Intra-Gastric Balloon
Bariatric Surgery

We can provide interpreters for a variety of languages, information in larger print or other formats (e.g. audio) - please call us on 01932 723553.
To use the Text Relay service, prefix all numbers with 18001.
About the procedure

The intra-gastric balloon is a soft silicone balloon that is placed into the stomach and filled with sterile saline. It partially fills the stomach and creates a feeling of fullness. When combined with a healthy diet and behavioural modifications the intra-gastric balloon helps to control your portion size and aid weight loss.

The Intragastric balloon is recommended for patients who are required to lose weight before an operation to reduce their surgical risk. It stays in the stomach for a maximum of 6 months.

The balloon is placed into the stomach through the mouth and gullet (oesophagus). You will be given sedation or a light anaesthetic during the procedure. The whole procedure takes around 30 minutes and you will be able to go home on the same day.

Remember, once the balloon has been removed you will be able to eat larger portions. Ensure you follow healthy eating guidelines to prevent any weight regain before your next procedure. The Specialist nurse will see you 4 weeks after the balloon has been removed to check on your progress and the Specialist Dietitian will also see you to go back over the pre and post-operative diets again.

Support

If you would like to meet people who have had an intra-gastric balloon or would like support during your weight loss journey then why not join us at:

The Bariatric Support group - last Monday of every month at Ashford Hospital, unless otherwise stated.

Alternatively join us online via our facebook page, bariatric buddies.

Details of both the above can be obtained from your Specialist nurse or Dietitian.

Notes:

Additional information can be obtained from your Specialist nurse or Dietitian.

Further Information

We endeavour to provide an excellent service at all times, but should you have any concerns please, in the first instance, raise these with the Matron, Senior Nurse or Manager on duty. If they cannot resolve your concern, please contact our Patient Advice and Liaison Service (PALS) on 01932 723553 or email pals@aspnhs.uk. If you remain concerned, PALS can also advise upon how to make a formal complaint.

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If this was to occur, please contact the bariatric office immediately on 01932 722077 or 01932 722365 or go to A&E if out of hours.

Vitamin and Mineral supplements
Supplements are useful for people who are not getting enough nutrients from their food. After the gastric balloon, your intake will initially reduce. Current guidelines are still being drawn up but are suggesting that balloon patients should take one A – Z vitamin and mineral supplement tablet throughout their 6 months.

Follow up
The intra-gastric balloon will stay in your stomach for approximately 6 months. During this time you will be seen in the outpatient clinics by the following people:

- **Bariatric Specialist nurse** - 4 weeks post insertion of balloon to monitor your progress
- **Bariatric Surgeon** - 5 months post insertion to assess your progress and to make a decision on the next stage of surgery
- **Bariatric Dietitian** - At 2 months and at 5 months after insertion to monitor your progress and 1 month after the removal of the balloon to check your weight and also to give a refresher on the pre and post-operative dietary guidelines

Removing the intra-gastric balloon
The intra-gastric balloon will be removed approximately 6 months after its insertion. The procedure is very similar to the balloon being inserted. You will be able to go home on the same day.

Please follow the Preparing for the surgery section above on page 3 prior to the balloon being removed.

Preventing for the procedure
You will need to be on a liquid only diet for 2 days before your procedure. The types of fluid you can consume include:

- Juices
- Thin soups
- Jelly
- Milk
- Slim fast / Complan
- Yoghurts

Other things to consider:
- You will not be able to drive on the day of the procedure so you will need someone to accompany you to and from the hospital
- Someone will need to stay with you for the first 24 hours after the balloon has been inserted
- Bring a book / magazine with you to read as you may have to wait before going down for your procedure
- Arrange to have some time off work. Most people return to work 1 week after having the procedure
- Ensure you have appropriate foods and drinks available at home for after the procedure
- Prior to your procedure you will be asked to attend for a pre-operative assessment

The hospital will send you a letter confirming the date of your procedure and where you need to go on the day. The letter will also advise you when you need to stop eating and drinking prior to the procedure.
The day of the procedure

This is the start of your weight loss journey. Try and stay calm and relaxed. The hospital staff will be able to answer any last minute questions you may have.

Remember, do not have any food or drink on the day of your procedure (unless otherwise informed)

The nursing staff will weigh you when you arrive at the hospital

Before you go down for the procedure the surgeon and anesthetist will come and talk to you. They will discuss the procedure and the complications with you. The Surgeon will ask you to sign a consent form.

When the procedure has finished you will return to the day surgery unit. The nursing staff will monitor your blood pressure and get you to start having small sips of water.

When the nursing staff are happy you have recovered from the procedure you will be allowed to go home. You will not be able to drive so please ensure you have someone who can collect you.

You will be given medication to help control the nausea and vomiting. You will also be given a tablet called Lansoprazole. This must be taken every day until the balloon is removed.

- A short walk in fresh air may help reduce nausea

Severe persistent vomiting should not be ignored. Please contact a member of the team on 01932 722077 or 01932 722697 if this continues to occur. Please ensure that you take a multi vitamin and mineral; supplement during this period of time, especially one containing Thiamine (B1).

Halitosis (bad breath)

Bad breath can be a result of dehydration and food getting stuck on the balloon. In order to lift the food from the balloon we recommend you drink at least 1 glass of fizzy liquid per day. Ensure you stay well hydrated by consuming 1500-200mls (3-4pts) per day.

Reflux

Reflux and indigestion are caused when acid moves from your stomach into your oesophagus. You will be prescribed medication called Lansoprazole / Omeprazole to reduce your stomach acid production whilst the balloon is in place. This medication should be taken daily for 6 months or until the balloon is removed.

Constipation

This can occur especially in the initial stages as you are eating less than normal and also have less fibre in your diet. Symptoms include: hard stools, feeling full and potentially nausea. Please ensure that you drink plenty of fluids, increase your fibre when possible and are active. If you experience discomfort, you can take laxatives such as Senokot or Fybogel, although we would wish to know if this continues to be a major problem.

Blue / Green Urine / stool or vomit

A blue dye is added to the saline that is injected into the balloon, so that in the rare event that the balloon was to leak or rupture, you would know immediately by the change in colour of your urine / stool or vomit.
The current Government recommendations for alcohol consumption are:

- 21 units a week for men (3 – 4 units / day max)
- 14 units a week for women (1 – 2 units / day max)
- Have 1 – 2 alcohol free days and avoid binge drinking

1 unit = Half pint of beer or 1 pub optic measure of spirits
2 units = 1 small glass of wine (175ml)

Remember

- Use diet / low calorie non fizzy mixers
- If you are taking any medication, consult your doctor before drinking alcohol

Potential Problems

Vomiting

Vomiting and nausea are common in the initial 5 days whilst the body adapts to having the balloon. You will be given medication and a liquid diet to help reduce this as much as possible. However, if you continue to experience occasional vomiting bouts please try the following:

- Try to ensure that you eat / drink slowly, aiming for 30 minutes for a meal
- Do not try to over eat. Use a smaller plate for meals
- Do not eat or drink late at night or just before sleeping
- Eat sat upright, do not eat whilst laying down
- If feeling sick, plain crackers or toast can sometimes help
- Try cold foods if the smell of food increases your nausea
- Try little and often. Aim for 6 small meals a day
- Trial foods or drinks containing ginger. e.g. ginger tea, plain ginger biscuits or crackers, sugar free ginger ale

Dietary Guidelines

Other than the speed of food re-introduction, the dietary guidelines after the insertion of gastric balloon are similar to those after bariatric surgery.

Week One (Days 1 – 7) Liquid Diet

For the first week after surgery, please ensure that you have a liquid diet. This helps your body to adapt to the balloon. However, it is hard to meet your body’s requirements when you are only consuming liquids. It is therefore important to ensure, that the liquids you do have, provide nutrients for your body.

Try drinking the following liquids:

- Milk (semi-skimmed, skimmed or 1%) – aim for 1 pt. per day
- Milk shake (not too sweet)
- Soup with blended protein such as chicken / fish / meat / pulses. If thick, please dilute with milk until a liquid consistency. Or add 2 tablespoons of dried milk powder. Please ensure any lumps are removed by blending
- Build-up or Complan soup and drinks (no lumps or bits)
- Ovaltine / Horlicks made with semi-skimmed milk
- Slimfast
- Thin yoghurt with no bits (Diet varieties only)
- Thin custard

The following fluids are fine between meals BUT please do not fill up on these at the expense of the nutritious fluids above.

- Tea or coffee (sweetener only if needed)
- Fruit juice (½ fruit juice, ½ water)
- Fruit squash (sugar free / low calorie varieties only)
- Water or flavoured water (sugar-free varieties)
Sample Menu Week 1

Breakfast:
- 1 small glass of Slimfast or Nestle Build-up drink

Mid-morning:
- 1 small glass of milk

Lunch:
- Soup (200ml) – Please ensure these are protein rich but blended until completely smooth
- ½ - 1 pot thin yoghurt

Midafternoon:
- 1 small glass of milk

Evening meal:
- Soup or Complan (savoury) or Slimfast or other meal replacement product or soup as above
- ½ - 1 pot yoghurt

Supper:
- 1 small cup of chocolate or Ovaltine (made with milk) or a small glass of milk

Week 2
Unlike bariatric surgery, most patients with gastric balloons should be able to progress from liquids to solid foods in the second week. Week 2 is therefore split into 2, the first half on pureed meals and the other half on soft mashable foods. You should be on solid foods by day 15.

- Chilli con carne with extra vegetables with rice
- Spaghetti or pasta with minced beef and bolognise sauce (ensure extra vegetables are added)
- Shepherd’s or Cottage pie with vegetables
- Salmon with new potatoes and vegetables
- Chickpeas with Mediterranean vegetables. Add a small amount of feta cheese for extra protein
- Dahl with rice
- Stir-fried chicken and vegetables with noodles

Fluids
Fluids are essential for health. If you do not drink enough you may suffer from dehydration. This can:
- Cause problems with constipation
- Affect concentration
- Make you feel tired and stop your body from working normally

Aim for 1500 – 2000ml (~3 – 4pts) per day. Some people find drinking water difficult. If this is the case, try alternatives such as:
- Fizzy diet drinks or water can help reduce food sticking
- Diluted fruit juice
- Milk
- No sugar squash

Alcohol
When trying to lose weight, remember alcohol contains calories, with few other nutrients and will be fully absorbed. It is important to limit your alcohol intake to help with weight loss. In addition, it is also an appetite stimulant, which may lead you to eat more and choose inappropriate foods.
Aim to reduce the amount of sugar in your diet by:

- Avoid sugar in drinks, use artificial sweetener instead
- Choose diet / light / no added sugar versions of squash
- Choose unsweetened fruit juice
- Cut down on biscuits, chocolate and cake consumption
- Use low sugar / low calories / diet / healthy options where possible, including breakfast cereals, yoghurts, puddings
- Spread jam, marmalade, honey and syrup thinly on bread, or try the reduced sugar versions

Ideas for meals (Healthy Eating)

**Breakfast suggestions:**
- Porridge / Shreddies / Shredded Wheat or Weetabix (1-2) with 200ml skimmed milk
- One small pot of yoghurt (diet, fruit flavour) and 1 portion of fruit such as soft fruit
- Soft boiled egg or omelette with ham or low fat cheese portion and 1 slice dried toast

**Lunch Suggestions:**
- 2 sliced sandwich with lean filling such as turkey or tuna/salmon (plain) and salad
- 1 Small jacket potato with baked beans
- Chicken soup with 2 melba toast or crispbread
- 1-2 slices of toast with beans or egg

**Evening Meal suggestions:**
- Jacket potato with beans or tuna / grated cheese (low fat)

**Week 2 (Days 8 – 10) Pureed diet**

During this time you need to puree ALL food and meals. You can do this by using a blender or a food processor. Please DO NOT use baby food products.

Aim to have foods that are the consistency of smooth thick porridge. For example:

- Any vegetable without skin / pith can be pureed or blended (such as carrots, parsnips, sprouts, cabbage, turnip)
- Pureed mash potato or sweet potato or yam or creamed rice are good sources of starch
- Protein-rich foods such as cottage cheese, chicken, lamb, beef, turkey, Quorn, soya (with gravy / sauce) or fish (all must be pureed until smooth)
- Yoghurt (set / liquidized but no bits) as snack as it offers some protein
- Pureed fruit / mashed banana (stewed or canned in natural juice may be easier to puree)
- Plain crackers dipped in milk / liquid to make them soft
- Continue to drink 1pt milk and a glass of diluted fruit juice (½ juices, ½ water).

**Foods to avoid:**

- All solid foods
- Tough skin on food (such as tomato, sausage)
- Sweetcorn
- Foods with seeds
- Bacon and meat with 'gristle' and meat that has not been pureed
- Hard cheese
- Potato skins
- Toast, bread
Tips:
- Use a blender or liquidizer to puree your food
- Food looks more pleasant if you puree it separately rather than in one go
  - Eat food very slowly, set aside 30 to 45 minutes for meals
  - Ensure you have a good variety of high protein foods such as milk, yoghurt, pureed meat / poultry / pulses / fish
  - Aim for a total of 1 pint of milk daily

Pureed food - Sample Menu

Breakfast:
- Porridge / powdered rice with milk

Mid-morning:
- ½ cup of pureed fruit or cup milk

Lunch:
- Soup with extra blended meat / fish

Mid-afternoon:
- ½ - 1 pot of yoghurt

Dinner:
- Minced beef (pureed) in gravy with pureed mashed potato and pureed vegetables

Supper:
- Pureed fruit with ½ pot yoghurt

Week 2 (Days 11 – 14) Soft diet

Please allow 30 to 45 minutes to eat your meal. It is important that you stop eating as soon as you feel full. Eating too much or eating too quickly may cause discomfort and possibly vomiting.

Here are some ideas to reduce your fat intake:
- Boil, steam, poach or casserole - rather than frying / roasting with oil
- Try a low fat unsaturated margarine and spread thinly
- Cut off the visible fat around meat and avoid eating the skin of chicken
- Limit the amount of pies, pastries, pasties, croissants, garlic and naan bread etc.
- Try low fat / fat free versions of foods, e.g. low fat cheese, mayonnaise, salad dressing
- Eat less crisps and chips
- Eat less processed meat, as this is higher in fat, e.g. sausages, corned beef, pâté

Many fatty foods are of a consistency which is easy to eat even with the gastric balloon and therefore weight loss will be limited if these are not reduced.

Sugar
It has very little benefit for the body other than providing calories. We call these empty calories as sugar has no other vitamin and minerals. It can be found in many foods or drinks.
There are two main groups of fat - saturated and unsaturated.

**Saturated fats** can raise your blood cholesterol and increase the risk of heart problems. These are primarily found in animal based products or processed foods. Examples include:

<table>
<thead>
<tr>
<th>Saturated fats</th>
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</tr>
</thead>
<tbody>
<tr>
<td>cream cheese, full fat milk , cream</td>
<td>Biscuits / cakes / chocolate</td>
</tr>
<tr>
<td>visible fat on meat, skin on chicken</td>
<td>Pies / pastries / processed meats</td>
</tr>
<tr>
<td>Butter</td>
<td>puddings such as cheesecakes and trifles</td>
</tr>
<tr>
<td>Crisps</td>
<td></td>
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</tbody>
</table>

**Unsaturated fat** refers to either poly-unsaturated or mono-unsaturated fat and can help reduce blood cholesterol. These are preferred to saturated fats. The table below shows some examples of unsaturated fats:

<table>
<thead>
<tr>
<th>Unsaturated fats</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Poly-unsaturated</td>
<td>Mono-unsaturated</td>
</tr>
<tr>
<td>Sunflower, corn, linseed, safflower and soya oils</td>
<td>Olive, ground-nut, rapeseed and walnut oils</td>
</tr>
<tr>
<td>Vegetable margarine</td>
<td>Olive oil based spread</td>
</tr>
<tr>
<td>Oily fish</td>
<td>Nuts</td>
</tr>
</tbody>
</table>

However, remember that all fats, oils and food made from these, are still high in energy (calories), therefore, try to reduce the total amount used to help with weight loss.

Try to aim for 3 - 4 portions of fat per day: A portion is

- 1 tsp. Butter / margarine
- 1 tsp. Oil
- 1 tbsp. Cream
- 1 tbsp. Mayonnaise / salad cream

**Foods to have:**

You can start to introduce more foods and different textures to your diet at this stage. However, choose nutritious foods to provide the nutrients your body needs.

Please use a fork to ensure your food is a soft or mashed texture.

**Suitable foods include:**

- Weetabix, porridge or Ready Brek – all soaked until mushy
- Mashed potato, sweet potato or yam
- Soft cooked pasta with a sauce (preferably tomato) or well cooked rice
- Mashed vegetables (such as carrots, parsnips)
- Minced chicken or meat or flaked fish with a sauce / gravy
- Scrambled egg or soft omelette
- Cottage cheese or grated reduced fat cheese
- Pulses such as mashed baked beans, chick peas, kidney beans
- Soft fruit or tinned fruit in natural juice
- Yoghurt (low fat or diet versions)
- Custard
- One to two breadsticks, crisp breads, crackers

**Foods to avoid**

- Any food with a tough skin or pith such as sausages, tomato, apple, plums, oranges or bacon.
- Stringy or fibrous vegetables such as celery, asparagus, or sweetcorn, green beans, mushrooms etc.
Soft and Mashable - Sample Menu

Breakfast Suggestions:
- One Weetabix / plain instant oats with semi-skimmed milk
- Yoghurt & soft fruit or mashed banana

Lunch suggestions:
- Cheese omelette made with one - two eggs and reduced fat grated cheese with 1 – 2 Melba toast.
- Soup with Dahl / lentils / chickpeas or very soft meat / fish and 1 – 2 melba toast
- Scrambled egg on cripsbread

Evening meal suggestions:
- Minced meat in a tomato sauce with well cooked pasta or rice or mash potato with mashed vegetables
- Fish in sauce with mash & mashed carrots and swede
- Small jacket potato (no skins) with mashed beans
- Low fat shepherd’s pie or cottage pie with mashed vegetables

Suggested snacks:
Each of the following represents one snack:
- Glass of semi-skimmed milk or glass of fruit smoothie made with pureed fruit and low fat yoghurt
- One small low fat or diet yoghurt
- Fruit – tinned in natural juice, stewed or soft fruit.

In addition: You can drink tea, coffee, water, low calorie fruit squashes. Please limit fruit juice to 1 glass (150ml) per day. If you are diabetic, limit fruit juice to 125ml per day.

Fruit and Vegetables
These contain many beneficial ingredients for health. These include being low in fat, high in fibre and water but also contain other substances such as Vitamin C, beta-carotene and anti-oxidants. These are used for wound healing, keeping skin and teeth healthy but also for many other processes within the body. By including these, you reduce the risk of developing nutritional deficiencies. They are also useful to help prevent constipation.
- Aim for a minimum of 5 servings per day. A portion is:
  - 2 heaped tbsp. vegetables
  - 1 small salad (cereal bowl size)
  - 1 medium sized fresh fruit (80g)
  - 6 tbs. Stewed / tinned fruit
  - 150ml fruit juice or 125ml if diabetic

Dairy
These are good sources of protein and are recommended for their calcium to help ensure that your bones remain healthy. Try to choose low fat or diet versions and aim for 3 servings a day. A serving is:
- 125g diet yoghurt
- 28g low fat cheese (such as low fat cheddar)
- 200ml milk such as 1%, semi skimmed or skimmed milk.

Fat and Sugar
Fats
Fats are needed by our body for many things such as regulation and production of hormones, cushioning and insulation so should not be cut out completely. However, most people in the UK eat more than needed thereby contributing to excess calories and weight. Try to reduce the total fat in your diet.
A portion consists of:
- 2-3 medium slices beef, lamb, liver, chicken, turkey (2-3 oz cooked meat)
- Large fillet white fish (5 oz) or 1 medium oily fish (3-4 oz)
- 2 eggs
- 5 tbs. Baked beans or 4 tbsp. Cooked lentils
- 4 oz. Quorn / Tofu / Soya

Breads, cereals and Starchy foods
These are important sources of fibre, vitamins and minerals and energy. The energy from these foods are the preferred ‘fuel’ of many organs including the brain and heart but even red blood cells which help transport oxygen around the body. They also control your blood sugar which is especially important for people with diabetes. They can also affect concentration and hunger. It is therefore important to include these at every meal.

However bread, rice and pasta can stick to the top of the balloon which may cause your breath to become smelly. If this is a problem, please have a drink of fizzy water.

Aim to have 5 - 8 portions per day. A portion consists of:
- 3 tbsp of breakfast cereal / 1 Weetabix or Shredded Wheat
- 1 slice of bread or toast
- ½ large roll or 1 small roll
- ½ large pitta bread or 1 ‘mini’ pitta
- 1 small chapatti
- 3 crackers or crispbreads
- 2 heaped tbsp. of rice (boiled)
- 3 tbsp. heaped boiled pasta
- 2 egg sized potatoes or 1 egg sized sweet potato

Week 3 – (Day 15 onwards) Healthy Eating
You should now start healthy eating guidelines.

It is essential for everyone to have a well-balanced diet but especially so for people who have the gastric balloon and who are trying to lose weight. You still need to ensure your body is getting enough nutrients, vitamin and minerals and importantly protein to maintain your health in the long term.

The consequences of a poor diet over many years can be a contributory factor to many long term diseases such as:
- Diabetes
- Heart Disease
- Osteoporosis (fragile bones)
- Anaemia
- Cancer
- Weight gain

In addition, it is important that the correct foods are eaten to ensure that you lose weight as fat rather than muscle. It is important to preserve muscle as it uses more energy than fat, so by losing more muscle than expected, it may reduce your metabolism and it becomes likely your weight will rebound. By sticking to a healthy well balanced diet, you will be helping to ensure your weight loss is more likely to be fat and that your body gets all the nutrients it requires to remain healthy.
What is a Balanced diet?
A balanced diet includes all the vitamins, minerals and nutrients to ensure good health. This means eating a wide variety of food. The Eatwell plate (overleaf) is designed to provide an idea of the types of foods you should include as part of a healthy eating lifestyle. The picture below, separates food into 5 groups and gives an idea of the proportions of foods expected in a day.

The five food groups are:
- Starchy Foods including bread and cereals
- Fruit and Vegetables
- Meat, Fish and Alternate Protein foods
- Dairy Products
- Sugary and fatty foods

Meat, Fish and Alternatives (Protein)
These foods are important for many reasons but especially for growth and repair. Protein is used by every cell in your body and therefore can affect immune functioning, wound healing and hair and skin health. Protein rich foods also contain many other essential vitamins and minerals such as iron, zinc and magnesium.

Meat
Try to have as wide a variety as possible and choose lean cuts or ensure fat or skins are removed. Having a wide variety will provide the body with different vitamin and minerals. For example, red meat is usually high in iron and is recommended once or twice weekly.

Fish
Is an excellent source of protein and is often well tolerated. Oily fish such as salmon, trout, pilchards and mackerel are also good sources of omega 3 fish oils which have been shown to have heart protective qualities. Aim to have fish once or twice a week, preferably one portion being oily fish.

Eggs
Are very good sources of protein, rich in iron, but also other vitamin and minerals such as Vitamin D. They can be cooked in many ways including poaching, scrambling or in omelettes making them very versatile.

Vegetarian sources
Beans, lentils and other pulses are also good sources of protein, high in iron, calcium, fibre but low in fat. Quorn, tofu and soya are often used by vegetarians for protein. These are often well tolerated and provide extra options for meals.

Ideally you should aim to have 2 – 3 small portions each day. Eat the protein part of the meal first, in case you feel full.