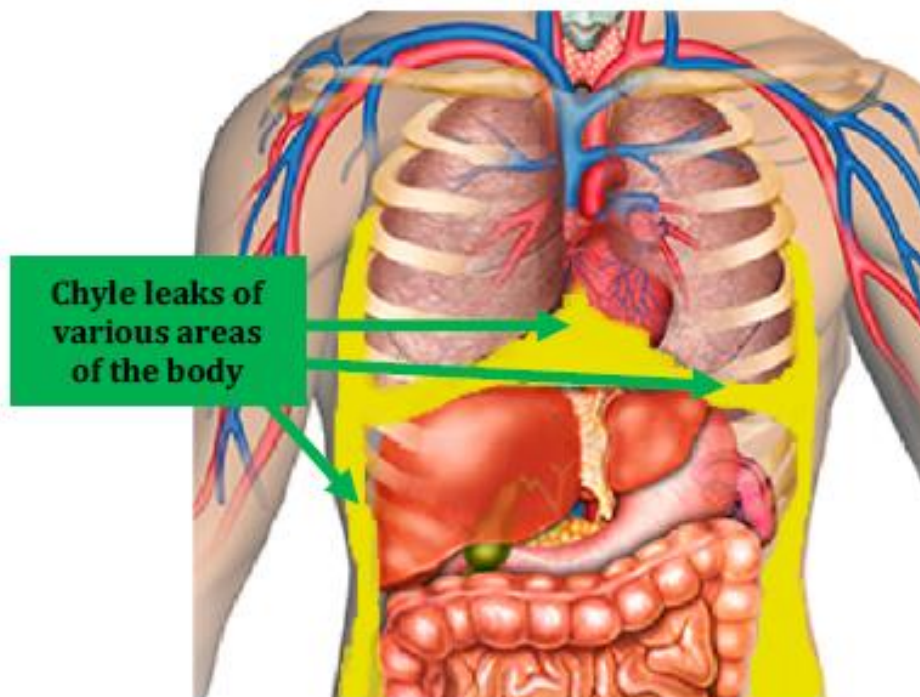


Figure 1: Example of where chyle leaks can collect in the body

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GHP1509_04_19

Department

**Nutrition and
Dietetics**

Review due

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Possible causes of chyle leak

- Trauma to the body for example thoracic surgery
- Non-traumatic conditions such as malignancy, lymphoma and yellow nail syndrome

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Management of chyle leak

Chyle leaks may require drainage or surgical repair to be resolved.

Conservative management (non-surgical treatment) can provide symptom relief and aim to reduce chyle production which may close the leak. This might include medication to reduce bodily secretions as well as nutritional management.

Chyle is made up of protein, fats and other nutrients. Having a chyle leak can therefore lead to large nutritional losses.

Reducing the amount of fat you eat may help to reduce chyle production. You will be referred to a dietitian for advice and support on this. If you have not been referred please contact the Dietetics Department, the details are at the end of this leaflet. While you are waiting for your dietetic outpatient appointment, please follow a very low fat diet. A very low fat diet contains less than 10g total fat per day. You can use food labelling to help with calculating this.

If you need to follow the diet for longer than 2 weeks you should introduce 1 teaspoon of walnut or sunflower oil to your diet every day to give you essential fatty acids omega 3 and 6. You will also need to take a multivitamin to supplement your diet with Vitamin A, D, E and K.

Important: Do not use multivitamins containing omega 3 or 6 as these will contribute to your overall fat intake and you will already be receiving these fatty acids from the walnut/sunflower oil.

It is important to provide your body with alternative fats that will not add to chyle production. Medium chain fatty acids (MCT) are absorbed in a different way and are therefore a suitable fat source. MCT oil can be purchased from various health stores and can be used for cooking.

Important: Do not heat the MCT oil too high as it will burn easily which can affect the taste of your food.

Please see the following information which gives you some examples of suitable and unsuitable foods while following a very low fat diet. There is also an example meal plan.

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Suitable and unsuitable food and drink for a very low fat diet

Suitable	Unsuitable
Carbohydrates	
<ul style="list-style-type: none"> • Pasta, rice, spaghetti, noodles • 25g portion of Rice Krispies®/Weetabix®/cornflakes • Rice cakes, crispbreads, very low fat crackers • Potatoes • White and brown bread 	<ul style="list-style-type: none"> • Ready Brek® • Pastry • Roast potatoes, chips • Ciabatta, focaccia, other oily breads
Protein	
<ul style="list-style-type: none"> • 50-60g/3 thin slices of turkey or chicken (light meat, no skin) • 30g/1 thin slice of lean beef or ham 	<ul style="list-style-type: none"> • Chicken and turkey dark meat or skin • Corned beef, meat paste • Beef burgers, sausages, salami, bacon
<ul style="list-style-type: none"> • Plain white fish e.g. haddock, cod, prawns • Tuna in spring water/brine 	<ul style="list-style-type: none"> • Oily fish e.g. mackerel, sardines, kippers
<ul style="list-style-type: none"> • Baked beans, peas, lentils, egg white, Quorn® fillet 	<ul style="list-style-type: none"> • Egg yolk
Fruit and Vegetables	
<ul style="list-style-type: none"> • Most varieties of fresh, frozen, and tinned fruit • All vegetables and salad 	<ul style="list-style-type: none"> • Avocado • Olives
Fats	
	<ul style="list-style-type: none"> • Butter, margarine, low fat spread, lard, suet, vegetable oil

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Dairy	
<ul style="list-style-type: none"> Skimmed milk, fat free yoghurt, fromage frais, cottage cheese, quark 	<ul style="list-style-type: none"> Whole and semi-skimmed milk, cream, full fat yoghurt, ice cream, cheese
Puddings	
<ul style="list-style-type: none"> Jelly, tinned fruit, meringue, sorbet, plain wafer, ice lollies, fat free frozen yoghurt 	<ul style="list-style-type: none"> Cakes, biscuits, milk puddings, shop-bought desserts
Drinks	
<ul style="list-style-type: none"> Squash, fruit juices, fizzy drinks, flavouring syrups, tea and coffee (made with water and skimmed milk) 	<ul style="list-style-type: none"> Hot chocolate, Horlicks®, milkshakes (unless skimmed)
Confectionary	
<ul style="list-style-type: none"> Jelly sweets, boiled sweets, mints 	<ul style="list-style-type: none"> Chocolate, toffee, fudge, butter mints
Miscellaneous	
<ul style="list-style-type: none"> Sugar, honey, jam, golden syrup, marmalade Marmite® Tomato ketchup, vinegar, pickle Spices, essences, salt, pepper 	<ul style="list-style-type: none"> Crisps Pizza Mayo, salad cream, salad dressings Creamy soup Peanut butter Lemon curd Nuts

Example meal plan for very low fat diet

Breakfast

- 25g Rice Krispies® with skimmed milk
- Fat free yoghurt with fruit

Lunch (choose one)

- Sandwich
 - 2 slices white bread
 - 50g cooked sliced turkey/chicken **or** 75g tuna (in brine or spring water) **or** 50g reduced fat cottage cheese
 - Salad
- Beans on toast
 - 100g baked beans
 - 2 slices of white bread with no butter

Dinner (choose one)

- Pasta bake made with 100g pasta, 200g tinned tomatoes and tuna/quorn with vegetables/salad
- Baked potato 100 to 180g with no butter, tuna/baked beans (quantity as above) and salad

If you have any questions or concerns while waiting for your outpatient appointment please do not hesitate to contact the dietetics department.

Contact information

Department of Nutrition & Dietetics

Cheltenham General Hospital
Sandford Road
GL53 7AN

Tel: 0300 422 3460

Available to contact Monday to Friday, 8:30am to 4:30pm

Department of Nutrition & Dietetics

Gloucestershire Royal Hospital
Great Western Road
GL1 3NN

Tel: 0300 422 5506

Available to contact Monday to Friday, 8:30am to 4:30pm

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