

Liver Reduction Diet (pre-bariatric surgery)

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Dacă aveți nevoie de această broșură într-o altă limbă sau într-un format accesibil,
vă rog să discutați cu un membru al personalului să se ocupe
de acest lucru pentru dumneavoastră

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إذا احتجت إلى هذه النشرة بلغة أخرى، أو بتنسيق
يسهل الوصول إليه، يرجى التحدث إلى أحد الموظفين لترتيب ذلك لك.

What is the liver reduction diet?

This is a diet that is low in energy (calories), specifically low in fat and carbohydrates.

By following this diet, you will deplete your liver's glycogen stores (glycogen is a form of sugar which is stored in the liver and muscles). This will help shrink the size of the liver and make the surgery easier and safer to perform. It is likely that you will also lose some weight during this time.

A large liver can make it more difficult for the surgeon to access your stomach as it requires moving out of the way in the process. If the liver is too enlarged, the surgeons may need to convert from a laparoscopic (keyhole) to an open surgery (large incision) which carries greater risks, will take longer to perform under anaesthetic and may lead to a lengthier hospital stay.

It is therefore essential that you follow this diet strictly for at least 2 weeks prior to your surgery.

Your dietitian will give you advice regarding this.

Important: The liver reduction diet is recommended for this time period only and must not be followed afterwards as it is not sustainable or nutritionally complete.

What does the diet involve?

There are 3 approaches with the liver reduction diet.

You should choose one of these options and stick to it for the duration.

The diet is designed to provide approximately 800-1000 kcal (calories) per day.

- **Option 1** – Meal replacement shakes
- **Option 2** – Milk & yoghurt diet
- **Option 3** – Food-based diet.

It is essential that you take a complete A-Z multivitamin and mineral supplement whilst following one of these diets. For example: Centrum Advance/Performance, Forceval, Holland & Barrett, Sanatogen A-Z, or a supermarket's own brand A-Z multivitamin and mineral supplement.

Option 1: Meal Replacement Shakes

Meal replacement drinks offer a nutritionally complete, low energy option suitable for use prior to bariatric surgery.

You should have 4 low-calorie meal replacement shakes/soups such as pre-made Slimfast® or Optifast® or other supermarket alternatives per day.

Usually these range between 200-250kcal per serving and contain additional vitamins and minerals.

Some people prefer this option as it does not involve thinking about food preparation or meal planning.

You may, however experience taste fatigue so it is useful to vary the flavours and products.

Drink these slowly throughout the day, rather than in one go.

Option 2: Milk and yoghurt diet

This approach is based purely on milk, yoghurt, and additional fluids only.

Alcohol and all other food sources should be avoided for the duration of this diet.

Daily allowance:

- 3 pints of skimmed OR semi-skimmed milk OR lactose-free OR plant-based milk (sugar-free syrups may be used to flavour the milk if preferred).
- 2 x 125g pots low fat or milk-alternative yoghurt.
- At least 2 litres fluid (see fluid requirements section for which fluids are allowed daily).

Tip: try and split the milk allowance into 4-5 'meals' per day.

Option 3: Food-based diet

This diet is designed to give you no more than **100g carbohydrate per day**. It is low in fat and moderate in protein. The energy value is between **800-1000 kcal per day**. It is very important to measure your portions accurately or the diet will not work and your liver will not shrink appropriately. Also, try and choose from a range of food sources to ensure you have a balanced diet.

Breakfast

Choose **1 food item** from each box at each meal:

Carbohydrate sources	Fruits and Vegetables
30g unsweetened breakfast cereal / Rolled porridge oats (dry)	1 piece of a medium fresh fruit (e.g., apple, orange, pear)
1 wheat biscuit	1 slice of a large fruit (e.g., pineapple, melon)
1 slice of bread / toast	2 tbsp fruit (stewed/ tinned in natural juice)
½ bread roll / bagel	Small handful of berries (no more than 60g)
2 x crispbreads	
Dairy/plant-based sources	Protein sources
100-125g diet yoghurt / dairy-free yoghurt	2 eggs
150g high protein yoghurt / Skyr	2 thin slices lean cold meat (ham / beef / chicken etc.)
75g reduced fat cottage cheese/ Quark	5 tbsp baked beans
200 ml skimmed/ semi-skimmed milk or plant-based milk	2 slices grilled turkey bacon

Lunch and evening mealtimes

Choose **1 food item** from each box at each meal:

Carbohydrate sources	Fruits and Vegetables
<p>½ medium baked potato</p> <p>½ pitta bread or 1 mini pitta</p> <p>3 tbsp cooked pasta</p> <p>3 tbsp rice</p> <p>125g boiled yam</p> <p>1 slice of bread / toast</p> <p>½ bread roll / bagel</p> <p>2 x crispbreads</p>	<p>1 piece of a medium fresh fruit (e.g., apple, orange, pear)</p> <p>1 slice of a large fruit (e.g., pineapple, melon)</p> <p>2 tbsp fruit (stewed/tinned in natural juice)</p> <p>2 tbsp vegetables/salad</p> <p>Small handful of berries (no more than 60g)</p>
Dairy/plant-based sources	Protein sources
<p>100-125g diet yoghurt / dairy-free Yoghurt</p> <p>150g high protein yoghurts / Skyr</p> <p>25g reduced fat cheese / vegan Cheese</p> <p>75g reduced fat cottage cheese/ Quark</p> <p>200 ml skimmed/semi-skimmed milk or plant-based milk</p>	<p>75g lean beef/chicken/turkey</p> <p>125g white fish / prawns / tuna in brine/ Springwater</p> <p>4 tbsp cooked pulses / lentils / dahl / chickpeas / other beans</p> <p>2 eggs</p> <p>2 tablespoons of unsalted nuts / no added sugar peanut / other nut butter</p> <p>2 thin slices lean cold meat (ham / beef / chicken etc.)</p> <p>5 tbsp baked beans</p> <p>100g soya / Quorn / tofu</p>

Sample meal plan

Breakfast	30g porridge oats with 200 ml semi-skimmed milk	200 kcal, 30g carbohydrate, 10g protein
Snack	1 medium sized apple	50 kcal, 10g carbohydrate 0.5g protein
Lunch	½ bagel with 75g reduced fat cottage cheese some lettuce, cucumber, cherry tomatoes, herbs	150 kcal, 23g carbohydrate, 11.5g protein
Snack	200g high protein yoghurt	140 kcal, 12g carbohydrate, 20g protein
Evening meal	Grilled chicken breast (75g), 3 x tbsp pasta, 2 tbsp vegetables, 25g low fat cheese	Approx. 300 kcal, 20g carbohydrate, 33g protein
Dessert	Sugar free jelly pot	10 kcal, 0g carbohydrate, 2g protein
		Total: 850 kcal, 95g carbohydrate, 77g protein


Many salad items contain very little carbohydrate or calories, so you can have these at each mealtime. Examples: lettuce, cucumber, celery, handful of cherry tomatoes.

Daily allowance: 10 sprays of 1 kcal spray oil, 10g low-fat spread.

Dessert option ideas: sugar-free ice pop, sugar-free jelly.

You must avoid foods that are high in fat and sugar at all times whilst on this diet (see food traffic light labelling on the next page for daily recommended intake of these).

	LOW	MEDIUM	HIGH	
	Per 100g	Per 100g	Per 100g	Per portion
Fat	3.0g or less	3.0g - 17.5g	More than 17.5g	More than 21g
Saturates	1.5g or less	1.5g - 5.0g	More than 5.0g	More than 6.0g
(Total) Sugars	5.0g or less	5.0g - 22.5g	More than 22.5g	More than 27g
Salt	0.3g or less	0.3g - 1.5g	More than 1.5g	More than 1.8g



Fluid requirements

Drink at least 2 litres of fluid every day and more during episodes of hot weather.

Spread your drinks throughout the day.

Drinks that are allowed freely are: water, tea and coffee (no sugar), and low-calorie squash. You may also have one stock-type drink per day such as Bovril® or OXO® or consommé. Avoid fruit juices as these can be high in sugar and therefore carbohydrate.

Alcohol is strictly **not allowed** as part of this diet.

Additional information

Constipation: If you feel like you are getting constipated, you should see your local pharmacist for a gentle laxative to help soften your stool, such as Fybogel®. You must drink plenty of fluid as previously described as this will help.

Patients with diabetes on insulin or gliclazide tablets: Please contact the person who helps control your diabetes before attempting this diet as it is likely your insulin or gliclazide dose will need adjusting. This is due to the diet being low in carbohydrate and will make your blood sugars go lower than normal.

Contact Details

If you have further questions or concerns regarding following this diet, please call 0151 430 1170.

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