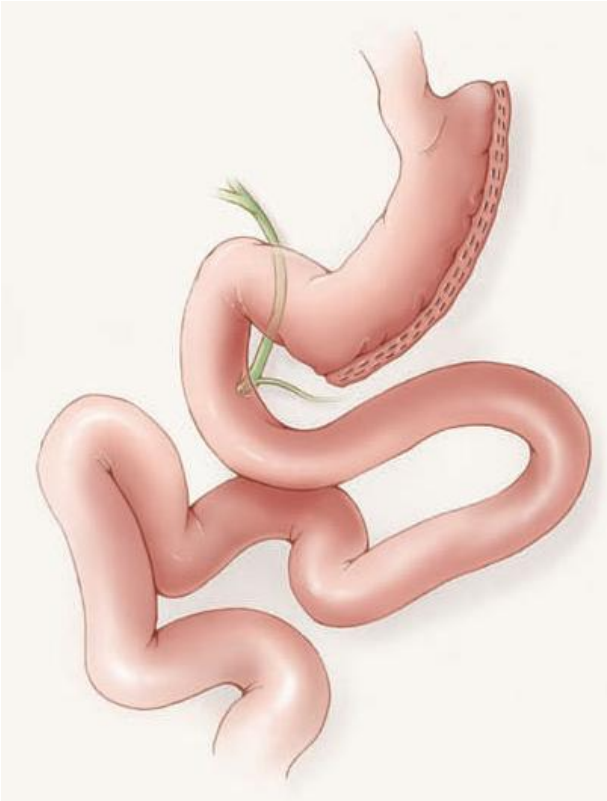
COUNTIES MANUKAU DISTRICT HEALTH BOARD
A Community Partnership

Patient Information Book for Laparoscopic Gastric Sleeve Procedure



Introduction

This information booklet has been developed to help prepare you for your laparoscopic gastric sleeve procedure. It discusses what you can expect before, during and after your stay in hospital and helps you with the lifestyle changes you need to make after surgery.

There is a confirmation page at the end, which you need to sign. This ensures you have had time to read, and understand all the information given to you. It is important that you give yourself adequate time to process all the information and we are happy to answer all questions that you may have.

There is plenty of space throughout the book for you to write questions down, and it is advised that you do so in order to remember them when you see your specialist.

Remember this is the beginning of a challenging journey and it is important that you are well prepared with information, and determination to reap the benefits.

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Surgical Overview

Bariatric Surgery (surgery for obesity) includes several different types of operations. Laparoscopic sleeve gastrectomy is a relatively new restrictive weight loss procedure. It involves reducing the size of the stomach from a sac to a narrow tube. Weight is lost because of early satiety (the feeling of fullness after eating), largely due to the smaller size of the stomach. Also, some appetite stimulating hormones normally produced by the stomach are reduced by the procedure. Apart from this the stomach digests calories and nutrients in an almost normal way.

This operation has evolved from old-fashioned stomach stapling procedures performed in the past. These operations were abandoned due to poor long-term outcomes from staple line breakdown and obstruction at the tight plastic band reinforced outlet of the stomach. The different way that the sleeve gastrectomy is stapled, and avoidance of the restrictive band prevents the complications associated with those stomach stapling procedures.

The sleeve gastrectomy was first used as an intermediate step toward gastric bypass or duodenal switch. These are relatively more complicated operations with relatively higher risks of complications in very obese patients (i.e. BMI > 50-55). The sleeve is performed first, and then many months after this, when the patient has lost weight, a second operation is performed that converts the sleeve to a bypass or duodenal switch. Surgeons using this strategy to reduce risk soon noticed that patients often declined a second operation because they were very happy with the weight loss results achieved by the sleeve alone.

More recently the sleeve gastrectomy has become a “stand alone” procedure for weight loss.

The staged management concept

Some patients, especially those with a BMI > 50-55, are at higher risk for complications of weight loss surgery because of either medical conditions related to obesity, or technical difficulty in performing the procedure due to the patients size. The gastric sleeve can often be achieved in these cases relatively quickly and safely as a laparoscopic (keyhole) operation and the patient can lose significant amounts of weight. If the amount of weight lost is not sufficient, the operation can be converted to a gastric bypass. This can also be a laparoscopic procedure, but after this initial weight loss the patient is lighter, and therefore the surgery is safer.

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Initially patients start on liquids before moving to a pureed diet which allows the stomach to heal. Several weeks after gastric sleeve surgery patients progress to eating three small meals a day. Entree sized meals are enough to produce a sensation of fullness. This makes it easier for patients to limit the amount they eat.

Laparoscopic surgery involves several very small incisions rather than open surgery, which uses one large incision. Harmless CO_2 gas is introduced into the abdomen, inflating it, and creating a space for the surgeon to work. The surgeon introduces a long narrow camera and surgical instruments, and uses these to perform the procedure.

Laparoscopic procedures have many advantages, including less pain, a shorter hospital stay, and a quicker recovery, as well as significantly reduced risk of wound infection or hernias. If for some reason your surgeon can not complete the procedure laparoscopically, he can convert to the open procedure safely. The chance of this occurring is low, and would only be done in your best interests.

Improved Health

Bariatric surgery reduces the risk of death from obesity. Many obesity related conditions such as type II diabetes mellitus, obstructive sleep apnoea, joint pain, lipid abnormalities and high blood pressure are either completely resolved or substantially improved.

Long-term weight loss

Most patients achieve good to excellent weight loss results following gastric sleeve surgery; typically this is 50-60% of excess weight. Patients lose most of their excess weight in the first year and can lose more weight over the next 6 to 12 months. Weight will usually stabilise after this. There can be some weight regain, but this is usually minor. **There is no amount of weight loss that is guaranteed.**

Healthy lifestyle changes, with improved diet and regular exercise, lead to a better outcome after the surgery. The laparoscopic gastric sleeve procedure is best seen as a tool that makes these lifestyle changes achievable for most patients.

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Anaesthesia for Bariatric Surgery

This information is designed to give you the information you require about the anaesthesia for your Laparoscopic gastric sleeve procedure. However, your anaesthetist will be in contact with you prior to your operation and will be able to answer any additional questions you may have. Please feel free to ask about any aspect of your anaesthesia care.

An anaesthetist is a medical specialist just like a surgeon, requiring the same length of training, and you will have a fully trained specialist anaesthetist for your surgery. The anaesthetist will contact you prior to your surgery to ask you about any previous and current health issues. It is very important you try to answer all questions fully to enable the anaesthetist to use the best anaesthetic techniques for your surgery. Specifically, it is very important to tell the anaesthetist about any previous anaesthesia problems, any allergies, and any history of Pulmonary Embolus (PE) or Deep Vein Thrombosis (DVT, Leg Blood Clots). The anaesthetist will arrange for extra tests if they are required for safe conduct of anaesthesia. If needed, they may ask to see you prior to the day of surgery.

You will usually meet your anaesthetist on the day of surgery, prior to your surgery. They will answer any further questions you may have and obtain your informed consent for the anaesthesia. Laparoscopic gastric sleeve procedure requires general anaesthesia: this is a combination of drugs used to put you into a state of reversible unconsciousness. The anaesthetist monitors you continuously during this time, and you will be given painkillers and anti-emetics (which help prevent nausea and vomiting) while you are asleep. In the recovery room further medications will be given as needed.

Pain is normally not too severe after this procedure. Occasionally, the gas used to inflate the abdomen can cause pain in the shoulder tip, but this rarely lasts long and is easily controlled. If ongoing pain relief is needed, then a PCA pump (patient-controlled analgesia, 'Pain Pump') will be used. You push a button and the pump delivers a dose of painkiller. You cannot give yourself too much; the machine will not let you. Nausea and vomiting can be troublesome for some people but there are many drugs we can use to prevent this. Your anaesthetist will chart a list of drugs for the ward nurses to give, and we would encourage you to use them as required. The nurses can contact your anaesthetist at any time for advice about pain-relief and any other non-surgical problem.

Your anaesthetist will be involved with your care for 2-3 days after the operation in concert with your surgeon. He or she takes care of pain-relief, nausea / vomiting and intravenous fluids, as well as managing most medical problems such as diabetes while you are in hospital.

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Hospital Admission

Day Zero - Admission

You will be admitted to hospital on the morning of surgery unless you have specific medical problems that your anaesthetist and surgeon wish to monitor closely overnight. It is understood that you will have had a thorough shower prior to admission, and that you bring along everything you require for your hospital stay. If you have any further questions for your surgeon or anaesthetist please write them down and bring them with you to hospital. If your operation is in the morning, you should not eat or drink from midnight the preceding day. If your operation is in the afternoon, you may have a light breakfast at 6 o'clock in the morning, but fast after that.

CPAP (Continuous Positive Airway Pressure)

If you currently use CPAP, please bring your machine with you to hospital.

Medications

Bring in all medications including over the counter and herbal medications. Don't stop any medications unless told to do so first by your anaesthetist or surgeon.

During the admission process your surgeon, anaesthetist, admission nurse and theatre nurse will see you. This will mean that different people ask you the same questions. This is a safety issue, and although it can be frustrating, it is important. Use this time to ask any questions that you may have.

Once you have been admitted and changed into your theatre gown and TEDs (stockings to prevent leg clots), you will wait in the preoperative area until theatre is ready. A final check between the theatre staff and the admission staff takes place before you are taken into the theatre.

You will move onto the theatre bed, which is narrow and firm, and a blood pressure cuff, ECG and an oxygen monitor will be attached to you so your anaesthetic team can monitor you closely throughout the procedure. Your anaesthetist will place a cannula (drip) into a vein and ask you to breathe some oxygen through a plastic facemask. Your anaesthetist will then gently send you off to sleep.

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Recovery Unit

You will wake up in the recovery unit with monitoring attached to you. You will have a cannula (drip) in your arm, a drain (plastic tube connected to a container) into your abdomen, and perhaps a urinary catheter (tube into the bladder). The PCA pump will attach to your drip.

Once you are awake and comfortable you will be transferred, either to the ward or to the High Dependency Unit (HDU). Which location you move to post-operatively will usually be decided pre-operatively. Typically patients that are larger, older, or with medical problems that need more monitoring will go to the HDU rather than the ward.

Further post-operative care: either HDU or Ward

Your nurse will record your vital signs regularly and give medications to control any pain or nausea.

You will be encouraged to do deep breathing exercises to keep your lungs healthy, and to move into a chair. Early mobilisation is good for DVT prevention. You will also have TED stockings on and a FlowTron machine (inflatable stockings). Again, this is to help prevent DVTs.

You can start to suck on some ice chips or to take sips of water on your first night.

Day One

Ward

If not already in the ward, you will move there on day one. You will be encouraged to slowly drink your way through 1 litre of water over the day: after this your IV can be removed. Do not try to hurry this, have a cup or water bottle to hand and sip slowly and steadily. Your catheter (if present) will be removed once you are moving independently. Your drain will be cut short with a bag fixed over it to allow you more freedom to move. You will continue to be given heparin injections and wear the TED stockings, and use the FlowTron device when not mobilising.

Your surgeon and anaesthetist will see you, as will your dietitian and physiotherapist. If required, a social worker or psychologist is available.

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It is important that you get up and move around as soon as you are able, so you will be encouraged to walk around the ward.

Medications for pain and nausea will continue, and will change to oral forms as you can manage. Do not hesitate to ask for a sleeping tablet if you require help to sleep at night.

Day Two
Walking will be encouraged. You will continue to be given heparin injections, wear the TED stockings all the time, and the FlowTron device when not mobilising.

All your medications should now be taken orally, perhaps crushed or in liquid form. Your diet will progress to *bariatric free fluids* (see nutrition information section). You should be able to gradually drink at least 1 litre of water over the day.

Most patients, if they are progressing well, will be able to go home on this day. Dietary advice on proceeding to a *bariatric pureed diet* is provided in the nutrition information section. Your drain will be removed if you are going home today.

Day Three
If you did not leave hospital the previous day, preparations will take place for this today. Your diet will progress to a *bariatric pureed diet* (see nutrition information section), and your drain will be removed. Walking as much as possible and deep breathing exercises will be encouraged.

Advice on Discharge
You will be reminded to take small bites and chew, chew, chew. When you feel full, **STOP** eating.

You will be given a prescription for medications to be taken after discharge.
These include:

- Multivitamins
- Analgesia for pain relief, usually for up to 2 weeks
- Anti emetic to help with nausea usually for up to 2 weeks
- Anti acid to reduce stomach acid usually for 6 weeks
- Perhaps Clexane for prevention of pulmonary embolism

Occasionally you may be prescribed a laxative (such as lactulose) for help with bowel movements

You should carry on taking your normal medications that you were on before surgery, unless specifically told to stop. Some tablets taken in the first six weeks after your operation may need to be crushed. We advise you continue wearing

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your TED stockings for ten days post operation, this is to reduce the chance of blood clots that can form in the legs (Deep Vein Thrombosis: DVT), and can go to the lungs (Pulmonary Embolism: PE).

If you have successfully managed to stop smoking prior to your surgery, then you should maintain this postoperatively. Smoking can slow the healing of the stapled edge of the stomach, and cause ulcers and bleeding.
It is also important that you refrain from alcohol post surgery until you have got used to your new stomach. When you do want to start alcohol again, do so only in moderation: it can have a more potent effect, and contains a lot of calories.

Follow Up Appointments

One Week You will be contacted by phone around 1 week after your operation to check on your progress. Use this call to ask any questions you may have.

Two Weeks You will be given an appointment to see your surgeon in two weeks time. Make sure you keep this appointment.

Four Weeks Appointment to see your dietitian

Six Weeks Appointment to see your surgeon. Some patients may find it helpful to see a psychologist at this time.

Three Months Appointment to see surgeon (or nurse practitioner) and dietitian

Six Months Appointment to see surgeon (or nurse practitioner) and dietitian

One Year Appointment to see surgeon (or nurse practitioner) and dietitian

Every Year Appointment to see surgeon (or nurse practitioner)

You will often be asked to obtain specific blood tests in the week before an appointment. Other medications, such as calcium and iron, may be prescribed at these follow-up visits.

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Potential Complications

All surgery has risks, and as any stomach operation for obesity is considered major surgery, it has significant risks associated with it.

People have died from having operations for morbid obesity. It happens rarely, but the risk can never be taken away completely. If you are older, or you already have certain health problems related to your obesity, your risk may rise. Heart attacks after the operation or clots that form in the leg veins, which then pass to the lungs, can cause death in morbidly obese people after surgery. This risk is between 1 in 500 and 1 in 100. Thorough precautions are taken during surgery and your hospital stay to minimise these risks, but they cannot be eradicated altogether.

Other problems that can occur after gastric sleeve surgery include pneumonia and wound infections. Some of these are relatively minor and do not have a long-term effect on your recovery. Other complications may be more significant and require a longer hospital stay and recovery period. Antibiotics at time of surgery, deep breathing exercises and early mobilisation after surgery are some of the measures taken to reduce the risks of these complications.

After a gastric sleeve procedure, all patients need to take vitamin supplements lifelong, and some need to take iron or calcium supplements as well. Sometimes one or other of these supplements are best given as an injection.

Complications that can occur with gastric sleeve surgery are listed below. This list is long, and although most patients have no complications, or minor complications only, please take note and ask your surgeon and team any questions that will help you to understand the risks associated with obesity surgery.

During Surgery

- Larger incision may need to be made because of technical difficulty with keyhole approach
- Bowel injury from insertion of keyhole instruments
- Bleeding, from blood vessels or injured organs
- Injury to the spleen. May require removal of the spleen
- Injury to other organs. Examples: Oesophagus, pancreas, liver
- Technical difficulty leading to change in operation strategy

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After surgery

- Death. Rate = ½ -1%
- Leak from staple lines. Rate =1%
- Bleeding. May require transfusion or return to surgery
- Infection. At keyhole incisions, or deep with the abdomen
- Sepsis. Severe infection that can lead to organ failure and death. This can lead to prolonged hospital stay and further surgery.
- Pulmonary embolus, a blood clot in the lungs, can be fatal. Rate = 1%
- Deep vein thrombosis. A blood clot in the leg veins
- Pneumonia
- Respiratory failure. Inability to breathe adequately after surgery. This may require support of breathing in an intensive care ward
- Heart attack or abnormal heart rhythm
- Stroke
- Pancreatitis
- Urinary tract infection or injury to the urinary tract from catheter insertion
- Complications related to placement of intravenous and arterial lines. This includes bleeding, nerve injury, or pneumothorax (collapsed lung)
- Nerve or muscle injury related to positioning during surgery
- Allergic reactions to medication, anaesthetic agents or prosthetic devices
- Colitis (= inflammation of the colon). Usually due to antibiotics used in surgery
- Constipation

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In the longer term

- Troublesome symptoms may include: Abdominal pain, change in bowel pattern, tiredness, bloating, nausea or vomiting
- Narrowing at the middle of the stomach (Hour glass stomach). May require stretching with a balloon or rarely surgery
- Excessive or inadequate weight loss. Rarely requires further surgery
- Dehydration or imbalance of body salts. Usually from inadequate fluid intake, infrequently requires admission to hospital
- Inflammation of the remaining stomach or oesophagus
- Gall bladder disease. Usually from gallstones that form during rapid weight loss, can require surgical removal of the gallbladder
- Hernias at the site of incisions
- Psychological problems can include depression, adjustment disorder, relationship difficulties and rarely suicide
- Liver disease or failure. Can occur if there is underlying liver damage that is worsened by weight loss or surgery
- Hair loss from protein malnutrition

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Nutritional Information

After Gastric Sleeve surgery you will need to make changes to your eating patterns. The diet after surgery progresses from a liquid diet to a pureed diet to a soft diet and then a modified diet. This progression is designed to allow your body to heal. It is very important that you follow the diet progression to maximize healing and minimise the risk of complications.

BEFORE SURGERY

For 2 to 6 weeks before your surgery you are required to follow a low calorie diet. The programme followed is Optifast or Dr Mcleods. Your dietitian and surgeon will advise on the amount of time you will need for this.

Why is it necessary to lose weight pre-surgery?

- To lower body fat levels for better access for the surgeon.
- To reduce the size of your liver which would otherwise be in the way.
- Greater ability to adapt to post-operative dietary requirements
- Improved surgery outcomes
- Reduced operating time and post operative risks
- Improved physical function and mobility post-surgery.

What is Optifast?

- Very low calorie diet (VLCD) that is < 800kcal per day.
- Nutritionally complete. (All the vitamins and minerals that you need.)
- Involves 3 milkshake sachets per day. (Soups and bars are also available)

How does it work?

- Each sachet is mixed with 200mls of water at meal times and provides all essential nutrients, as weight is lost.
- You need to drink at least 2 litres of the following fluids per day:
    - Water
    - Diet soft drink
    - Black tea or herbal tea without milk or sugar
- A maximum of 2 cups of low starch vegetables are allowed per day.
- Replacement fibre – 1tsp of psyllium or equivalent per sachet of optifast eg Metamucil or Benefibre
- Please see attached “foods allowed” lists below for more information.

If you are having trouble with this diet or having symptoms such as nausea, please call your dietitian, surgeon or your GP.

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Additional Allowances

Allowed				**Avoid**
Fruit*	One of – 200g strawberries, 1 lychee, 1 apricot, 100g cooked rhubarb, 1 slice of pineapple, 2 passion fruit, 100g grapes, 1 lime, 1 apple, 50g cherries, 1 mango, 1 medium orange, 1 peach, 1 small pear, 120g pear in natural juice, 120g plums, 5 prunes.			All other fruit Including banana
Low Starch And Green Vegetables (2 cups per day)	Alfalfa sprouts Asparagus Beans Bok Choy Broccoli Brussel sprouts Celery Cabbage Capsicum Carrots	Cauliflower Cucumber Eggplant Garlic Lettuce Leeks Mung beans Mushrooms Onions	Radish Shallots Silver beet Snow peas Spinach Squash Tomato Watercress Zucchini	Corn Green peas Legume Lentils Potato Pumpkin Sweet Potato
Soups	Stock cubes	Vegetable soups (Using allowed vegetables)	Miso soup	All others
Sauces And Condiments	Lemon juice Vinegar Worcestershire sauce	Soy sauce (In moderation) Chilli	Mustard Tomato paste	
Herbs And Spices	All herbs and spices			
Miscellaneous	Artificial sweeteners	Unsweetened Lollies/gum	Diet jelly Essence – banana, mint, strawberry	
Calorie Free Fluids (At Least 2 Litres Extra Per Day)	Water Tea Diet soft drink	Diet cordial Mineral water		Fruit juice Alcohol

After Surgery

Day zero (Day of surgery)
- Sips of water.
- Ice to suck.

Day one
- 1 litre of water (slowly, as tolerated)
- Progress to bariatric free fluid diet by the afternoon

Day two
- Bariatric free fluid diet (anything liquid at room temperature)
- Smooth soups, Optifast, tea/coffee, low fat smoothies
- Must be low sugar containing fluids

Day three – Week three
- Bariatric pureed diet
- Very small amounts of puree/mashed food only (½ teacup at most)

Week Four onwards
- Small meals of soft food that is high in protein and low in fat and sugar.

General Information
During all of the above stages and once recovered it is crucial that you:
- **AVOID** liquids with meals (do not drink 30mins pre and post eating)
- Drink between meals and aim for 6-8 glasses fluid per day
- Follow a general healthy diet, low in fat and sugar

Constipation
- Because you are eating less constipation may be a problem. Keeping up with your fluid intake, and occasionally using a gentle laxative will help with this.

Handy Hints
- If you try to eat too much too quickly or drink with meals vomiting may occur.
- Do not consume liquid calories such as fruit juice, soft drinks, cordial, or milkshakes.
- Eat slowly, chew all food well and take time with your meals.
- Ensure you have an adequate protein intake. Protein should be eaten before carbohydrates (starchy) foods.
- As soon as you are home after your surgery start taking a multivitamin daily such as “Centrum”

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Puree Diet

To be followed until 3 weeks after your surgery – Eating too much can result in complications before healing has occurred.

Important Points

- Eat slowly
- Avoid very hot or very cold foods
- **DO NOT** drink within 30 minutes of meal times
- It is normal to be managing only very small amounts during this phase.

Eating with a teaspoon is a good idea.

Foods Allowed	Foods to Avoid
High protein, low fat pureed foods: Low Fat yoghurt, Milk, Cottage cheese, Porridge, Mashed weetbix, Creamota, Scrambled or poached eggs, Pureed meat/chicken/fish, Pureed/mashed vegetables/potato, Smooth soups, Pureed fruit	Raw fruit Raw vegetables Breads Rice Pasta Nuts Seeds Skins Solid Food
Low fat products	Butter Margarine Oil Avocado Cheese (high fat varieties) Ice cream Cream
Low sugar products Low calorie drinks Water Herbal teas	Cordially, Soft drinks Jelly

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Sample meal plan (Initially only 1 -2 Tablespoons of food at a time):

Breakfast	Creamota or weetbix Low fat milk or 1 Tablespoon low fat yoghurt 1 Tablespoon Puree fruit
Lunch	Smooth vegetable/pumpkin soup Scrambled egg
Dinner	Puree chicken and low fat gravy Or Mashed fish Puree potato/pumpkin/vegetables
Snacks (x3/day)	Puree fruit, mashed banana, low fat yoghurt and milk

Soft diet

After your puree diet move to a soft diet for two weeks. Then gradually move to more solid foods.
Aim to have only 3 meals per day.
You should be using a bread and butter plate

Food group	Foods Allowed	Foods to Avoid
Meat, Chicken and Fish	Tender chicken, fish and meat in bite sized pieces or minced. Shaved ham, turkey or chicken Tinned salmon and tuna in spring water	Hard or stringy meat fat, chicken skin or gristle. Fried meats
Milk and milk products	Low fat milk, cottage/ricotta cheese, low fat yoghurt.	Ice cream, high fat cheeses, cram and full fat milk
Fruit	Soft fruits: peeled pears, apples, stone fruit, melon	Pips, skins, pith
Vegetables	Cooked vegetables: mashed, stir fried, grilled or boiled Introduce salads slowly	Tough or raw vegetables: Beans, corn, celery, broccoli stalks etc.
Breads and cereals	Low fat crackers eg cruskits, rice, pasta, noodles, porridge, weetbix, bran flakes.	Doughy bread, muesli, high fat cereals.
Drinks	Diluted juice, diet soft drinks and cordials, herbal teas, coffee or tea	Soft drinks, energy drinks, milkshakes, full fat milk drinks, juice

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	with low fat milk.	
Miscellaneous	Artificial sweetener, herbs and spices, marmite, stock, low fat hummus, minimal oil when cooking.	Sugar, chocolate, sweets, syrups, jams, butter, cooking oils, potato chips, high fat crackers, creamy sauces.

Handy hints

- Introduce more solid foods after a few weeks e.g. salads, red meat
- Avoid bread and instead have low fat crackers e.g. rice crackers, cruskits
    - Look for <5 g fat per 100g.
- Small amounts of toasted vogels bread can be eaten. Avoid soft white breads.
- Continue to chew food well and take your time eating.
- Avoid fluids with meals
- Do not over eat as this will make you uncomfortable and may cause vomiting
- Continue to eat regular meals and select healthy food options to optimize your continued weight loss
- You will need to make sure that your meals are nutritious and include all the nutrients your body needs

Food to include at each meal

Protein

You need to include low fat protein at each meal to ensure you maintain your muscle stores and loose fat stores e.g.:

- Lean red meat 2-3 x per week e.g. lean mince, eye fillet
- Fish and chicken (no skin)
- Low fat dairy products e.g. trim milk, low fat yoghurt and cottage cheese.
- Tofu, beans and lentils e.g. baked beans, hummus, kidney beans.

Protein is very important; you should start each meal with it. Hair loss (temporary) can be a problem if there is inadequate protein in your diet.

Fruit and Vegetables – Include with each meal

- Fresh, frozen or canned vegetables. Avoid hard seeds and pips.
- Fruit that has been peeled and membranes removed.

Carbohydrate/Starchy Food - 2-4 serves per day

- 1 serve = ½ cup pasta/cereal, 1 slice bread, 1 egg sized potato
- Potato, bread, rice, pasta and cereals should be eaten in very small amounts only
- If you are having bread use wholegrain varieties (e.g. Vogels) and toast it as this will fill you up more
- Protein foods should take priority.

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Fluid

- 6 – 8 glasses fluid per day (do not include coffee, alcohol or caffeine drinks)
- Avoid full strength juice, cordials, high calorie fizzy drinks, milkshakes etc

Fats

- Use very minimal margarine or preferably none.
- Avoid oil in cooked. Grill, bake, boil, stir fry or dry roast
- Avoid fatty meats e.g. sausages, luncheon sausage, salami

Handy hints

- Order entrée size meals
- Continue to eat regular meals and select healthy food options to optimize your continued weight loss
- Aim to exercise at least 30mins 5 days per week. This should be continuous cardio type of exercise rather than weights
    - Brisk walk, cycle, cross-trainer, aqua jogging or swimming

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Healthy lifestyle choices

There are several long-term habits that you should adopt to get the most out of your surgery. The first post-operative year is a critical time that must be dedicated to changing old behaviours and forming new, lifelong habits. You need to take responsibility for staying in control. Lack of exercise, poorly balanced meals, constant grazing and snacking, and drinking carbonated drinks are frequent causes of not achieving or maintaining weight loss.

To maintain a healthy weight and to prevent weight gain, you must develop and keep healthy eating habits. You will need to be aware of the volume of food that you can tolerate at one time and make healthy food choices to ensure maximum nutrition in minimum volume. A remarkable effect of bariatric surgery is the progressive change in attitudes towards eating. Patients begin to eat to live; they no longer live to eat.

Obesity cripples the body. As weight is lost, the burden on the bones, joints and vascular system is decreased. Given proper nutrition and physical motion it will rebuild its broken framework. The most effective way to heal the body is to exercise. People who successfully maintain their weight exercise daily.

Exercise and the support of others are extremely important to help you lose weight and maintain that loss following gastric sleeve surgery. You can generally resume higher impact exercise 6 weeks after the operation, sooner than that, you can take walks at a comfortable pace and progress as you tolerate. Exercise improves your metabolism; while both exercise and attending a support group can boost your confidence and help you stay motivated.

A physiotherapist will see you whilst you are in hospital. They can give you initial advice regarding exercise. Your GP can give you information about groups or programmes in your area. Your surgeon can give you details of physiotherapist-run programmes that specialise in bariatric patients' needs. There is a lot of support around you; ultimately it is up to you to make use of it.

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10 POINT PLAN

1. Do not drink liquids with meals. Drink fluids before the meal. Wait until one hour after meals before resuming

2. Eat three tiny, protein-focussed meals per day at regular times, sitting at a table. Eat slowly, savouring your food, using a teaspoon.

3. Stop eating when feeling full or if feeling discomfort

4. Always cut food into small pieces and chew food very well

5. Concentrate on eating protein rich foods such as fish and seafood, cheese, eggs and poultry. Eat protein foods first before any other food

6. Do not snack between meals

7. Avoid very sweet food, Lollies, chocolate, and high-sugar drinks

8. Sip liquids slowly, drinking at least ½ cup every hour between meals to avoid dehydration

9. Minimise alcohol intake as it is high in calories, may cause an ulcer and the effects may be felt much more quickly

10. Take a multivitamin supplement every day, and other supplements if required

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Confirmation Page

It is important for you to have read and understood all the information given to you regarding this procedure. The information will help you make an informed decision, and allow you to proceed with your eyes wide open.

Surgery alone is not a quick fix to obesity problems; as such you are effectively entering into a partnership with your surgical team. We will help and support you through this lifestyle choice, but in return we need to know that you are committed to this pathway too.

Once you have read this book, take time to think about it and ask questions of your surgical team. When you are ready, please sign this page to confirm you have completed this important step toward your laparoscopic gastric sleeve procedure. Please bring this book with you to all your appointments.

I, _____ confirm that I have read and understood all the information given to me in this book, including the risks of surgery and my responsibilities. I have been given sufficient opportunities to ask questions from the bariatric team, and I believe that I am ready for a laparoscopic gastric sleeve procedure.

Signed _____

Date _____