

Dietary advice after your endoscopic sutured gastroplasty (ESG)

Information for patients

This leaflet gives dietary advice for after your ESG and has been developed by bariatric (weight loss) dietitians. If you have any questions or concerns, please contact the nutrition and dietetics department (details at the end of this leaflet).

Details of the procedure

ESG is a procedure designed to reduce the size of the stomach, by placing stitches (sutures) on the inside and pulling them tight to fold the stomach in on itself (see diagram). This means that your stomach holds less food and you will feel full more quickly after eating.

ESG is a bariatric procedure, but unlike having an operation, there are no scars on your skin as the procedure is performed entirely from the inside. This

reduces the risk of complications and result in a shorter hospital stay. Also, no parts of the stomach are removed. It is performed by endoscopy alone, in a procedure similar to having a gastroscopy. You will have been provided with a separate information leaflet on gastroscopy.

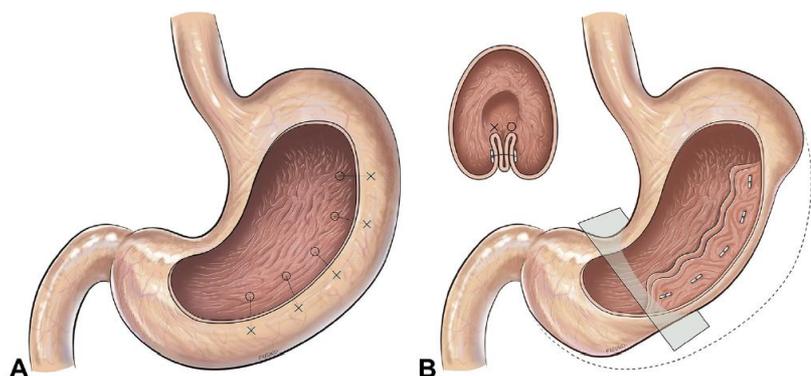


Diagram of the stomach before (A) and after ESG (B), showing the folds of the stomach with fixing sutures (inset) and how the stomach size has been reduced by the procedure.

Services provided by:

Guy's and St Thomas' NHS Foundation Trust
King's College Hospital NHS Foundation Trust

Food reintroduction after ESG

After your procedure you will need to go through several stages of food reintroduction, slowly progressing from liquids through to solid food. This is to give the stitches time to heal well. If you do not follow the dietary recommendations, there is a risk of loosening the stitches.

Stage	Time	Diet type	Definition
1	Weeks 1 and 2	Liquid diet	Smooth liquid, no lumps, thin enough that it runs off a spoon.
2	Weeks 3 and 4	Soft diet	Can be mashed with the back of a fork.
3	Weeks 5 onwards	Normal diet	All textures but smaller portions and low in fat and sugar.

Stage 1: Liquid diet (weeks 1 and 2)

- Start with sips and, if these feel comfortable, gradually increase the amount you take in one go.
- It is fine to drink (for example, tea, coffee, squash, water), but you should make sure these are in addition to high protein liquids and not **instead of** them.

High protein liquids

- Milk with added milk powder (make at home by mixing 1 pint of semi-skimmed or skimmed milk with 4 tablespoons of dried skimmed milk powder).
- Smoothies (fruit or vegetables blended with milk with added milk powder, high protein yoghurt or protein powder). Homemade will be better as shop-bought varieties may be high in sugar.
- Smooth soup (homemade or tinned) with an added 1 to 2 tablespoons of skimmed milk powder or unflavoured protein powders. Avoid instant cup-a-soups.
- Meritene™ shakes and soups (available in pharmacies).
- Complan™ shakes and soups (available in supermarkets and pharmacies).
- Meal replacement shakes
 - Slimfast™ (powders or ready to drink – available in supermarkets)
 - Tesco Slim™ or Asda Great Shape™
 - Exante™ or Lighter Life™ (available online).
- High protein milkshakes (such as, Ufit™, Arla™, For Goodness Shakes™, Urban Active™).
- Protein water (such as Vievé™, Upbeat™ or +PW™).
- Whey, soya or pea protein powders, made into a shake as in instructions (available in health food shops and some pharmacies).

Stage 2: Soft diet (weeks 3 and 4)

Food at this stage should be soft enough that it will fall apart when pressed with a fork or spoon. You should eat 3 small, soft meals a day and avoid grazing throughout the day. Listen to your body and when you feel satisfied, **stop**.

You should aim to balance your meals according to the small dinner plate below, with half of your meal being protein, a quarter vegetables or fruit and a quarter carbohydrate. Choose a high protein option and add small amounts of soft vegetables and carbohydrate – see examples. below.

Example meal plan (Stage 2: Soft diet)

Choose one from each group below

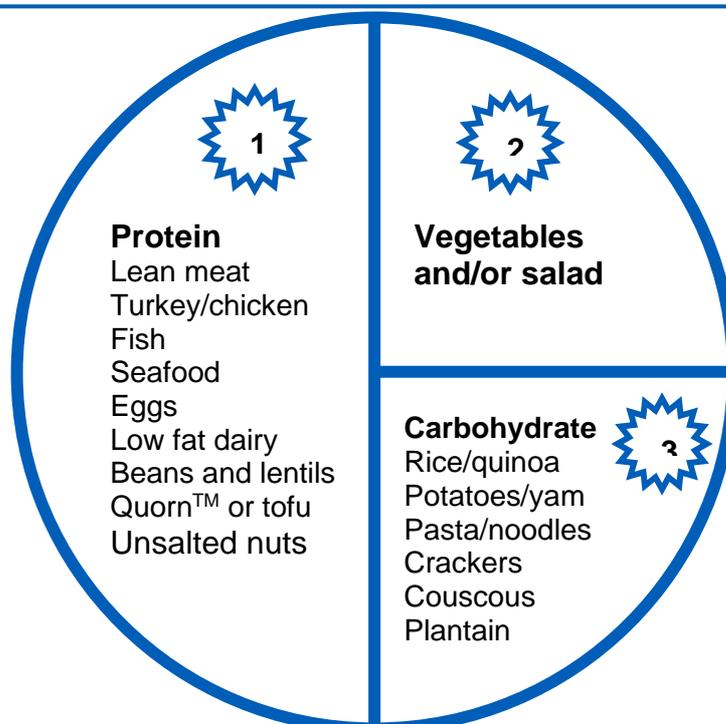
Breakfast

- Low fat, high protein yoghurt with soft fruit
- Weetabix® or other cereal softened with milk with added milk powder
- Porridge or Ready Brek®
- Soft cooked egg (poached, scrambled) with a tinned tomato
- Homemade fruit smoothie (fruit blended with yoghurt or milk)
- Protein or meal replacement shake

Main meals (two a day – lunch and evening meal)

- Crackers or crispbreads with high protein topping (tinned fish, cottage cheese, mashed egg, low fat soft cheese, hummus)
- Omelette (1 to 2 eggs) with cheese
- Lasagne, ravioli or spaghetti bolognese (soft pasta dishes)
- Shepherd's or cottage pie
- Fish in sauce or fish pie with soft cooked vegetables
- Tuna pasta bake (with soft cooked pasta)
- Meat/chicken stew with vegetables and boiled/mashed potato/cassava/plantain
- Mince in gravy with vegetables and boiled/mashed potato
- Baked beans with boiled/mashed potato
- Chunky, high protein soup (such as, minestrone, pea and ham, Tuscan bean)
- Lentil dhal
- Meat/chicken and vegetable curry (avoid rice or bread for now)
- Cauliflower cheese or macaroni cheese

Small dinner plate



Stage 3: Regular diet (week 5 onwards)

You are now ready to continue on your long-term eating plan. Remember that you are not just eating small amounts to reduce your calorie intake and lose weight. You should also be aiming for a healthy nutritious eating plan.

- 1. Eat three meals each day.** Avoid skipping meals, even if you don't feel hungry, as going for long periods without eating can actually slow down weight loss.
- 2. Eat slowly and stop as soon as you feel full.** Rushing your meals can lead to overeating as there is a delay between eating and your brain realising that you are full. Eating too quickly often means you won't be chewing your food properly.
- 3. Protein, vegetables, carbohydrates.** This is the order in which you should eat from your plate. Protein is the most important part, so eat that first in case you become full before you clear the whole plate. Carbohydrates are least important, so eat those last and don't worry if you cannot finish them.
- 4. Eat a healthy, balanced, solid diet.** Choose solid foods (such as lean meat or fish with vegetables) as these stay in the stomach for longer and are more satisfying. You will eat less overall and stay fuller for longer. Follow a diet, based on healthy eating guidelines, that is low in fat and sugar and high in lean protein and fibre.
- 5. Small portions.** Your meals should be no larger than the size of a 'side plate' or 'tea plate'. We suggest that you switch to using one of these plates long-term to help you control your portions. Use the small dinner plate diagram to guide you (page 3).
- 6. Be cautious of unplanned snacking.** Try not to develop a 'grazing' pattern of eating small meals throughout the day.
- 7. Choose low calorie drinks (non-carbonated).** Liquids pass through your stomach quickly and easily, and high-calorie drinks will add calories to your daily intake without filling you up. High-calorie drinks include alcohol, fruit juices, smoothies, sweetened (sugar-containing) squash/cordial, non-diet soft drinks, sports drinks, milk and milk-based drinks such as milkshakes. Milk is a good source of calcium and low-fat milk in reasonable quantities is fine, but other high-calorie liquids should be limited. **Avoid all** fizzy drinks as these can create pressure in the stomach and cause discomfort and possibly lead to the stomach stretching.

For best weight loss, limit the following foods:

- high calorie drinks (alcoholic drinks, fruit juice or smoothies, full-fat milk or milky drinks such as hot chocolates, milky coffees or milkshakes, sugar-sweetened soft drinks, energy drinks)
- chocolate, ice-cream, cakes, sweets, biscuits and desserts rich in sugar or fat
- added fats and fatty foods – butter, oils, cream, full fat dairy, fried foods, fatty meats
- high fat savoury snacks foods such as crisps, pastries and nuts

Cooking tips

- Remove all fat and skin from any meat or chicken **before** cooking.
- Use low fat cooking methods such as grilling, baking (wrap in foil to keep things moist), steaming or boiling.
- Limit oil or butter added to vegetables or salads. If you need extra flavour, add seasoning or a little bit of low-calorie dressing or vinegar.
- If you need to use oil to stop food from sticking, use a spray oil.
- Add flavour using herbs, spices, seasonings, lemon juice, ginger, onions, and garlic.

- Do not add any oil or butter to carbohydrates – keep them simple.
- Choose high fibre carbohydrate options wherever possible as these will keep you fuller for longer and help to prevent constipation (try wholegrain bread, pasta, rice, crackers and keep skins on potato).

Multivitamins and minerals after ESG

After your procedure, it is unlikely that you will be able to get all the vitamins and minerals essential for good health from your food alone. So it is important that you take a multivitamin and mineral supplement:

- Multivitamin and mineral (A-Z) – choose from:
 - Forceval™ (available on prescription) – 1 capsule each day or
 - over the counter supplement (1 tablet each day) such as Sanatogen A-Z™, Centrum A-Z™, Tesco A-Z™, Lloyds A-Z™
- Vitamin D 2000IU (1 tablet each day)
- If you have pre-existing deficiency (for example, iron) continue any prescribed supplements

Long-term nutritional monitoring

It is also important that you have regular blood tests to monitor for nutritional deficiencies (you not having enough in your body). You should have bloods at 6 and 12 months in the first year and annually thereafter.

Where can you get more information?

If you are concerned at any time, contact one of the dietitians and they will call you to discuss things further. If you feel that you may need extra support, you can make an appointment to come into the hospital.

Contact us

If you have any concerns or queries, please contact your dietetic team:

If you are under **King's College Hospital** bariatric dietitians, please contact:

t: 020 3299 2584

e: kch-tr.kingsbariatricdietitians@nhs.net

If you are under **Guy's and St Thomas'** bariatric dietitians, please contact:

t: 020 7188 2010

e: BariatricDietitians@gstt.nhs.uk

Your comments and concerns

Guy's and St Thomas' NHS Foundation Trust

For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.

t: 020 7188 8801 (PALS) **e:** pals@gstt.nhs.uk
t: 020 7188 3514 (complaints) **e:** complaints2@gstt.nhs.uk

King's College Hospital NHS Foundation Trust

The Patient Advice and Liaison Service (PALS) offer support, information and assistance to patients, relatives and visitors. They can provide help and advice if you have a concern or complaint that staff have not been able to resolve for you. PALS at King's College Hospital, Denmark Hill, London SE5 9RS, **t:** 020 3299 3601, **e:** kch-tr.palsdh@nhs.net

Was this leaflet useful?

We want to make sure the information you receive is helpful to you. If you have any comments about this leaflet, we would be happy to hear from you, fill in our simple online form, **w:** www.guysandstthomas.nhs.uk/leaflets, or **e:** patientinformationteam@gstt.nhs.uk