



Post-Operative eating plan: Gastric Band

Introduction

After the band has been placed, the aim is to allow the band to settle into the correct position and become secure. This '**settling in**' period can take up to two months and therefore you will need to follow the dietary advice in this booklet to minimise the pressure on your gastric pouch, promote healing, and prevent vomiting. It is also important to help you learn new eating habits to help make your surgery successful:

There are **two main post-operative phases**: liquid and soft. This is followed by a lifelong **healthy diet** of a normal texture

What is the aim of the diet after surgery?

- to help develop healthy eating habits
- to ensure a balanced daily intake of nutrients to minimise the risk of deficiencies.
- to reduce your calorie intake in order to bring about weight loss

The most important nutrient to consume post bariatric surgery is protein. Protein is important to promote wound healing; help maintain muscle and organ mass and minimise side effects such as hair loss and brittle nails.

Post-operative eating plan

Day of surgery

After you awake from the anaesthetic you will be able to have sips of fluid and ice to suck. You will have an intravenous drip to provide all the fluid you need. The fluids you take orally at this stage are just to keep your mouth comfortable.

Day 1 post-surgery

Continue to drink slowly in small sips and wait in between sips for a minute or two. You can drink milk, tea, coffee or water and should aim to consume at least 2 litres of fluid in these 24 hours. Your liquids will need to be taken in small quantities to enable the swelling in the tissues to settle and heal. You must not eat solid foods as these can put a strain on your stomach and may cause serious problems.

The first 10 days—liquid diet

For the first ten days after the operation, aim to have high protein drinks, shakes or soups that are smooth with no lumps regularly spread throughout the day. You can top up with other drinks to meet your body's requirements of at least **2 litres of fluid a day**.

Whilst following a liquid only diet, it can be more difficult to meet your nutritional requirements so you will need to ensure the liquids you do consume contain adequate protein. You can do this by making up your own high protein drinks (see below), or by buying commercial products such as protein shakes and soups. Aim to consume **60g protein and a**

minimum of 800 calories each day. This can be difficult on a liquid diet, try to initially aim for **1 litre of protein drink and 1 litre of other sugar free fluids.**

Remember to drink **slowly**, taking small sips and waiting between swallows or you are likely to vomit.

High protein milk

40g protein per pint (14g protein per 200ml serving)

Ingredients

60g (4 tbsp) skimmed milk powder (21g protein)

570ml (1 pint) cold skimmed or semi-skimmed milk (19g protein)

Optional: Nesquik powder / milkshake powder / coffee

Method

Mix milk powder with a little of the milk to form a paste. Stir in the rest of the pint of cold milk.

You can use this high protein milk in all drinks such as tea, coffee, Complan, Ovaltine, and soups and custard.

Fruit smoothie

serves 2 (12g protein per serving)

Ingredients

½ pint (250ml) high protein milk (18g protein)

¼ pint (100ml) low fat yoghurt (6g protein)

3 oz (100g) fresh fruit e.g. bananas or strawberries

Method

Combine all ingredients in a blender and blend until smooth. Serve chilled on ice.

Commercially available Protein Shakes

There are a variety of different protein drinks/ powders available in most supermarkets, health food shops and online. These can be an easy option to help you meet your protein requirements. It is a good idea to try different protein drinks before surgery as the taste of these varies significantly. There is an example of some of the protein drinks available at the end of this booklet.

Vitamin and mineral supplements

Bariatric guidance recommends you take a daily multivitamin and mineral supplement every day for the rest of your life. The one that is currently recommended and on prescription is

Forceval™, one tablet daily. If you find Forceval difficult to tolerate talk to your bariatric team about an alternative.

Days 11–14—puree diet

After 10 days on the liquid diet, you will be able to start to eat foods of a thicker consistency for the next 25 days. All foods for this stage will need to be blended or a natural puree consistency.

Try 1-2 tsp of food at a time to see if tolerated and aim to eat the **protein foods first** at each meal.

Continue to aim for 2 litres of fluid including some protein drinks, as your portion sizes of pureed diet will not be sufficient to provide all your nutritional requirements. Separate your fluids by 30 minutes before and after eating.

Menu plan

Breakfast:

- ½-1 Weetabix™ with high protein milk **or**
- 1 pot yoghurt or fromage frais **or**
- 2 tbsp of porridge or Ready Brek™ made with high protein milk

Mid-morning:

- 200 ml high protein drink or yogurt

Lunch:

- 1 cupful of soup made with fish /meat / beans / pulses and potato **or**
- 1 scrambled egg **or**
- 1-2 tbsp pureed fish / pulses / chicken / meat **or**
- 1-2 tbsp mashed cottage cheese

with ½ tbsp pureed vegetables

and ½ tbsp mashed potato/sweet potato /winter squash

Mid-afternoon:

- 150ml yoghurt with or without added pureed fruit **or**
- 150 ml fruit smoothie **or**
- 200 ml skimmed or semi-skimmed milk **or**
- 2 tablespoons low fat custard

Evening meal:

- 1-2 tbsp pureed fish / pulses / chicken / meat

with ½-1 tbsp blended vegetables.

and ½-1 tbsp mashed potato/ sweet potato /winter squash

Tips

- eat the protein foods first at each meal, then the vegetables and finally the starchy food. In the early days, you may only be able to manage the protein part of the meal
- if you need to chew your food, the consistency is too thick. Ensure the foods are smooth with no lumps.
- add skimmed milk powder or flavourless protein powders to foods to boost the protein content
- try one new food at a time. If a food doesn't agree with you, try it again in a few days as your stomach may need time to adapt to surgery
- Your body will dictate the portion size. Listen to your body and stop when you are full before you start to feel uncomfortable.
- carry a bottle of water or high protein drink with you at all times and sip on it throughout the day
- Do not eat baby food. This does not provide you with the adequate nutrition.

Days 15-21- soft diet

After 4 days on the puree diet, you will no longer need to blend your foods. You can gradually add foods that are soft in consistency (foods which you can mash with a fork).

Remember to focus on the protein foods, ensuring that you include these foods at every meal and eat them first.

Menu plan

Breakfast

1 Weetabix™/ 25g porridge oats/ All Bran / Branflakes™ with milk **or**
scrambled egg with 2 wholegrain crispbreads/crackers with 1 tsp butter/margarine/low fat cheese spread

Mid-morning

150ml light natural yoghurt/fruit yoghurt **or**
200ml semi-skimmed milk **or**
200 ml high protein drink

Lunch

200ml high protein soup e.g. chicken / lentil / bean / fish **or**
small jacket potato without skin with 40g cottage or low fat cheese **or**
shepherd's pie

Evening meal

50g fish / chicken / turkey / ground beef/ pulses/ Quorn
with ½ cup soft cooked vegetables

and ½ cup mashed potato / sweet potato / winter squash / risotto / 4-6 wholegrain

crackers/1 slice wholegrain toast

Dessert

150ml low fat natural or low sugar fruit yoghurt **or**
½ cup pureed / stewed / soft / tinned fruit **or**
200 ml high protein drink
Small pot of custard/ Angel delight

Remember to continue to aim for 2 litres of sugar free fluids **between your meals**. You will need to separate your food and fluids by 30 minutes.

Some people who have a gastric band find it difficult to eat first thing in the morning as they feel that their band is tighter. If this is the case, try having a nutritious drink and wait until your stomach feels ready for food.

Tips

- add chicken, beef or vegetable stock, low fat gravies or low fat cream soups to moisten meat
- Aim to follow the '**rule of 20**':
 - a. Cut your food up well, and take a **20** pence piece size portion onto your spoon or fork
 - b. Chew this **20** times
 - c. Wait for **20** seconds after swallowing before taking a second mouthful
 - d. Eat in this manner until you are satisfied, rather than 'full' or 'stuffed' and for no longer than **20** minutes.
- Continue to eat your protein foods first followed by high fibre foods
- If you struggle to eat tougher proteins such as meat, start with softer proteins such as fish, beans or lentils
- Avoid fizzy drinks, these are empty calories and can also cause reflux and bloating
- Bread is commonly not tolerated after the band. Try toast and ensure you have this with protein-based foods.
- Peel fruit and remove the skins from fibrous vegetables as these may not be tolerated
- Try to stick to a regular meal pattern and avoid snacking

Try 1 tbsp of a new food every 1-2 days. If you feel nauseated or bloated after eating then you are not ready for this food. Wait a few days before trying this food again

After 21 days—healthy diet

At this stage, you may feel ready to progress onto a full textured healthy diet. Gradually increase the texture and continue to add new foods in slowly.

Raw fruit and vegetables can be added in as tolerated. It may be advisable to avoid the skins and membranes on fruit until further on post-surgery.

You should aim to consume about **60g-70 g protein** per day and an energy intake of between **800-1200 calories per day**.

Aim for 3 small meals and **2 high protein snacks** and remember to include 2 litres (**8-10 glasses**) of sugar free fluids each day.

Sample meal plan

Breakfast

Wholegrain cereal / porridge / Ready Brek™ made with milk **or**
wholegrain toast / crackers / crispbread with 1 tbsp of low fat cheese spread / peanut butter / hummus **or**
scrambled egg on toast **or**
baked beans on toast

Mid-Morning

Fruit , Tea / coffee
Cracker with low fat spreadable cheese / peanut butter/ boiled egg/ crab sticks

Lunch

200ml high protein soup (e.g. chicken / lentil / bean) **or**
baked beans / sardines / poached egg on toast **or**
bean and rice salad **or**
small jacket potato with baked beans / tuna / cottage cheese

Mid afternoon

Tea / coffee
Fruit / low fat yoghurt/ 30g cheese/ 15g nuts

Main meal

Small serving of lean meat / fish / egg / beans / lentils / tofu / Quorn
with a serving of vegetables or salad
1 tablespoon of potatoes / brown rice/ brown pasta / chapatti /

Vitamin and Mineral Deficiencies

Remember to take a daily multivitamin and mineral supplement. This is for two main reasons:

- it is difficult to eat enough of these nutrients with your smaller stomach
- it is harder for your body to digest and absorb these nutrients.

Problem foods

Some foods **may** be difficult to eat following a gastric band. With all the foods, it is important to **follow the 'rule of 20s'**.

If you are experiencing vomiting, indigestion or nausea, ask yourself the following questions:

- Have I eaten too quickly?
- Did I chew my food well enough?
- Did I eat too much?
- Did I drink with my meal?
- Did I drink within ½ hour after eating?
- Did I lie down too soon after eating?

If you think you have followed all the correct dietary advice, or if you are struggling with difficulty swallowing, reflux/heartburn or a night cough, it is likely your band is too tight. Discuss this with your bariatric team.

Inadequate weight loss

The surgery changes your stomach, but will not change your psychological hunger (cravings). Foods of low nutritional value such as simple carbohydrate foods like chocolate, cakes, biscuits etc. require very little digestion and can slide through the band easily. These foods are known as **'slider foods' and if you continue to eat these you will have an inadequate weight loss and even a weight gain.** Many people turn to slider foods because they are very easy to eat, unlike high protein foods, which require a lot of chewing and can cause discomfort if eaten too quickly. For your surgery to be successful long term, you need to avoid 'slider foods'.

Useful Information

1. Bariatric Surgery

- NHS choices weight loss surgery <https://www.nhs.uk/conditions/weight-loss-surgery/>
- Imperial College Healthcare NHS Trust www.imperial.nhs.uk/our-services/surgery/bariatric-surgery
- British Obesity Surgery Patients Association www.bospa.org
- WLS Info (Weight Loss Surgery Information & Support) www.wlsinfo.org.uk
- [British Obesity & Metabolic Surgery Society](http://www.bomss.org.uk) www.bomss.org.uk ([see patient section](#))
- Recipes for life before and after bariatric surgery- bariatric cookery book from NDR UK £6.50 <https://www.ndr-uk.org/item/212/BariatricSurgery/Recipes-for-Life.html>
- Bariatric cookery <https://www.bariatriccookery.com/>

2. Healthy Eating and Exercise

- British Dietetic Association www.bda.uk.com/foodfacts/home
- British Heart Foundation www.bhf.org.uk
- World Cancer Research Fund – www.wcrf-uk.org/uk

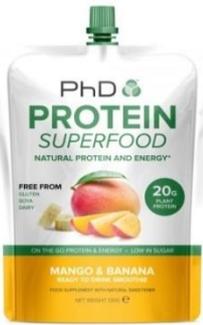
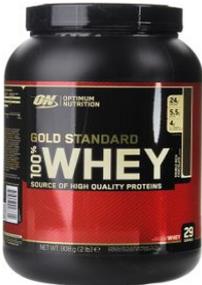
- NHS Choices www.nhs.uk/Livewell/
- Healthy Food Guide UK- healthy recipes and monthly meal plans. <http://www.healthyfood.co.uk/>
- Diabetes UK www.diabetes.org/Guide-to-diabetes/Recipes
- Change for Life- healthy recipes, meal ideas and shopping tips- you can monitor your sugar intake with the 'Sugar Smart app' and find healthy recipes on the 'Smart Recipes' app <http://www.nhs.uk/Change4Life/Pages/meal-planner-recipe-finder.aspx>

3. Psychotherapy / Counselling

- British Association of Counselling and Psychotherapy –www.bacp.co.uk
- United Kingdom Council for Psychotherapy www.ukcp.org.uk
- Improving Access to Psychological Therapies- www.iapt.nhs.uk
- Alcohol www.drinkaware.co.uk
- Smoking – see your health professional or GP for local support services

Some examples of commercial protein Shakes available

<p>UFit Protein Milkshake (310ml)</p> <p><u>Protein:</u> 22.4g <u>Carbs:</u> 10.7g <u>Energy:</u> 166kcal <u>Allergy:</u> Milk – Lactose Free available <u>Flavours:</u> strawberry, iced coffee, chocolate, banana, vanilla</p>	
<p>UFit Pro 50 Protein Milkshake (500ml)</p> <p><u>Protein:</u> 50.2g <u>Carbs:</u> 18.3g <u>Energy:</u> 336kcal <u>Allergy:</u> Milk <u>Flavours:</u> vanilla, strawberry and chocolate</p>	
<p>Huel (100g)</p> <p><u>Protein:</u> 29.5g <u>Carbs:</u> 37.1g <u>Energy:</u> 400kcal <u>Allergy:</u> suitable for vegans <u>Includes:</u> Fortified with vitamins and minerals <u>Flavours:</u> vanilla, berry, coffee, original</p>	
<p>Optimum Nutrition Vanilla Yoghurt Smoothie Protein Powder (35g in 200ml water)</p> <p><u>Protein:</u> 20.0g <u>Carbs:</u> 7.8g – no added sugar <u>Energy:</u> 128kcal <u>Allergy:</u> Milk , Soy <u>Flavours:</u> vanilla</p>	

<p>'For Goodness Shakes' protein shot (60mls)</p> <p><u>Protein:</u> 25g <u>Carbs:</u> 0.6g <u>Energy:</u> 101Kcal <u>Allergy:</u> not vegetarian <u>Flavours:</u> Pomegranate and coconut</p>	
<p>Vega Clean Protein Vanilla (35g in 200mls water)</p> <p><u>Protein:</u> 25g <u>Carbs:</u> 2.2g <u>Energy:</u> 133Kcal <u>Flavours:</u> Vanilla, Chocolate <u>Allergy:</u> gluten and dairy free. Vegan</p>	
<p>Asda protein water (500mls)</p> <p><u>Protein:</u> 30g <u>Carbs:</u> <0.5g <u>Energy:</u> 127Kcal <u>Flavours:</u> Strawberry and pomegranate, tropical <u>Allergy:</u> lactose</p>	
<p>PhD Protein Superfood Smoothie (130g sachet)</p> <p><u>Protein:</u> 20g <u>Carbs:</u> 5.5g <u>Energy:</u> 175Kcal <u>Flavours:</u> Mango and banana <u>Allergy:</u> gluten, soya and dairy free</p>	
<p>Optimum Nutrition Gold Standard 100% Whey Powder (50g in 200mls water)</p> <p><u>Protein:</u> 34g <u>Carbs:</u> 5.5g <u>Energy:</u> 182Kcal <u>Flavours:</u> Chocolate Mint, Banana Cream, Birthday Cake, Chocolate Peanut Butter, Cookies & Cream, Extreme Chocolate, <u>Allergy:</u> Milk</p>	

<p>MyProtein- Organic Whey Protein (25g in 200mls water)</p> <p><u>Protein:</u> 20g <u>Carbs:</u> 3.0g <u>Energy:</u> 102Kcal <u>Flavours:</u> strawberry, banana, unflavoured <u>Allergy:</u> Milk</p>	
<p>Science in Sport Whey 20. 20g protein in a 78ml gel</p> <p><u>Protein:</u> 20.0g <u>Carbs:</u> 2.0g –1g sugar <u>Kcal:</u> 89 <u>Allergy:</u> Milk , Soy, gluten free <u>Flavours:</u> chocolate mint, mango and passion fruit, caramel, peanut butter</p>	
<p>Slimfast Vitality high protein (330mls)</p> <p><u>Protein:</u> 26g <u>Carbs:</u> 14g <u>Energy:</u> 210kcal <u>Allergy:</u> gluten and lactose free <u>Flavours:</u> Chocolate, Berry blast</p>	
<p>Protein Weetabix Drink (275mls)</p> <p><u>Protein:</u> 21g <u>Energy:</u> 211kcal <u>Carbohydrate:</u> 22g <u>Allergy:</u> milk, gluten <u>Flavours:</u> strawberry and raspberry, chocolate, vanilla</p>	
<p>Asda Whey Box Vanilla protein supplement (20g serving added to food)</p> <p><u>Protein:</u> 15g <u>Energy:</u> 84kcal <u>Carbohydrate:</u> 2.5g <u>Allergy:</u> milk <u>Flavours:</u> vanilla, banana</p>	

