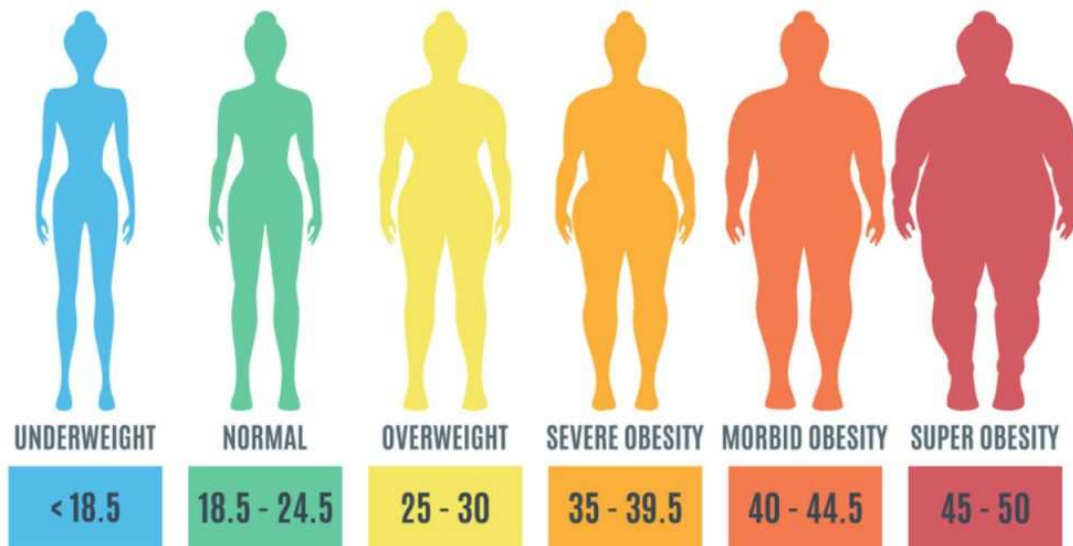


WEIGHT LOSS SURGERY BOOKLET

Mr Jon Shenfine MBBS FRCS FRACS PhD
Jersey General Hospital
2021

BODY MASS INDEX



Weight Loss Surgery

Weight loss surgery, obesity surgery, or bariatric surgery all relate to operations that give patients a 'tool' that they can use to assist with weight loss when diet, exercise and medications fail.

We have specific criteria that you have to fulfil to be a candidate:

1. Body Mass Index (BMI)>40
2. BMI>35 with at least one obesity related illness such as type II diabetes or obstructive sleep apnoea
3. BMI>30 with 'brittle' diabetes or other severe obesity related condition
4. Has made reasonable attempts at weight loss without success
5. Age 18-65 years
6. No alcohol or drug dependency
7. Committed to life-long follow up and change in lifestyle

Surgery can change how much you can eat, how much you want to eat and sometimes how much energy your body gets from the food that you eat. But it is not a 'magic bullet' or a 'quick fix', it has to be linked to a commitment to change your lifestyle in terms of diet and exercise to be associated with good outcomes. Most patients will see significant weight loss after surgery, however, occasionally this does not happen, usually due to a failure to commit to healthy eating and regular exercise, equally there is great variability in how much an individual loses. Mr Shenfine will discuss this with you but it's important that your expectation of weight loss is realistic.

All operations carry risk and these have to be balanced against the long-term health benefits of a healthy weight. Generally, unless you are old or very unwell, the benefits offset the risks, as obesity does negatively impact your health and well-being.

Operations

Gastric bypass

The Roux-en-Y gastric bypass (RYGB) has been around in one form or another since the 1960s. Globally it is the most common weight loss procedure being especially popular in the US where it was first developed. The name comes from a Swiss surgeon: Dr Cesar Roux who developed techniques of joining up the bowel which is used in this operation.

We have the most long-term data about the RYGB and as such it has become the operation against which all other obesity operations are compared. However, although it is a standard to compare against it is not a 'gold' standard since all bariatric operations have their good and bad aspects and the RYGB has specific

drawbacks too. One of the major advances has been the move to perform this surgery laparoscopically, which has reduced post-operative discomfort and length of hospital stay with a shorter time to return to normal activities but with preserved safety. This is sometimes written as LRYGB.

There is a newer version of this operation which is gaining in popularity because it is simpler, quicker, associated with lower complication rates and appears to be just as effective. This has had a few names but is generally referred to as the Mini-Gastric Bypass or One Anastomosis Gastric Bypass (MGB or OAGB). I prefer the term OAGB. It has been around since the 1990s but has only become popular over the last five years or so. However, in that time thousands of patients have undergone this operation and it is now accepted as a non-experimental variant. Again this is performed laparoscopically (LMGB/LOAGB).

Gastric bypasses have at least three effects on your relationship with food and thereby your weight. To begin with, they are restrictive with portions sizes reduced by your new, smaller sized gastric (stomach) pouch that is formed by the surgery. Eating more than you should leads to discomfort and vomiting. Over a long time this restriction can dissipate as the pouch stretches. It is important with all weight loss surgery to change your lifestyle while the operation works best. The second effect is of malabsorption: not all the calories you eat are absorbed by the body. Again, over time the body adapts/compensates this effect and you need to take extra (supplemental) vitamins and minerals every day and have regular blood tests to check that your vitamin and mineral levels are healthy. Deficiencies are possible and can be dangerous if you do not take the supplements. Finally, bypasses reduce your appetite. This is due to complex hormonal feedback changes (mostly be a reduction in your hunger hormone – Ghrelin).

Sleeve Gastrectomy

The sleeve gastrectomy developed from both as an open operation called the Vertical Banded Gastroplasty (VBG) and as part one of a two stage procedure called the Biliary-Pancreatic Diversion (BPD). Over time it has rightfully become a stand-alone procedure which is now performed laparoscopically (LSG). In basic terms, your stomach size is reduced by removing 80-90% of it. Obviously, this limits how much you can eat because you will rapidly fill up this smaller stomach but also by removing the part of your stomach that produces hunger hormone (ghrelin). It is important that you recognise the feeling of fullness as it may be different to the feeling pre-operatively.

As a result of the changes after LRYGB, LOAGB or LSG patients will lose up to 30% of their total body weight (or around 60% of excess body weight) over a period of around 18 months. But everyone is different, some lose weight faster, some slower, some lose more than this and some less. There is no way to predict exactly how much weight you will lose but it is uncommon not to lose some

weight. This weight loss and other hormonal effects mean that there can also be improvements in your medical conditions if you have them. Such as diabetes and hypertension. Many patients go into complete 'remission' from their type II diabetes - meaning that they no longer require medication such as insulin or oral tablets to help them control their sugars. Hypertension and high cholesterol can also resolve and sleep apnoea also often improves.

Gastric Band

The band is a simple premise. Laparoscopically, an adjustable, soft, inflatable band is placed around the upper part of the stomach to create a smaller stomach pouch. This works by restricting your portion size and hormone changes reduce your hunger and increase your satiety. They were incredibly popular when introduced in the 1990s. They were marketed as being very safe to place, effective, adjustable and easily removable without the issues of nutritional deficiencies that are more common with the other weight loss surgeries. But this has not totally been borne out. Over time, there have been numerous issues with bands. The weight loss is not as dramatic or sustained as other surgeries, they led to dilatation of the gastric pouch and oesophagus over time and sometimes they erode into the stomach or slip leading to major problems and more surgery to deal with these problems. Adhesions and scar tissue form under the band so they certainly leave their mark. They have fallen out of favour in most of the world but remain strangely popular in the UK. Mr Shenfine will not place a gastric band but he is happy to work with your band if you have one; remove your band or deal with the other consequences; or revise your band to another more effective weight loss operation.

Before surgery

Information is really important to make a decision. We do not assume that you understand surgery, but we do want you to come with some research and knowledge to your appointments, as having an operation always carries risks as well as benefits.

At your appointment with Mr Shenfine, he will discuss your history of weight gain and loss; your medical conditions if any; and examine you. If surgery is right for you, he will then talk about the types of operation and what he feels would be your best surgical option as well as your preferences. He will finally discuss the general and specific risks and benefits and expectations. Some patients are ready for surgery at this point and others will need more time, more information or more investigations before proceeding.

We cannot operate without your 'informed' consent i.e. you must have capacity and enough knowledge to appreciate the benefits, the risks, the side-effects and are able to balance this information and agree to undergo weight loss surgery. Primary weight loss surgery is very safe but there have been cases worldwide of mortality or development of life-threatening and life-damaging complications and therefore you must agree to any of the risks of undergoing surgery. We encourage patients to have as much information as possible and we are always available to answer your questions. Mr Shenfine will ask you to sign a 'risk form' which details the risks of your surgery at this point – this is part of your consent but a 'Hospital consent form' will also need to be signed, perhaps on the day of surgery. Secondary or 'revisional' surgery usually carries a higher risk of complications and Mr Shenfine will discuss this with you.

Pre-op VLCD & the Milk Diet

It is important that you follow a special diet in the two weeks before your surgery and your dietician will have discussed this Very Low Calorie Diet with you. Sometimes these involves slimming shakes and sometimes a simple 'milk diet' developed in Portsmouth. They are all similar. You will lose weight on this diet but the real benefit is that they all 'shrink' your liver. Mr Shenfine will be operating under your liver and in weight loss patients this space can be reduced in size. By reducing the size of your liver this increases the space and thus the ease and safety of the operation. But this also helps you to mentally prepare for your dietary journey after surgery. It's an opportunity to remove tempting foods from the house, to get used to taking a multi-vitamin every day, discuss the diet with your family and close friends and plan your future meals and cooking. There are a number of VLCD diets that we can use but the easiest and cheapest is the MILK diet. Essentially this involves drinking 2litres of semi-skimmed milk a day together with a 'salty' drink and a multi-vitamin tablet. But NO food! A small number of patients experience side effects whilst on a VLCD, most commonly constipation, which can be managed with over the counter type preparations.

Pre-assessment Clinic

Approximately two weeks before your surgery you will be invited to a pre-assessment clinic. During this visit you will be prepared for anaesthesia and your surgery by a specialist nurse. You will be accurately weighed and measured, your blood pressure will be measured and blood tests will be taken. Your nose and armpits may also be swabbed to make sure you don't have MRSA.

Some patients are deemed to be 'higher risk' than others due to previous surgery, high BMI (>50) or because of co-existing medical problems. Mr Shenfine will discuss this with you if this is applicable to you. This may mean that you have a higher chance of complications for example and may need a special assessment prior to surgery or a longer hospital stay to monitor you safely afterwards.

Most patients will stay in hospital for two nights, if your surgery is completed laparoscopically, but obviously this varies a little and Mr Shenfine will discuss this with you at your clinic visit prior to surgery. We advise that you consider 2-4 weeks off work depending on your job after surgery.

Admission to Hospital

You will be admitted to Jersey General Hospital. Our dedicated staff are trained to look after patients undergoing bariatric surgery and understand the needs and concerns of larger patients, but you also play a key role in your successful recovery. If you have any concerns while you are in hospital please speak. The ward is equipped with operation gowns, furniture and equipment suitable for larger patients.

You do not need to bring towels into hospital as we have them on the ward. You will need slippers or suitable footwear and nightwear. A few patients have previously recommended 'satin' type pyjamas as they slide around easier in bed to help you move around or turn over after surgery. Avoid tight fitting clothes or tight elastic around the waist, as these can be uncomfortable after surgery. You will need to bring your own toiletries and may want to bring a dressing gown too. If you use a CPAP machine please make sure you bring it with you and any other items that you feel will aid your recovery. Storage space is always limited so try not to bring in valuables or excess amounts of belongings. The hospital will not accept responsibility for loss or damage of your items. Bring your regular medication with you please – some of these may need to be stopped up to 7-10 days prior to surgery such as blood thinners or anti-platelet agents – please discuss with Mr Shenfine.

Please fast from food for at least 6 hours before surgery. You can have small amounts of water (no more than 200ml per hour) up to 2 hours prior to admission

and unless told otherwise please take your normal morning medication with a sip of water.

When you get to the operating theatre the anaesthetist will prepare you and give you a general anaesthetic. He or she will give you some antibiotics. All operations involve five small incisions being made on your abdomen – three of these are about a centimetre in size and two are 5mm long. The operation will take between 1-3 hours for Mr Shenfine to perform. The wounds are closed with dissolvable sutures and local anaesthetic is injected into your abdomen as well as your skin around these wounds to reduce your post-operative pain.

You will wake up in the ‘recovery’ area in theatre and will be kept there until you are stable and comfortable before returning to the ‘High Dependency Unit’ of ICU. You will have a fluid drip, oxygen to breath and regular monitoring of your vital signs. Some patients need closer monitoring. Mr Shenfine does a routine ‘leak test’ in theatre during your surgery so you will be allowed sips of water to drink almost straight away. If you tolerate this then you can move on to mouthfuls of ‘clear fluids’ i.e. water. On the day after surgery after you have been reviewed by Mr Shenfine he will let you have ‘free’ fluids’ which is basically anything – coffee, tea, soup or juice but again in small amounts. You must ‘sip’ fluid not ‘chug’ - let these sips go down before trying another mouthful of fluid. This is REALLY important – we don’t want excess pressure on the staple lines or joins by overfilling your stomach. Because of the small mouthfuls you will need to sip fluids almost constantly to keep your hydration up – otherwise you will feel awful and get constipated. If there has been concern about the joins or you are having revisional surgery then you may not be allowed to drink until you have had a ‘contrast swallow’ after surgery. This is a radiology (x-ray) test to check the integrity of the new plumbing. Mr Shenfine likes to keep you on fluids only for two weeks after surgery and you will have discussed your diet after surgery with our dietician. This is because there is a lot of swelling around the surgery sites as well as having a much smaller stomach.

Your pain will initially be managed with a combination of paracetamol and anti-inflammatory painkillers. We try to avoid morphine-type painkillers as these can slow your recovery. Having some discomfort is normal but if you have severe pain then you must let us know. Back on the ward, four to six hours after surgery, you will be sat out in a chair to ensure you are breathing well and will be encouraged to move around your bed area, minimising the risk of breathing complications and the formation of clots in your leg veins. You will be given a blood thinning injection at six hours after surgery and will be wearing special anti-embolic stockings throughout your stay – these need to stay on until you are fully mobile after surgery. Please do not walk unassisted until the staff have told you that you can do this. The day after surgery it is usually possible to remove all the monitoring and drips and most patients are fit for discharge home on the second day after surgery and by this time are mobile and self-caring. Breathing exercises after

surgery are encouraged. Take plenty of deep breaths and we recommend holding a pillow or towel over your abdomen to support you when you cough.

Make sure someone can pick you up from the hospital and that you have adequate support in place for when you get home. Make sure that you have enough supplies of your medications and painkillers.

If at any time, you or your family are concerned about your condition, please do not hesitate to inform one of the nursing staff.

Risks and complications of Surgery

Weight loss surgery is safe or we wouldn't do it! However, there are always risks with any surgery. Some risks are general and occur with any operation and some are specific to the exact surgery you are having. Also some patients have higher risks due to other medical conditions or by having revisional (secondary) surgery which is always more difficult due to scar tissue and therefore higher risk. Any numbers are estimates based on the literature.

Although you are unlikely to suffer complications, it is important that you know and appreciate your risk beforehand and Mr Shenfine will not only discuss your particular risk profile but also will be happy to answer any questions that you have about this.

General Complications

All operations and anaesthetics carry a small amount of risk in terms of bleeding, infection, scarring, blood clots, cardiological complications (heart issues) such as heart attack and respiratory (lung) issues such as pneumonia.

Short term weight loss surgery complications

Conversion to an open operation

It isn't always possible to complete the operation using keyhole surgery. This is rare unless you have had previous surgery in this area beforehand. However, your safety is paramount so if there is bleeding during surgery or unusual anatomy or severe adhesions from previous surgery then Mr Shenfine may have to convert from a keyhole approach to an open operation. Your operation will not change inside but a larger wound takes more time to recover from and stronger painkillers which will delay your recovery. The risk of conversion to open surgery is around 1 in 250 cases.

Anastomotic Leak

Occasionally the join between bowel can leak. This is called an anastomotic leak and occurs in less than 1 in 100 patients. Mr Shenfine does a leak test on table with a special dye to ensure that you do not leave the operating theatre without a watertight join. But leaks can happen afterwards (usually within the first ten days after surgery). If this occurs, bowel content can escape into the abdominal cavity causing peritonitis. You would know if this happened to you. It causes pain and an intense feeling of being unwell. If the leak is small and happens early then rapid re-operation may stop the leak, sometimes small leaks can even simply be treated with antibiotics and time. Large leaks although rare, can become life-threatening and need re-operations and prolonged hospital stays to recover from.

Wound Infection

Minor wound infections are common and can usually be managed with wound care and sometimes oral antibiotics. Rarely wound infections can be severe and will need daily dressings or even hospital admission and intravenous antibiotics until they heal.

Bleeding

Significant bleeding after surgery affects 1 in 100 patients. Patients can bleed into the bowel or into the abdominal cavity. If severe you may need a blood transfusion and rarely a re-operation or an endoscopy to stop the bleeding.

Heart related complication

Heart attack, stroke and other cardiac complications can occur after surgery. The risk is highest in patients with pre-existing problems or vessel related disease. If higher risk you may have to see a cardiologist prior to your surgery. Our anaesthetists are incredibly skilled and experienced and watch every heartbeat during your surgery.

Chest Infection

Chest infections are really common after any surgery. They are especially an issue with abdominal surgery in bigger patients who smoke. All patients are asked to take deep breaths and mobilise as early as possible after surgery. Chest infections will usually be treated with antibiotics and physiotherapy.

Deep Vein Thrombosis and Pulmonary embolism

Blood clots in the veins of the leg are called deep vein thromboses (DVT). The danger with these clots is that they can detach and travel to your lungs. This is called a pulmonary embolism (PE) and can be very dangerous or even fatal. It is best to minimise the risk of this complication by taking preventative steps. It is for this reason that you will wear TED stockings and during surgery you will be attached to a machine to 'pump' your calf muscles. You will also be given some blood thinning injections until you are fully mobile. In some patients we give these injections even after you go home. The risk of a PE is around 1 in 200 patients.

Death

Worldwide the risk is less than 1 in 200 patients. If you have a higher risk then this will be discussed with you and documented. Mr Shenfine has never had a mortality with weight loss surgery.

Longer-term weight loss surgery complications

Reflux

Acid reflux is really common with 20-40% of the general population experiencing heartburn. Obesity is a known risk factor for reflux so many patients already have symptoms and about 15% will have a hiatus hernia. Reflux symptoms are very variable after the different weight loss operations. It is rare for patients to have any reflux at all after a LRYGB but 20% of patients after LSG will have symptomatic acid reflux. It is even more complicated after a LOAGB as although acid reflux is unusual, bile reflux (which feels the same) is common. Mr Shenfine recommends that ALL patients take a Proton Pump Inhibitor tablet (such as omeprazole or similar) for 3 months after surgery. At this point we will ask you to stop taking this tablet and see what happens. Most patients will have no or minimal symptoms of reflux. Nearly all LRYGB patients will be able to stop the medication. Some OAGB patients will need to continue and 5 in 1000 will have severe bile reflux and

need a second operation to deal with this and 20% of sleeve patients will need to continue the medication with around 4% needing more surgery to deal with this reflux. Mr Shenfine likes to perform endoscopy (gastroscopy) on all patients prior to surgery to make sure there are no risk factors for reflux beforehand, he will repair any significant hiatus hernia at the time of your surgery and he recommends a follow up endoscopy at a year for all patients and every two years lifelong for sleeve and one anastomosis gastric bypass patients – as chronic acid or bile reflux can damage the oesophagus and has been linked to developing cancer of the oesophagus. Although to keep this in perspective, obesity is a far more significant risk factor for cancer in a number of areas.

Stomal ulcers

Occasionally, patients can develop ulcers on the join between the stomach pouch and the bowel joined to it. This usually causes pain after eating. It is more common in patients who smoke and those who use anti-inflammatory drugs such as ibuprofen (brufen/nurofen) or diclofenac (voltarol). They heal when you stop the insult i.e. stop smoking and take strong anti-acid tablets. Occasionally they require surgery and rarely can even bleed or perforate and endanger your life. For this reason you must not smoke after gastric bypass and avoid anti-inflammatory drugs.

Strictures

The bowel joins can narrow after surgery (stricture). This happens in 2 in 100 patients and causes difficulty eating solid foods and vomiting. Treatment is usually by dilating (stretching) the join affected using a special balloon during an endoscopy under sedation. One or two stretches usually cures this but in rare cases multiple dilatations over a few weeks are required.

Adhesions

Scar tissue inside your abdomen occurs after any surgery but is less common after laparoscopic than open operations. These adhesions can kink or obstruct the small bowel causing abdominal pain.

Internal Hernia

This complication is peculiar to LRYGB. This is due to the fact that we have moved the normal position of your bowel and this leads to 'holes' between the loops of bowel that the bowel can twist through. Mr Shenfine specifically closes these holes during your surgery but with weight loss a small hole can enlarge and form the internal hernia. They occur in around 5 in 100 patients. This causes bowel to get repeatedly trapped and released, causing intermittent abdominal pain, bloating, nausea and retching then resolution. A special CT scan may help to check for this if this keeps happening but sometimes a laparoscopy may be necessary to diagnose the internal hernia and to re-close these holes. Rarely the bowel can get trapped and not release, this can lead to strangulation of the bowel – this is a surgical emergency as the bowel can lose its blood supply. Although rare this can threaten your life. Should you ever get severe abdominal pain after bypass surgery you must go to the hospital and inform them that this may be the cause. They will ring Mr Shenfine directly.

Nutritional deficiencies

Nutritional deficiencies can occur after bypass surgery but they are rare if you have good follow up with your dietician and Mr Shenfine for the first two years. You must take vitamin and mineral supplements every day for the rest of your life and have regular (annual) blood tests. Nutritional deficiencies can lead to anything from brittle bones or weak muscles to permanent neurological damage and is easy to avoid.

Dumping

Dumping syndrome is not uncommon after any weight loss surgery. This is due to food moving quicker through the upper gut and causing fluid shifts or swings in your blood sugar levels due to too rapid absorption. It makes you feel unwell between 15-20 minutes to an hour after eating: sweating, nausea, dizziness followed by diarrhoea. It is nearly always due to eating something with too much 'sugar' in it. Some sugary things are obvious but there are sugars in lots of food that you may not expect: for example milky drinks, fruit juices etc. By cutting these out of your diet the dumping improves.

Medications

Most drugs are unaffected by weight loss surgery except for 'slow release' medications. Please check with Mr Shenfine if you are on any of these medications.

Alcohol

Mr Shenfine would prefer you to avoid alcohol for at least three months after surgery. After this it is safe to drink alcohol but please note that alcohol is absorbed quicker after weight loss surgery and can lead to more rapid effects with a spike in your blood level. We strongly recommend NEVER drinking any alcohol if you are going to drive. There have been cases of even small amounts of alcohol putting patients 'over the limit'.

Infertility, contraception and pregnancy

Pregnancy soon after weight loss surgery can endanger both your baby and you, due to the rapid weight loss and changes in your nutritional status. We recommend waiting at least 18 months before trying for pregnancy. In addition, the oral contraceptive pill may not be as reliable after bypass so we recommend using barrier methods, a coil or depot contraceptives. Your general practitioner should be able to advise you appropriately.

Psychological issues

Some patients suffer psychologically after surgery. You may have 'buyers remorse' immediately after surgery – did you really need an operation to help with your weight, is this really worth it, can I just get this reversed? You may feel down or sad or upset. This is normal and is part of the adjustment period. Equally, if you have used food as a 'comfort' for emotional swings then losing this support can leave you feeling 'lost'. If you need specific psychological help or support please do not hesitate to tell us. We are here to make this a good journey as well as being successful one to improve your health.

Hair loss

Thinning of your hair is surprisingly common but is rarely discussed! It's probably

due to a mixture of rapid weight loss, low haemoglobin, low protein and a 'shock' response of the body. It is most noticeable 3 months after your surgery. For this reason it is important to take your vitamin supplements and maximise your protein intake. You won't become bald! But it can take a while for your hair to thicken up.

Weight gain

Your weight loss journey is a personal one. Some lose weight faster than others but at some point some weight re-gain is common and normal. This is due to your body adapting to the surgery so it is vitally important to make lifelong lifestyle changes and not to rely on the surgery as a magic bullet to control your weight. It's a tool. And tools work best when they are used the way they were intended. Work with Mr Shenfine and the bariatric team to set realistic and sustainable lifestyle changes and do not set yourself unrealistic expectations that will ultimately disappoint you.

Excessive weight loss

We cannot accurately predict how much weight you will lose. Sometimes patients lose more than they expect especially those who re-discover a love of exercise as their weight comes off. If you are worried about how much you are losing then please talk to us about it.

Re-emergence of medical issues

We talk about diabetes going into remission rather than being cured because we have seen the symptoms of diabetes and other conditions recurring. Again, viewing surgery in conjunction with lifelong lifestyle change is the best way to keep you healthy.

All weight loss surgery patients need regular support and assessment life-long. Feelings of hunger and satiety vary – you may never feel hungry and the feeling of 'full' can be different to previously or 'move' higher up. Overeating can cause unusual symptoms such as sneezing, shoulder pain, excessive salivation or even shortness of breath. It's important to slow down and chew thoroughly. Think about the rule of 20s: 20 chews of food, take 20 seconds with food in your mouth before you swallow and at least 20 minutes to eat your meals. Weight loss can affect lots of aspects of your life in unexpected ways. There are lots of counselling and support groups especially online that can help with changes in your body I age and with relationships. Excess skin tends not to shrink after surgery and you may need surgery to deal with this once your body weight is stable. Mr Shenfine does not do this surgery but may be able to recommend someone who does.

At home

It takes about two weeks to recover after surgery and return to normal activity including work unless this is physical. We recommend that you walk as much as possible and increase the distance daily. Regular paracetamol with an additional infrequent weak opioid painkiller are usually sufficient to control your pain once you are at home.

The first couple of weeks after surgery are a whirlwind of highs and lows. One day you will feel amazing, pleased with your decisions, comfortable and happy and the next day can be one of discomfort, constipation and regret. The liquid diet is boring but important. It allows the joins of the bowel and staple lines to heal up safely and also gives you a chance to reset your brain in terms of your diet, how to eat and how much to eat.

Walking and being active around the home will enhance your recovery, reduce your fatigue and lower the risk of blood clots in your legs. Gradually increase your exercise every day – the distance or the time that you walk depending on your level of comfort. If you have higher risk for blood clots then you may have to have daily injections to thin your blood after surgery when you are at home for 2-4 weeks. If so then during your hospital stay in hospital you will be taught how to give yourself these injections.

Moderate to strenuous activity is best avoided for around 6 weeks after surgery while your wounds are healing to prevent hernias. Avoid lifting more than 10kg.

You shouldn't drive until you are sure that you can do an emergency stop and you should inform your insurance company that you've had surgery before driving. This is normally between 7-14 days.

Post-op Diet

All weight loss operations have a restrictive component to begin with in that you have a very small stomach pouch to eat into. You simply cannot eat much, feel full quickly and this sensation lasts longer than usual although the sensation may be different to feeling full that you have had before. Be careful not to overeat – this will make you feel uncomfortable and you could vomit. To begin with we like you to only drink fluids (for two weeks). This allows you to experience some of these sensations without causing any damage as fluid will empty from the gastric pouch quickly. For the two weeks following this, you will be eating puree, gradually thickening up your diet as time progresses so that you can experience that full feeling. Some but not all people lose their hunger entirely after surgery and rarely some people feel more hungry! There is a difference between mental or emotional hunger, which may have become engrained over time and true physical hunger. Regular small meals will help to regulate both your emotional feelings of hunger and your energy levels. You can't go back to just one big meal per day with lots of little snacks. Poor weight loss after surgery is often due to high-energy snacking.

General how to eat rules!

Some simple rules that seem like common sense after weight loss surgery but it is worth reading this every now and then to remind yourself:

1. Set aside time to prepare food and to eat.
2. Protein (meat and non-meat) is really important, it fills you up, helps you to heal and maintains your muscles. Liquid protein (mostly dairy) and protein powder can sometimes make up shortfalls.
3. Take no more than a tablespoon size mouthful at a time.
4. Slow down and chew well. Chew every mouthful: 20 chews is a good number to remember and put your spoon down between each mouthful. Wait. This allows time for the food to settle in the stomach, before taking the next mouthful.
5. If you get pain or discomfort – this is probably because you've eaten too fast or not chewed enough. Your intake will increase a little over time but you will learn to stop when you are full. Ignoring that feeling will ultimately stretch your pouch and lead to weight re-gain.
6. Take 20 minutes to eat your meals.
7. For any new food, take a very small thin slice or bite. Use your knife to do the work by cutting against the grain of meats and vegetables and taking thin slices. This makes it easier for your teeth to break down the fibres.
8. There will always be some foods you cannot tolerate, but with time and practice eating, you should be able to eat most things.
9. Ensure you have a good fluid intake each day; drink a minimum of 1.5-2 litres. If you don't drink enough then you can get headaches and dizziness and constipation. Sip, sip, sip!
10. Don't drink and eat at the same time. Leave a 30 minute gap between them.

First 2 weeks after surgery

Fluids only! Limit your portions to $\frac{1}{4}$ to $\frac{3}{4}$ of a cup of fluid per meal. No more than 200ml at any time. Try to have six of these fluid meals per day. It's important that you are taking in protein so dairy products like yoghurts and thin custard, and milk are useful as well as protein rich soups. You can use a protein powder to supplement this. This will help to make you feel full and also help you to recover. If you use shakes then make these with skimmed milk rather than water. Between your 'meals' drink lots of water – tea, coffee, juices, diet cordial. It feels strange to drink between essentially fluid based meals but you need to get in at least 1.5l of fluids per day and have to sip slowly so this can take up a lot of time. If you get dehydrated then you will feel awful and become constipated. Avoid fizzy drinks for at least 3 months after surgery, they will make you feel bloated. Don't forget to take your supplements - a good multivitamin, calcium-vitamin D lifelong plus iron for a month and a PPI (omeprazole or similar) for 6 months.

Weeks 2-4 after surgery

After two weeks you can introduce thicker fluids – puree and smoothies. The consistency should be like baby food. Do NOT actually eat baby food though – it's too high in calories. Over time, you can thicken up the puree until it sits like a mound on your spoon. At the end of 4 weeks you can move on to soft foods. Try to progress slowly, if you eat too fast or move on to solid food too quickly then you will feel discomfort and may vomit. Aim for six 'meals' per day, allowing around 20-30 minutes per meal with drinks in between. Don't drink fluids during a mealtime and always stop if you feel discomfort. It's generally best to avoid drinking for 30 minutes before and after eating.

Wound care

Mr Shenfine generally likes the dressings he places at the time of surgery to stay on as long as possible. Wounds heal better if left alone. Equally though, don't worry too much if the dressing falls off! Once they start to get a bit 'peely' then peel them off! All the stitches are dissolvable and under the skin. Sometimes you may see a suture like a piece of cotton thread. You can pull this out if it comes easily or cut it flush to the skin. Anything inside you will dissolve safely. Don't worry about getting your wounds or dressings wet in the shower just carefully pat these areas dry. Do not rub your wounds. If there is any redness, swelling, discharge or pain from a wound, let your GP or Mr Shenfine know as soon as possible. It is however, normal to have some bruising around your wounds. This will fade over time.

Constipation

Lots of patients get constipated after surgery. This is because of a mixture of fasting before surgery, the anaesthetic drugs we use and your painkillers. Drink plenty (>1.5l) of fluids very day. Consider adding a fibre supplement to your fluids.

Gentle exercise can help as well as simple things like drinking some prune juice. Sometimes some coloxyl and senna or lactulose are needed to get things going.

Weight loss

Most weight loss after bariatric surgery happens within the first 18 months after your operation. This can be rapid in the first 3-6 months, then a little wobbly between 6-12 months then slowing to a plateau by 18 months or so. Sometime you can lose nothing for weeks then suddenly lose a lot. It is important that in the first two years you establish your new lifestyle. One that is achievable and sustainable for the rest of your life as this is when you will feel the most motivated and the surgery works best.

Exercise

Exercise helps to maintain muscle tone, maintain your bone strength, improve your weight loss and increase your confidence and feeling of well-being. Aim to do some activity every day, but don't expect to be running a marathon straight away. It will take time to build up your stamina. We recommend walking to begin with. It's simple and effective. Try to start with a daily walking plan. If you find walking difficult, then once your wounds are secure at about a week or so, water-based exercises such as swimming or water aerobics are another option.

Pain

You should not experience severe pain after this surgery – if you do, then contact your GP, Mr Shenfine or go to emergency. We recommend regular paracetamol for the first few days but you will also have been given some stronger pain relief tablets which you can use in addition if you need them.

Do NOT take aspirin, anti-inflammatories, drink alcohol or smoke cigarettes after surgery unless you have specifically been told that you can do so. These all cause ulceration which can be life-threatening after this sort of surgery.

Emotional Eating

Food in many cultures is used to celebrate, and to show love. Most people enjoy eating. However, food can become more than that for some patients: an emotional crutch, giving comfort and making them feel a little better when life is tough and stressful. This leads to eating without physical hunger, to get that brief feeling of warmth. Surgery removes that crutch and some patients then have nothing to fall back on when they do get stressed leading to psychological problems. This can be especially damaging if you weren't aware of how much support you got from food. It is better to put coping mechanisms in place before surgery. Some patients may transfer this emotional crutch to other dangerous pursuits such as alcohol, drugs and gambling. We try to identify patients who need psychological counselling before surgery but there is always help if you need it.

Please think about your relationship with food before you have surgery:

- Where do you eat? Do you sit down to eat? Do you do things while you eat like watch telly? Do you always taste and/or enjoy your food?
- Do you ever eat and not think about the food you are eating?
- When you eat are you always physically hungry? How do you feel when you eat?
- Do you eat when it's not a mealtime? Does anything trigger this?

Follow-up

You will be followed up by Mr Shenfine regularly for two years after surgery. At 4 weeks, 3 months, 6 months, a year and at two years after surgery. It is essential to your future health that you come to all your post-op visits. This will enable us to record your weight journey, the effect of weight loss on your medical conditions, your diet and progression, your vitamin levels and supplements, your activity and exercise, adjust your medications and review any blood results. If everything is well you may be discharged to your own GP and certainly by 2 years post-operatively. Other members of the bariatric team may review you as well or share this follow up. Good dietician support is essential to keeping healthy and we also recommend having an exercise plan as these two aspects are most likely to give you the best outcome.

Notes:

1. Some of your data will be stored on a database unless you actively withhold consent. This is ultimately to improve patient care and ensure that our results are good.
2. I encourage you to check your weight regularly and to attend an annual weight and diet review with a healthcare professional lifelong, this will help to keep you on track and pick up any problems quickly if they ever occur. You must at least have lifelong annual blood tests to make sure your vitamin and mineral levels are good. Vitamin deficiencies can threaten your life or cause life-altering problems.
3. You must take your recommended supplements. Usually a good multivitamin and mineral supplement, vitamin B12 orally or injections every 3 months, a calcium-vitamin D supplement and sometimes iron.
4. If you develop retching or vomiting, swallowing problems, or severe abdominal pain then please attend the A&E department urgently.
5. We all need to take responsibility for our own health. The surgery may make you healthier but don't assume that your diabetes, hypertension, obstructive sleep apnoea or your mental health etc. will improve or go away forever. Your medication doses may need to be altered up or down over time or the formulation of your medication changed (liquid versus a tablet for example) and you still need your medical issues monitored even if they do go into remission. I strongly suggest continuing CPAP until your sleep apnoea has been confirmed to have been improved.
6. If you are a woman of child-bearing age then you must avoid pregnancy for at least 12–18 months post-surgery. Because of malabsorption I recommend barrier or depot contraception for this time period.

Support groups

There are a number of online support groups especially on facebook. The local one can be found at: <https://www.facebook.com/groups/JerseyWLSsupport>

You can also email them if you have any specific questions or simply to ask to join the group: jerseywlsgroup@gmail.com

Emergencies?

Complications can happen to anyone. If you are not well then do not hesitate to make your way to the Emergency Department at Jersey General Hospital or call an ambulance or call your GP. You can also call Mr Shenfine directly on 07797787703

<https://www.slnh.org/risk-calculators/risk-for-bariatric-complications>
<https://www.slnh.org/risk-calculators/risk-for-bariatric-readmissions>