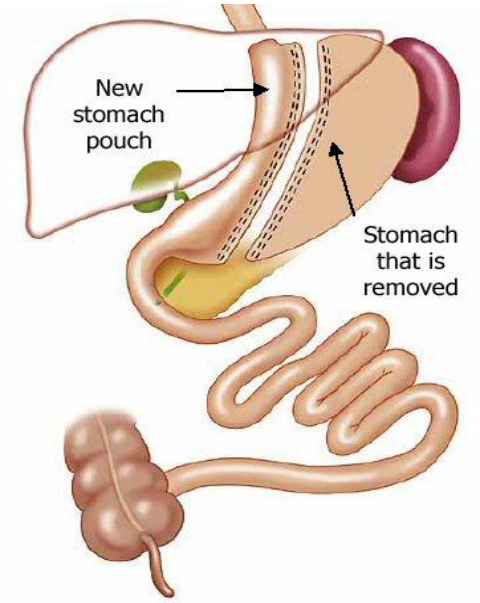
SLEEVE GASTRECTOMY

PRE AND POST OPERATIVE INFORMATION FOR PATIENTS



ST GEORGE BARIATRIC SURGERY

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INTRODUCTION

This information book aims to assist you prepare for your sleeve gastrectomy and also help you with the lifestyle changes you need to make to optimize the outcome of your surgery.

Please review this booklet before your surgery and also bring it with you to the hospital when you come in to have your surgery.

This booklet contains information about:

- **Preparing for surgery**
- **Your Surgery and your hospital stay**
- **Nutrition: pre and post operatively**
- **Follow up visits**

If you have questions regarding any of the information presented in this booklet please do not hesitate to contact us on:

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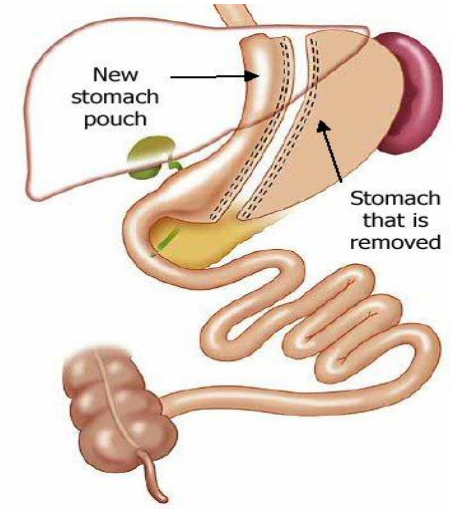


Figure 1.
Narrow Stomach Tube is created and the outer part of the stomach is removed

The sleeve gastrectomy (SG) is a restrictive weight loss operation. The outside part of the stomach is removed and the shape of the stomach is changed from a sac to a long narrow tube. The gastric volume is reduced from approximately 2 Liters to 100 mL.

Furthermore the outside part of the stomach which produces the hunger hormone Grehlin is removed, resulting in a initial profound loss of appetite. This effect tends to lessen with time, but nevertheless long term, there is less hunger.

The main effect of the SG is thought to be the reduced volume of food needed to feel full and satisfied. Using the SG as a tool for portion control allows the committed patient to eat 3 small meals per day and feel satisfied, unlike being on a diet. The subsequent reduction in caloric intake will result in weight loss. Good food choices as well as regular exercise are also necessary to optimise outcome.

The advantage of SG over the other restrictive operations such as the gastric stapling operation (VBG) or the adjustable band (AGB) is that with the SG the whole gastric tube fills when eating so patients feel full rather than obstructed. As the SG does not have a band, there are not many food intolerances in the long term. Bread, meat and fruits can be consumed albeit at a reduced volume and speed. Therefore it allows for eating a healthy balanced diet. If an operation does not allow people to eat a healthy diet then long-term outcomes will be difficult and potentially jeopardized.

Remember that success with weight control is characterized by 3 small meals per day of lean source protein, low starch carbohydrate, adequate fruits and vegetables and aiming to keep caloric intake low (Daily: less than 1300 Kcal for women and less than 1500 Kcal for men). The SG with reduced **hunger** and **early satiety (fullness)** gives people a powerful tool to comply with the low calorie meals plan long term. It is unlike being on a diet.

In summary the main advantages of the SG over AGB are less obstructive eating, more rapid weight loss, no foreign body, no adjustments, and greater end weight loss. The disadvantages are that it is irreversible, and has a little higher upfront surgical risk. The advantages over gastric bypass are no micronutrient problems and elimination of stomal ulcers and small bowel obstruction.

For more information see the your "information for people considering surgery for sever obesity" book and also visit The Obesityhelp website on: http://www.obesityhelp.com

The Staged Management Concept

Some people, especially larger patients (supra-obese BMI >55) have higher risks for surgery. This is based on their medical condition or the difficulty in performing the surgery due to extreme size. In these cases performing the SG, which is essentially the first part of a gastric bypass can be done relatively quickly and safely as a keyhole operation. This allows the patient to lose significant amounts of weight (approx 50% EWL) and avoid a more complicated long procedure.

After one year post op, if the amount of weight lost is not sufficient then the operation can be converted to a gastric bypass which can be done as a keyhole procedure but in a lighter and fitter patient making the surgery much safer. Conversion from a SG to gastric bypass is much easier than AGB to gastric bypass.

WHAT IS LIFE LIKE WITH A GASTRIC SLEEVE?

The weight loss occurs in approximately 12 months. Initially the surgery is very restrictive, but over the next 12mths as the new stomach recovers patients move towards the ability to eat 3 small meals. Post operatively patients are on puree diet for 3 weeks and then progress to a soft diet. By 6mths most people can eat approximately 25% of their previous meals and are able to include all food groups. When going to a restaurant they can eat an entrée sized meal and feel satisfied. The key point being that a small meal satisfies hence the experience is different to dieting and therefore sustainable in the long term.

The early phase is characterized by very early fullness and lack of hunger, which helps with weight loss. But to maintain health there should be a focus on drinking 1liter water per day, 1 multivitamin per day and approx 60 grams of protein per day. Apart from a commitment to "healthy eating" no foods are specifically banned.

FOLLOWING YOUR GASTRIC SLEEVE RESECTION

DAY ONE: The Day of your operation.

When you wake up there will be a 'patient controlled analgesic" pump connected to your IV. The nurses will show you the button that releases the medication into your system. This works very well for pain control.

You will be asked to sit up and dangle your legs over the edge of the bed four (4) hours after the operation. Your nurse will assist you but you will be required to move yourself.

You can have ice to suck to keep your mouth moist.

DAY TWO: The Day after your operation

You will be instructed how to use the 'incentive spirometer'. This device is very important. Using it helps your lungs open back up and prevent fluid accumulating. Please use it at least five times an hour while awake. Each time you use it, repeat 10 times. Remember to inhale, raising the balls, hold them there for a second, then exhale. Wait a few seconds, and then repeat.

Move your feet and exercise your calf muscles as often as possible. You will also have white stockings (TED) and heparin injections to prevent clots in the leg veins.

Your will start a clear fluids diet today. This diet includes clear soup, jelly, juice and cordial. Remember you are not expected to eat all the items on your tray. Take **VERY SMALL SIPS**, start with a teaspoon and **STOP WHEN YOU FULL**.

Walk as much as possible today.

DAY THREE:

Today is the day for you to stabilise and regain your strength. Continue to use your breathing apparatus.

Your will progress to full fluid diet today. This diet includes soup, yoghurt, custard, milk and cordial. Remember you are not expected to eat all the items on your tray. Take **VERY SMALL SIPS**, start with a teaspoon and **STOP WHEN YOU FULL**. If you tolerate the liquid for breakfast, your IV may be removed.

All your medications can be taken by mouth but all tablets need to be crushed.

Walk as much as possible today.

DAY FOUR:

You may be ready to be discharged on this day or the following day. Your diet will progress to a puree diet. You may eat anything that can be blended. You should eat very slowly. When you sense fullness, **STOP**. **YOU SHOULD AVOID LARGE PARTICLES.**

On your discharged stay on the same quality of food that you have been on in the hospital. **REMEMBER TO TAKE SMALL BITES, CHEW, CHEW, CHEW, AND PUT YOUR FORK/SPOON DOWN BETWEEN BITES.**

AT HOME:

It is important to maintain an active life. You will do better and reduce your risk of complications if you are working towards getting back to normal quickly. Try to walk at least 5 blocks each and every day. Remember, you are losing weight. You weigh less today than yesterday. Accept that and walk further because you know it's easier. No other exercises are encouraged at this time. Please do not drive for the first week.

Remember to drink a lot of fluids **but avoid** soft drinks. Aim for at least 1 liter of water per day. **Listen to your "New Stomach". When you feel full, STOP. Meals should take up to one (30 minutes to 1) hour to complete.**

PLEASE REFER TO THE DIETARY GUIDE PROVIDED BY OUR DIETIAN FOR HELP.

Medications:

When you leave hospital you will have prescriptions for medications to be taken after discharge. They include:

Somac – This helps to reduce the secretions in the stomach. You should take this for at least 3 months.

Analgesia – You will be prescribed specific pain medication. Please take it according to the instructions. .

Resume the medications you were taking before surgery except if advised otherwise. Regular checks with your GP or endocrinologist are essential to re-stabilize diabetes and blood pressure medication.

NB: All large (> 5mm) pills taken during the first six weeks after your operation must be crushed so when you have these prescriptions filled, please purchase a pill crusher.

EXPECTED POST OP SYMPTOMS

DIZZINESS

Occasionally you may feel light headed. This is due to the fact that you are not drinking as much liquid as you were able to before surgery; therefore the volume in your body is reduced. When this occurs, do not panic. If you can find a comfortable place to sit or lie down, do so. Your body will adjust and the blood will be redistributed adequately after a short interval. However, if this is occurring too frequently, (more than three times a day) please call us. Aim to drink 1.5 liters of fluid per day and monitor your intake. Remember to sip on fluids in between meals and do not worry if you are not drinking a lot of water because juice, milk, soup etc., are all okay.

ALTERED BOWEL HABITS

Bowel habits may be altered after the surgery. In the beginning, you may have watery bowel movements. Do not expect your bowel movements to be regular until you start eating solid food. For most, bowel habits should become regular and you should have one bowel movement every day and usually less in quantity than you are used to. Laxatives can be used such as agarol, lactulose and benefibre.

VOMITING

During the first two months after surgery, you will probably experience a few episodes of vomiting. It is important to remember your new stomach is approximately 100ml and can be easily overwhelmed. You must eat slowly and stop when you feel full. Meals will take up to 45 minutes. Vomiting can occur due to too fast eating, poor chewing and inappropriate food. Follow the dietary advice strictly.

Too much vomiting or retching will cause secondary swelling and possible obstruction of the passageway. If you vomit more than three times a day, call the office. If you cannot keep anything down for more than eight hours, call the office

NAUSEA

Nausea is a side effect of any gastric operation. This problem may start on the third day after the operation or a couple of weeks after discharge from the hospital. This is the side effect of the operation that is responsible for some of the massive rapid weight loss. Even though you may experience severe nausea you should make an effort to eat at least three or four small meals a day and drink at least three to four cups of water a day. Place one litre of water in the fridge in the morning so you know how much you have drunk during the day. The feeling of nausea may be severe but it is rarely associated with vomiting but if vomiting does occur what comes up is not what was eaten but rather white saliva. If you are vomiting food however, this may need further investigation by X-ray or endoscopic exam.

ANOREXIA

Anorexia, complete lack of appetite, forgetting to eat, is a problem some patients experience. Make an effort to eat at least three to four meals a day.

NUTRITION PLAN BEFORE YOUR SLEEVE GASTRECTOMY

Why do you need to lose weight before surgery?

Your weight loss journey starts before the operation. The weight loss prior to surgery has been shown to reduce the liver size and the fats around the stomach. This makes the surgery easier and therefore reduces the risks.

Furthermore any weight loss before the surgery is a step towards the right direction to reach your weight loss goals. So start today!!!!

What diet plan should you follow to guarantee the weight loss:

Your doctor and dietitian have prescribed Optifast® VLED before, as the studies have proven that it is safe and it works. Optifast® VLED will totally replace your normal food intake. You need to replace each of your meals with an Optifast (any of the Optifast products are suitable).

Product options:

Milkshakes (Chocolate, vanilla, strawberry, coffee), Soups (Chicken, Mixed vegetable), Dessert (Chocolate) Bars (Chocolate, Berry crunch, Cappuccino)

Preparation:

Add one sachet of Optifast® VLED to 200 ml of cold or warm water. Stir, shake or use a blender to dissolve. Adding ice in the blender will make it taste better. Do not use boiling water. You may use more water if desired.

How does Optifast® work?

Optifast® VLED is a medically formulated meal replacement program that is nutritionally complete. This Very Low Energy Diet provides all your vitamin and mineral requirements; however it gives you minimum amount of energy. Therefore your body is forced to break down its own fat stores for energy.

Will you be satisfied on this diet?

By breaking down fat stores a chemical called ketones are produced, which act as appetite suppressants. If you follow this plan closely, in few days time your body will adjust and you should get a reasonable level of satiety. If you eat foods other than what is recommended, the ketone production is interrupted and your cravings for food will increase.

How long do you need to be on this diet?

Based on your current BMI, you need to be on Optifast for _____weeks before your surgery in order to achieve adequate weight loss and reduce the operation.

What else can you eat in addition to Optifast®?

Fluids
Rapid weight loss places a load on your kidneys, therefore you must take at least 2 Litres (or 10 cups) of extra fluids a day to flush them. Most of your fluid should be water but you may also include: Diet soft drinks, diet cordial, unflavored mineral water as well as tea or coffee (no milk or sugar but artificial sweeteners can be added)

Foods with no or small amount of energy
In addition to the Optifast you may also eat other foods that have no energy such as: Diet jelly, strained broth and diet soft drinks or cordial. You can also include 2 cups of vegetables from the list below. These vegetables only have small amounts of energy, and you can have them raw, or steamed. Do not add oil, butter or margarine to them; however you may include vinegar, lemon, lime, herbs and other spices for flavouring.

Your vegetables:
Asparagus, Cauliflower, Celery, Beans, Cucumber, Tomatoes, Silver Beet, Beetroot, Eggplant, Snow peas, Bok Choy, Lettuce, Spinach, Broccoli, Leeks, Squash, Brussel Sprouts, Alphalfa, Sprouts, Mung Beans, Tomato, Cabbage, Mushrooms, Watercress, Capsicum, Zucchini, Carrots, Onion, Shallots, Radish.

What are the expected side effects on this diet plan?

When you start the Optifast it is expected to feel hungry, tired, dizzy or even irritable. However as your body gets used to it and adjust to the Optifast plan these symptoms will improve. The ketone production also causes a bad breath. You may chew a sugar – free mint ore chewing gum to alleviate this.

Optifast does not have much fibre and it is designed to be absorbed in the small bowel, therefore you may not have regular bowel motions. It is recommended to: have 2 cups of your allowed vegetables per day, drink 2 liters of recommended fluids as well as add fibre supplementation such as Benefibre to your Optifast.

If any of the symptoms persist discuss it with your doctor, dietitian or pharmacist.

What if you have diabetes?

The most important treatment for diabetes is weight loss; therefore it is still suitable for you to be on this plan. However as the carbohydrates in this product are limited, if you are on insulin or medications for your diabetes, you need to discuss this with you doctor or endocrinologist monitor before starting this regime.

You may need to modify your diabetes treatment, to prevent low blood sugars.
Monitor your blood sugars very closely and if you experience hypoglycemia (low blood sugars), let your doctor know.

Please liaise with you GP or endocrinologist

Optifast®VLED Meal Plan

The Optifast Meal Plan is designed to replace your usual daily food intake.

Breakfast

1 Optifast milkshake — Black tea or coffee

Lunch

1 Optifast bar — 1 cup salad (with Low Joule dressing)

Dinner

1 Optifast Chicken Soup — 1 cup of steamed vegetables

Mid meals or snacks

Strained broth, Low joule soft drink or cordial, diet jelly, Black tea or coffee

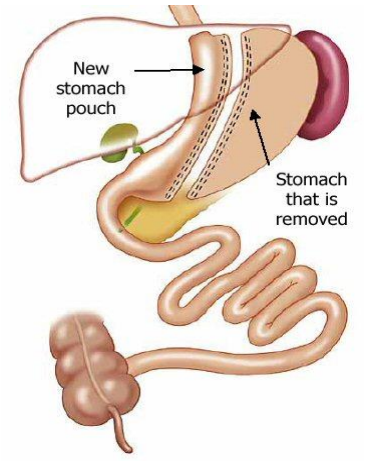
Drinks lots of fluids all day

Pre op weight loss shopping List

- Optifast®VLED: You can purchase Optifast VLED from your Local chemist, discount chemists or order your pre op package through: **www.bandbuddies.com.au**
- Benefibre –your soluble fibre supplement
- Low Joule – no calorie Salad Dressing
- Low Joule/Diet Jelly
- Mixed Vegetables from the list above
- Low Calorie Flavouring Options: Lemons, Lime, Vinegar, Tabasco, Fresh or Dried Herbs (E.g. Basil, coriander, dill, oregano, parsley, rosemary, sage etc), Spices (E.g. Cinnamon, curry powder, ginger, mint, nutmeg, paprika, etc)
- Low Joule/Diet Cordials / Low Joule/Diet Soft Drink, Mineral and Soda Water

This diet is challenging but if followed correctly, it works. It reduces your liver volume, improves your blood sugars, improves your breathing and reduces your risk of surgery. It will also help you achieve better weight loss long term. So lets start today … all the best ….

NUTRITION ADVICE AFTER YOUR SLEEVE GASTRECTOMY



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Good and healthy nutrition plan

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Daily exercise

=

Good and long term weight loss

NUTRITION ADVICE AFTER YOUR SLEEVE GASTRECTOMY

The sleeve gastrectomy (SG) is a restrictive weight loss operation. The outside part of the stomach is removed and the shape of the stomach is changed from a sac to a long narrow tube. The gastric volume is reduced from approximately 2 Liters to 100 mLs It helps you lose weight in two ways:

1. It reduces the size of your stomach, therefore you feel full after eating a very smaller meal.

2. The outer part of the stomach, that produces hunger hormones is removed, therefore you are generally not hungry and feel satisfied for longer

Nutrition management post op can be divided into 3 different stages:

Stage One:	Immediately post op	DIET:
	Day 2 to day 4	Liquid diet
	Day 4 – for 4 weeks post op	Puree diet

↓

Stage two:	Adaptation phase	DIET:
	Week 4	Soft Diet
	Week 6-8 post op	Full diet

↓

Stage three:	Long term and weight maintenance	
	Week 8 post op - long term	Healthy Nutrition

Stage One: In Hospital - Fluid diet

Initially your stomach is swollen and the amount of food that you can eat is very small. You also need to get to know your new stomach volume to prevent unwanted symptoms such as pain, nausea and vomiting.

- You may have Fluids 1-3 days after your operation – this is test diet
- These include: water, diet cordial, soup, jelly, milk, custard, tea coffee
- There is a lot of swelling in your stomach pouch and it needs to heal
- Do not try to eat all the food provided
- Eat and drink very slowly and stop when you feel full

At Home – Puree diet:

Approximately 4 days after your operation you may start a puree diet. You will not be hungry and you feel full with a small amount of food. To avoid any unwanted symptoms:

- Use a blender and ensure all your meals are a smooth pureed consistency.
- Eat slowly – take 30 – 40 min at each meal
- Take small bites
- Do not eat and drink at the same time –
    - Separate your fluids from your solids (30 min before and after meals)
- Serve your meals on a small bowel or a side plate
- Stop when you feel full

On a daily basis, it is important to drink **adequate fluid**, take a **multivitamin daily** and eat **small meals** that **include protein** sources (see protein section).

1. Drink Adequate Fluids:

Fluids are important in preventing dehydration and also help keep your bowels regular.

- Water will be difficult to swallow initially – it feels heavy to drink it
- Add some diet cordial to your water, this makes it easier to drink it
- Drink small amounts of fluid at a time throughout the day – **SIP SIP SIP**
- Drink at least 1 – 1.5 L per day
- Fluids may include: Water, diet cordial, low fat milk, juice (no added sugar)
- Avoid gulping fluids – this will cause pain and discomfort

2. Vitamins and Minerals:

The amount of food you can eat is very small and to make sure you get good nutrition, we strongly recommend that you take a multivitamin and mineral tablet.

- NutriChew is the recommended multivitamin for you. This is a specially designed multivitamin for patients following surgery and it will meet all your requirements in 2 tablets daily – chew it well.

3. Protein:

Protein is important to prevent muscle loss, whilst you are going through this rapid weight loss period - **See the Protein sections at the end of your booklet**

- You need 50-60 grams of protein per day to meet your needs.
- Good sources of protein include: meat, fish, chicken, eggs, legumes and dairies
- Include the protein sources at each meal and eat them first
- Have 1-2 meals replacements (Optifast) as they are high in protein.

Puree diet sample meal plan

Breakfast:	1 Weet-bix™ or- ½ cup of porridge with ½ low fat milk
Morning Tea:	100 ml low fat yoghurt
Lunch:	½ Optifast OR ½ cup Pureed chicken/meat/fish & vegetable soup
Afternoon Tea:	Finish the rest of your Optifast
Dinner:	As per lunch

Remember:

- Use your meal replacement as they are very high in protein and low in fat
  - You will not be able to drink all the meal replacement in one go.
  - Drink them over a longer period, sipping slowly, or have them over 2 meals

- Avoid doughy items (such as bread and pastry), Sticky and starchy foods (such as rice and pasta) and any solids at this stage. These are too filling, will not be easily digested and will result in pain and vomiting at this stage.

Stage Two: Soft diet

By 4 weeks after surgery you can progress to a soft diet. Only progress to this diet if you have tolerated the puree diet. It is still important to eat slowly and chew your food well. Continue to have small meals and **eat your protein sources first**. You may still include meal replacements such as Optifast at this stage. You need to follow a soft diet for the next 3 weeks.

Soft Diet

Group 1 Breads and Cereals

- Quick/instant porridge or semolina or Weet-bix™ (soaked in low fat milk)

✗ **Avoid fresh or soft bread, rice and pasta at this stage**
These are very filling and prevent you from eating your protein spirces

Group 2 Fruit and Vegetables

- Soft ripe, tinned or stewed fruit (with no added sugar)
- Soft cooked vegetables

✗ **Avoid stringy fruit, fruit skins and raw vegetables**

Group 3 Dairy Products (3 serves daily)

- Skim or low fat milk (maximum 250 ml per day – including tea/coffee)
- Low fat or calorie reduced yoghurt (1 tub of 200 grams per day)
- 1 Slice of low fat cheese

✗ **Avoid ice cream, milkshakes and flavoured milks**

Group 4 Meat, Fish, Poultry, Eggs, Legumes (2 serves daily, 1 serve =50 grams)

- Eggs - try scrambled or poached
- Lean minced meat (lamb, pork, veal, chicken), add to casseroles and mornays
- Soft, marinated fish, canned Tuna/Salmon
- Well cooked beans and legumes – try adding to soups and casseroles

✗ **Avoid fatty meats, avoid dry stingy meats such as breast of chicken, steak**

Soft diet sample meal plan

Breakfast:	1 x Weet-bix™ or ½ cup porridge with low fat milk
	OR Mashed scrambled or poached egg
Lunch:	1x Vita-weets™ with tuna or low fat cheese
Dinner:	Steamed fish, chicken Mornay or lean mince meat with
	small quantity of soft cooked vegetables – only if tolerated
Morning/afternoon tea:	Sip on water - Low fat yoghurt OR 100 ml low fat milk

Continue to sip on fluids, do not eat and drink at the same time, eat and drink slowly, chew your food well, and Stop when you feel full.

Stage three: Full solid diet - Long term

By 6 - 8 weeks after surgery you should be able to eat normal consistency foods. It is important to eat slowly, chew your food well, stop when you feel full and not over stretch your new stomach. Continue to have small meals and eat your protein sources first.

To continue loosing weight and maintain this weight loss long term:

- Use your gastric pouch effectively by:
  - Avoid snacking and grazing – aim for 3 meals per day
  - Have a healthy meal plan
  - Avoid high calorie dense foods
  - Avoid fluids that contain energy such as energy drinks, juices
- Ensure increasing your incidental activity as well as maintain regular exercise.

The following meal plan aims to give you guidelines for long term healthy eating.

Solid Diet

Group 1 Breads and Cereals

- Breakfast cereals – aim for a high fibre, low sugar content
- Spaghetti or noodles or rice (well cooked), Couscous
- Multigrain bread - try toasted first

✗ **Avoid fresh or soft bread, rice and pasta at this stage**

Group 2 Fruit (2 serves/daily) **Vegetables**

- Fresh fruit or tinned fruit (with no added sugar)
- Variety of cooked vegetables, slowly introduce salad vegetables

Group 3 Dairy Products (3 serves/daily)

- Skim or low fat milk (maximum 250 ml per day)
- Low fat and diet yoghurt (1 tub of 200 grams per day)
- Low fat cheese slices, cottage or ricotta cheese (no more than 30 grams/day)

✗ **Avoid ice cream, milkshakes and flavoured milk**

Group 4 Meat, Fish, Chicken, Eggs, Legumes (2 serve/daily. 1 serve=50 grams)

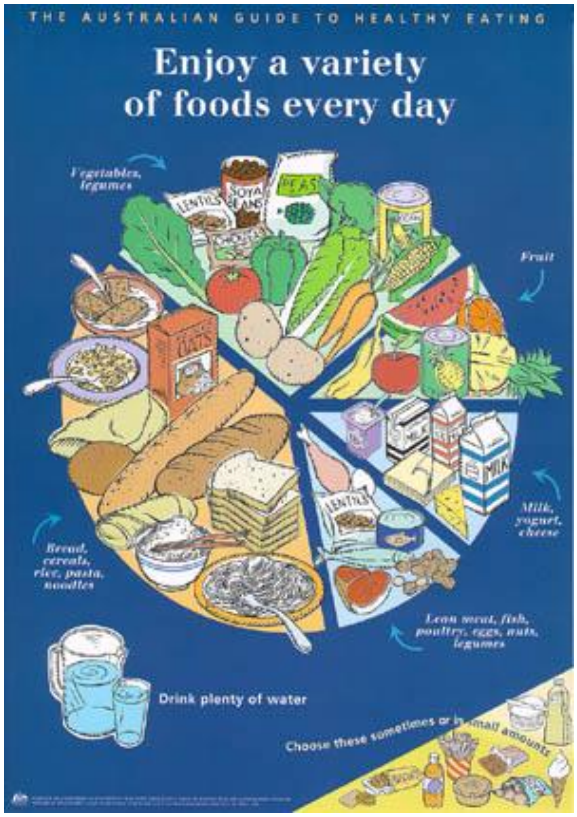
- Lean Meat (lamb, pork, veal, beef), fish or chicken, Eggs (limit to 2-3 a week), Baked beans and legume (chickpeas, lentils etc)

Group 5 Fats, Oils (maximum 2 teaspoons per day)

- Use polyunsaturated or monounsaturated margarines and cooking oils

Solid diet sample meal plan

Breakfast:	1x Weet-bix™ or porridge with low fat milk
	OR 1x toast with baked beans or eggs or cheese
Lunch:	1x slice of toast or 2x low fat cracker biscuits
	With tuna or low fat cheese
	Salad and vegetables as tolerated
Dinner:	Small serve fish, chicken or lean meat
	With steamed, boiled or lightly stir fried vegetables
Morning Tea/ Afternoon Tea:	Low fat yoghurt (200 mls) or Fresh fruit



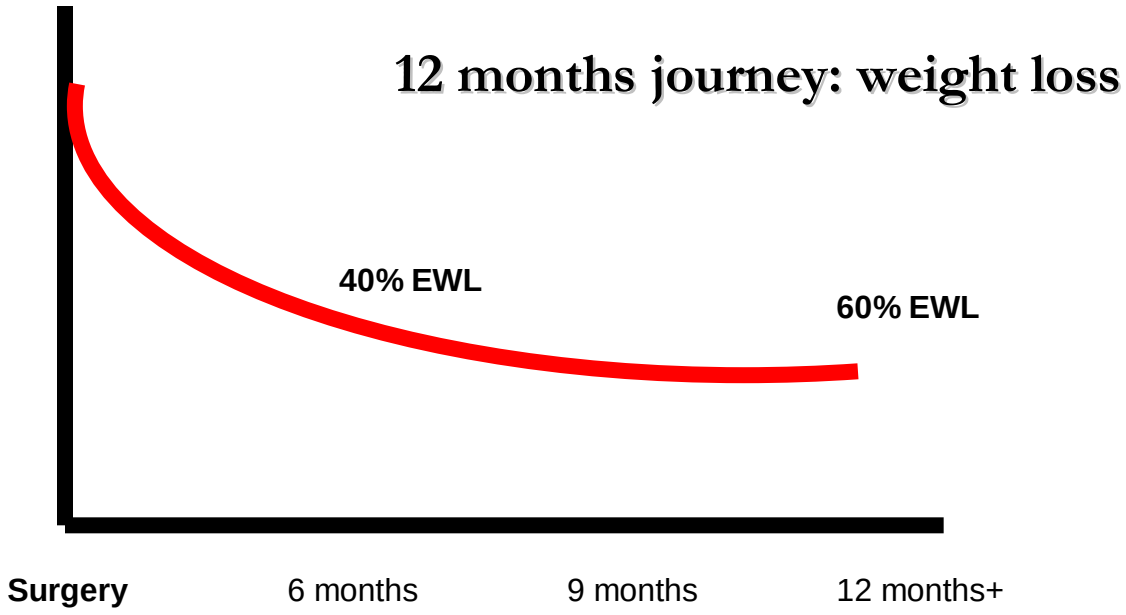
Enjoy variety of food, but in smaller portions:

- Include protein sources at each meal
  - Using lean meat/chicken
  - Use low fat dairy sources
- Increase vegetable and fruit intake
- Limit your starchy foods such as
  - Bread, pasta, noodle and rice
- Drink plenty of fluid
  - Aim for: 1-2 liters of fluids
  - Avoid fluids with energy
- Limit foods with high calories such as chocolates, chips, cakes and biscuits

Your progress post op:

Phase One: **0-6 months post op**

Your body will allow you to lose weight in the first 6-9 month post op. Most patients report that their weight loss stabilises after this stage. Therefore you need to take advantage of this period in losing as much weight as possible as well as maintaining adequate nutrition status.



Phase Two: **6-12 month post op**

Your weight loss slows down and starts stabilising at this stage, you may feel hungry at times and you can also eat more food. Therefore you need to start implementing changes such as serving yourself on a small plate, increasing your fruit and vegetable intake, avoiding snacking, continuing to make good food choices and doing regular exercise.

Phase Three: **12 months and more post op**

The operation has achieved what it can in the first year. Your success post surgery will depend on your **life long** efforts to change your lifestyle. This includes making changes to your eating and exercise habits as well as taking responsibility for every decision you make that affect your weight. Some of the key factors in achieving optimal weight loss and maintaining it are:

- **Monitor your weight**
- **Use your new stomach pouch effectively**
- **Regular exercise**

General Recommendations:

Meal Size:
After the surgery you will not be able to eat large amounts of food and fluid at one time. Having **small** meals will help prevent pain, discomfort, nausea and vomiting. As a general rule only aim for ½ to 1 cup of food at each meal, chew food well, eat slowly and stop eating when you feel full or feel any discomfort.

Protein:
Protein is important in healing and preventing muscle loss while you are losing weight. Not enough protein results in lethargy and hair loss. We recommend at least 60 grams of protein per day. You should **eat protein foods first** at each meal. These include meat, fish, chicken, eggs and reduced fat dairy products.

- Buy lean meat
- Remove all visible fat from meats and the skin from chicken before cooking
- Avoid processed meats e.g. Salami, ham, sausages
- Use low fat cooking methods such as grilling, steaming, microwaving or boiling instead of frying.

Food Groups	Recommended serves for each day	Example of serving size
Meats and alternatives Source of protein, iron, zinc and Vitamin B12	**Aim for 2 serves daily** Low fat varieties Buy lean meat Avoid processed meat Remove all visible fat	• 50 g of meat, chicken, fish • 1/2 cup of lean mince • 1/2 cup of cooked beans, lentils, chick peas, split peas or canned beans • 1 small eggs (limit 2-3 /week)
Dairy products Source of protein, calcium and zinc	**Aim for 3 serves daily** Low fat / diet varieties	• 250 ml of low fat milk -1 cup • 200 g yoghurt (1 small carton) • 20 g cheese (1 slice) • 250 ml custard (1 cup)

You can also use meal replacements with protein such as: Optifast, Tony Ferguson, Dr. MacLeods. There are other commercial supplements available at pharmacies. Your dietitian will recommend these if necessary.

Protein content of common foods

This protein counter table is based on foods that we consider good sources of protein. It is designed to help you get enough protein during your post op period.

Food item		Portion	Protein (grams)
Legumes			
	Baked beans, kidney beans, chick peas, lentils	**½ cup**	**7-9**
Eggs			
	Egg	**1**	**6**
Meat/ Chicken/ Seafood			
	Beef, Lamb, Pork, Veal, Fish, chicken	**30 grams**	**8**
	Prawns	**5 pieces**	**7**
	Lobster, Crab	**30 grams**	**5**
Dairy			
	Milk. Skim	**1 cup**	**8**
	Cheese, Cottage	**1/2 cup**	**14**
	Cheese, Parmesan	**¼ cup**	**12**
	Cheese, Ricotta	**½ cup**	**14**
	Cheese, Mozzarella	**30 grams**	**8**
	Yoghurt, low fat	**200 mls**	**8**
Soy items			
	Soybean	**½ cup**	**14**
	Tofu	**½ cup**	**10**
	Textured Soy protein	**½ cup**	**11**
	Soy milk, plain	**1 cup**	**7**
	Soy beans	**½ cup**	**14**
Meal replacements			
	Optifast™	**1 sachet**	**17**
	Tony Ferguson™	**1 sachet**	**17**
	Kicstart™	**1 sachet**	**17**

Note: 1 Standard cup = 250 mls

Minerals and Multivitamins:

As the amount of food you can eat is very small, you will not be able to get all the nutrition you from food alone. This could result in vitamin and mineral deficiencies. To prevent this we recommended that you:

1. **Take: NutriChew 2 x daily.** This is the recommended multivitamin as it is specially designed for patients following surgery and it will meet all your requirements in 2 tablets daily – chew it well.
2. Have the recommended routine blood tests
3. Come to see us for your scheduled post op nutrition follow up

You may need other supplementations if your dietary intake is not balanced. Your dietitian will discuss this with you at the follow up clinic.

Fluids:

Fluids are important in preventing dehydration and also help keep your bowels regular.

- It is important to drink plenty of water (6-8 glasses per day).
- Avoid large amounts of fluids with meals. Drink 30 minutes before meals and wait for 30 minutes after meals.
- Avoid liquid calories: these are fluids that have calories and add to your total energy intake without giving you any feeling of fullness. Drinking these on a regular basis is often one of the reasons that patients do not get goo weight loss. These include: Non diet soft drinks, cordials, juices, milkshakes or sports drinks.

Alcoholic beverages:

You will be affected by alcohol much more quickly after the surgery. Therefore it is important to start with small amounts first and as per recommendations: **DO NOT DRINK AND DRIVE.**

Alcoholic drinks such as wine, beer, spirits, sherry and port have no nutritional benefits and are also very high in calorie. It is best to limit these beverages.

Fibre:

Fibre is important to keep your bowels regular. Initially your diet lacks fibre and therefore you may need to take a fibre supplement (such as Benefibre™) with plenty of water. This increases bulk and should help with regular bowel activity.

As your diet progresses you should include breads and cereals, fruits and vegetables as well as adequate fluids daily. Your Daily exercise is also important in preventing constipation. If constipation is a problem discuss this with your Doctor/dietitian.

Exercise:

Successful weight control is a result of healthy eating **AND** regular exercise. The best type of exercise is one you can enjoy, and can continue to do on a regular basis. Exercise will help you to improve or maintain your weight loss, increase your metabolism, and also improve your general health.

A suitable long term aim is for 60 minutes of moderate activity such as a brisk walk, on all or most days of the week. Your size may make it hard for you to exercise as much as you need to. Remember the more you use energy through exercising the more you lose weight and the easier it will be to exercise.

Start with simple exercises such as walking and swimming. Then gradually increase your levels to more vigorous exercise such as cycling and jogging. You should check with your doctor about the amount and type of exercise that is best for you. You should also increase your activity level in your daily life. For example:

- Stand rather than sit
- Be outside rather than inside
- Walk rather than drive - if possible
- Park your car further away from where you need to go so you can walk more
- Climb the stairs rather than using the lifts

Long Term weight maintenance:

As mentioned earlier your success post surgery will depend on your **life long** efforts to change your lifestyle. This includes making some radical changes to your eating and exercise habits. Taking responsibility for every decision you make that effects your weight is the first step in your weight management. Some of the key factors in achieving optimal weight loss and maintaining it are:

- **Monitor your weight closely**
  You need to weigh your self once a week. This gives you feedback on how you are managing your weight problem. If your weight loss has stopped or you are regaining weight the solutions are to have your diet reviewed and increase your activity level.

- **Use your new stomach pouch effectively**
  The aim of the sleeve is to help you feel full after eating a small meal. However you still need to use your stomach pouch effectively to achieve good weight loss and maintain it.

    - Eat healthy and balanced meals: including lean meats, fruits and vegetables, choosing low fat dairy items
    - Avoid high calorie dense foods
    - Avoid snacking and grazing – aim for 3 meals per day
    - Avoid liquid calories
    - Do not drink 30 minutes before and 45 minutes after eating

- **Regular exercise**
    - Choose an exercise that you enjoy and do it daily, e.g. Start with walking 30 minutes daily
    - Increase your activity level in your daily living (see exercise section for some suggestions)

FOLLOW - UP

Follow – up post operatively

It is important to have regular follow-up with your surgeon. You also need to see your dietitian for ongoing nutrition monitoring and education. The follow up visits have been outlines for you in the following table. Please contact our rooms on the numbers in front of this book to make your appointments.

Post op:	**What will happen during the clinic visit?**
Three weeks	You will be seen by your Surgeon and Dietitian The following will be discussed: • Post op progress – wounds • Diet progress • Fluid adequacy • Diet adequacy • Multivitamin supplementation
Three months	You will be seen by your Surgeon, Practice nurse and Dietitian. The following will be discussed: • Diet progress • Fluid adequacy • Multivitamin supplementation **Please remember to collect a blood form which you will need to do 2 weeks prior to your next visit.**
Six months	You will be seen by your Surgeon and dietitian The following will be discussed: • Review your lab test results • Healthy long term meal plan • Exercise and activity levels • Vitamin and mineral supplementation
Nine months	You will be seen by your Surgeon and Practice nurse The following will be discussed: • Operative progress • Fluid adequacy • Multivitamin supplementation **Please remember to collect a blood form which you will need to do 2 weeks prior to your next visit.**
Yearly	You will be seen by your Surgeon and dietitian The following will be discussed: • Review your lab test results • Healthy long term meal plan • Exercise and activity levels • Vitamin and mineral supplementation