Pre- Surgery Liver Reduction Diet

Information for Patients

Introduction

It is essential that you follow a very restricted diet for 3 weeks, before having your surgery. This is to help to shrink the liver, making the surgery easier to perform laparoscopically (via keyhole). Following this diet achieves changes in the liver to shrink it in size and to make it softer, making it easier to move out of the way during surgery. If the liver is heavy, fatty or immobile, it is harder for the surgeon to see and gain access to the stomach underneath. This could be a reason for changing to open surgery or the procedure being too unsafe to perform. Open surgery means a larger abdominal scar, longer recovery and increased risks.

By following this strict diet, your body reduces its glycogen stores. Glycogen is a form of sugar stored with water in the liver and muscles and is used for energy. So when you follow a strict diet such as this, which is low in starch and sugar, as well as very low in fat, your body loses its glycogen stores and associated water, and therefore your liver shrinks. You may find that you need to urinate (pass water) more often when you are on this diet.

Shrinking the size of your liver helps the surgeon, because your liver lies over the top part of your stomach. If the surgeons can't move your liver out of the way to do the surgery laparoscopically they may have to convert to open surgery by making a large incision (cut) in your abdomen or your operation may not be able to go ahead. Open surgery will take longer and you may have to stay in hospital longer too.

During the Pre-operative diet you will need to:

- Follow the diet strictly for 3 weeks
- Drink plenty of fluids during the day, aiming for over 2000mls/day of sugar free fluids. This can include tea and coffee
- Spread your food and drinks evenly throughout the day. Do not save up everything for later in the day
- Avoid any alcohol and cigarettes to help your recovery after surgery
- Take a daily multivitamin and mineral supplement eg Sanatogen A-Z, Centrum or supermarket/pharmacy own A-Z brand
- Keep busy and active when you can

You will lose weight by following this diet, most people lose between 5-10Kg (11-22 pounds), but more importantly, your liver will shrink to reduce the risks of complications during your operation. Remember to weigh yourself on the day you start the liver reduction diet and then on a weekly basis to monitor your progress.

You may be tempted to have a special meal before your surgery. However, do not do this as it will undo the shrinkage effects on the liver.

compassionate care

If You Have Diabetes

If you have diabetes, please contact your GP, practice nurse or Diabetes specialist nurse prior to starting the liver reduction diet as your medication may require adjusting. As you reduce your food intake, you may need to reduce your medication. Check your blood glucose levels more regularly to make sure that you do not experience hypoglycaemic attacks (low blood glucose levels).
As you will be having your surgery at Huddersfield Royal Infirmary, a Diabetes Specialist Nurse may see you whilst you are in hospital. If you are on medication (tablets or insulin) it is likely that this will also need adjusting after your operation.

What to do if you become constipated on the Liver Reduction Diet

Constipation is common when you are taking less food or meal replacement shakes/soups. If you become constipated whilst on the liver reduction diet plan try a bulk forming laxative eg Fybogel or Benefiber which work in the same way as dietary fibre and are available to buy in chemists or large supermarkets.

Diet Options

Diet Option 1- Food

The diet is designed to give you around 800-1000Kcals per day through food and will contain less than 100g carbohydrate. It is low in fat, remember to cook all your food with minimal added fat, avoid frying where possible (1cal spray oil can be used).

This diet will involve planning your shopping, meals, reading food labels and may include changing your cooking methods, this will help you to lose and maintain your weight loss after surgery.

Diet Option 2- Low Calorie Meal Replacement Plan

This diet is designed to give around 800-1000Kcals through the use of meal replacement shakes or soups eg Optifast, Celebrity Slim, Cambridge, Lighter Life, Slimfast HP or other Supermarket/Chemist branded versions.

Some people prefer this option as it does not involve thinking about food preparation or controlling food portions, but you may get taste fatigue with having the same products every day. Try to vary the flavours and products.

Diet Option 3- Food/Low Calorie Meal Replacement Plan

The diet is designed to give you between 800-1000Kcals per day through the use of meal replacement shakes or soups at 2 meals per day and food at 1 meal per day.

Diet Option 1- Food

Choose 1 food item from each box at each meal

Breakfast

1 Carbohydrate + 1 Fruit or Vegetable + 1 Dairy

Carbohydrates	Fruit and Vegetables	Dairy
• 30g unsweetened breakfast cereal / dry porridge oats / unsweetened oat cereal • 1 slice bread / toast • ½ bread bun/roll • 1 Wheatabix • 1 plain biscuit / oatcake	• A piece of fresh fruit • 2 tbsp vegetables(Mushroom/ Tomato) • 2 tbsp fruit (stewed / tinned in natural juice) • Small glass fruit juice (100ml)	• Small pot diet yoghurt / fromage frais • 75g reduced fat cottage cheese • 1/3rd pint skimmed milk

Lunch

1 Carbohydrate + 1 Fruit or Vegetable + 1 Dairy or 1 Meat, Fish and Alternatives

Carbohydrates	Fruit and Vegetables	Dairy	Meat, Fish & Alternatives
• 1 slice bread / toast • ½ bread bun/roll • ½ pitta or 1 mini pitta • 1 small boiled potato • ½ medium baked potato • 2 tbsp boiled rice • 3 tbsp cooked pasta • 100g plain boiled egg noodles	• A piece of fresh fruit • 2 tbsp vegetables • 2 tbsp fruit (stewed / tinned in natural juice) • Small glass fruit juice (100ml)	• Small pot diet yoghurt / fromage frais • 25g reduced fat cheese • 75g reduced fat cottage cheese • 1/3rd pint skimmed milk	• 50-75g lean beef / pork / lamb / mince / chicken / turkey / oily fish • 125g white fish / prawns / tuna in brine • 4 tbsp cooked pulses / lentils / dahl / chickpeas / butter beans / peas / other beans • 2 tbsp nuts / 1oz no added sugar peanut butter • 2 thin slices lean cold meat • 2 grilled low fat sausages • 100g soya / quorn / tofu • 5 tbsp baked beans • 2 eggs

Dinner

1 Carbohydrate + 2 Fruit or Vegetable + 1 Dairy + 1 Meat, Fish and Alternatives

Carbohydrates	Fruit and Vegetables	Dairy	Meat, Fish & Alternatives
• 1 slice bread/ toast • ½ bread bun / roll • ½ pitta or 1 mini pitta • 1 small boiled potato • ½ medium baked potato • 2 tbsp boiled rice • 3 tbsp cooked pasta • 100g plain boiled egg noodles	• A piece of fresh fruit • 2 tbsp vegetables • 2 tbsp fruit (stewed / tinned in natural juice) • Small glass fruit juice (100ml)	• Small pot diet yoghurt / fromage frais • 25g reduced fat cheese • 75g reduced fat cottage cheese • 1/3rd pint skimmed milk	• 50-75g lean beef / pork / lamb / mince / chicken / turkey / oily fish • 125g white fish / prawns / tuna in brine • 4 tbsp cooked pulses / lentils / dahl / chickpeas / butter beans / peas / other beans • 2 tbsp nuts /1oz no added

Daily Allowance : 10g low fat spread or light mayonnaise, 10 sprays of 1 calorie spray oil.

Allowed freely : Tea, Coffee with milk from allowance, sugar free squashes and unsweetened flavoured water, marmite, sugar free jelly, sugar free gum, stock cubes, pepper, herbs and spices

Healthy eating range ready meals can be used as a meal (if they contain 300Kcals or less per portion)

Sample food diary: Option 1 (Food)

Day 1 Liver Reduction Diet

Time	Food Eaten	Amount Eaten	Calories
7.30am	Bran flakes Banana Semi-skimmed milk	30g 80-100g 200ml	100Kcal 100Kcal 100Kcal
10.30am	Sugar free jelly	100-200g	5-10Kcal
12.30pm	1 slice medium sliced wholemeal bread Tuna in brine (drained) lettuce, cucumber, 1 tomato 10 grapes	40g 80g 25g	90Kcals 75Kcal 50Kcal
6pm	Roast beef 1 small boiled potato Carrots and Broccoli Sugar free ice-pop	75g 100g 100g 20-50ml	100Kcal 150Kcal 50Kcal 5Kcal
9pm	Semi-skimmed milk	200ml	100Kcals
		Total	**930Kcals**

Aim to drink 2000mls of sugar free fluids to prevent dehydration and constipation. Fluids can include:

- **Tea / Coffee**
- **No added sugar squash**
- **Sugar free ice pops/lolly**
- **Water**
- **Sugar free flavoured water**
- **Meat/yeast extract eg Bovril**

Option 2- Low Calorie Meal Replacement Plan

Products which are suitable to use on the liver reduction diet include low calorie milkshakes, smoothies, yoghurt drinks and soups. It is important to read the nutritional information on the packaging and consume the total volume which will give you between 800-1000Kcals and a minimum of 70g protein/day.

As these products are generally fortified (already have vitamins and minerals added) you do not need to take a separate multivitamin / mineral tablet each day.

It is important that you read the nutritional information label on the meal replacement shake or soup and ensure you consume the correct volume that provides between 800-1000Kcals per day and between 60-80g protein/day.

Many products on the market are suitable to be included in the meal replacement diet plan (shakes/ soups/bars/porridge/smoothie) for example Slimfast, Optifast, Celebrity Slim, Cambridge, Exante, Holland and Barrett and the ranges in chemists and supermarkets.

Example Plan on Option 2- Meal Replacements

Breakfast

Asda great shape meal replacement shake- vanilla 29g sachet made up with 250ml skimmed milk (201Kcals, 17g protein)

Lunch

Slimfast HP no added sugar ready to drink bottle 325mls (204Kcals, 15g protein)

Dinner

Optifast soup- chicken flavour made up with water (201Kcals, 20g protein)

Supper

Tesco Slim meal replacement shake- strawberry 29g sachet made up with 250ml skimmed milk (200Kcals, 18g protein)

Total 806Kcals, 70g protein

Diet Option 3- Food / Low Calorie Meal Replacement Plan
Example Plan

Breakfast
Celebrity slim smoothie- strawberry and banana 52.5g made up with 250ml water (200Kcals,16g protein)

Lunch
Superdrug Slenderplan shake-chocolate 29g made up with 250ml skimmed milk (203Kcals, 18g protein)

Evening Meal
See diet plan 1 for variety and quantity - small meals can include stirfry, shepherds pie, risotto, stew, fish pie etc

75g Chicken, ½ onion, ½ pepper
100ml low fat curry sauce (eg curry powder and low fat yoghurt)
2 tablespoons cooked basmati rice
Sugar free jelly

Or Healthy eating ready meal (300Kcals per portion) and diet yoghurt (100Kcals)

If you remain unsure on what to eat or if you are concerned that your weight is not reducing please contact your healthcare professional

---

If you have any comments about this leaflet or the service you have received you can contact :

Melanie Langley (Bariatric Surgery Specialist Dietitian) Tel: 07836711515
or
Cara Barnes (Bariatric Surgery Specialist Nurse) Tel: 07824599736

www.cht.nhs.uk

If you would like this information in another format or language contact the above.

Potřebujete-li tyto informace v jiném formátu nebo jazyce, obrat'te se prosím na výše uvedené oddělení

Jeżeli są Państwo zainteresowani otrzymaniem tych informacji w innym formacie lub wersji językowej, prosimy skontaktować się z nami, korzystając z ww. danych kontaktowych

ਜੇ ਤੁਸੀਂ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਪ੍ਰਾਰੂਪ ਜਾਂ ਭਾਸ਼ਾ ਵਿੱਚ ਲੈਣਾ ਚਾਹੁੰਦੇ ਹੋ,

ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਉੱਪਰੋਕਤ ਵਿਭਾਗ ਵਿੱਚ ਸਾਡੇ ਨਾਲ ਸੰਪਰਕ ਕਰੋ।

اگر آپ کو یہ معلومات کسی اور فارمیٹ یا زبان میں درکار ہوں، تو
براہِ مہربانی مندرجہ بالا شعبے میں ہم سے رابطہ کریں۔

"إذا احتجت الحصول على هذه المعلومة بشكل مغاير أو مترجمة إلى لغة مختلفة فيرجى منك الاتصال بالقسم المذكور أعلاه"

© Calderdale and Huddersfield NHS Foundation Trust.
All rights reserved. Not to be reproduced in whole or in part without the permission of the copyright holder.

CHFT