



## Nutritional Guidelines

### SLEEVE GASTRECTOMY

A Sleeve Gastrectomy is effective in achieving significant weight reduction in those with extreme obesity. To ensure success, there are some nutritional goals pre and post surgery that must be followed to optimise your weight loss outcomes.

These guidelines will be fully explained during your dietetic consultations. If at any stage you have further questions, we are here to help you. Please contact the rooms on **03 9008 5914**.

### PRE OPERATIVE DIET

#### 2-4 Weeks prior to surgery

Weight loss prior to surgery has been shown to reduce the liver volume and reduce fats from around the abdominal organs which will make for a quicker and easier surgery. A very low calorie diet (VLCD) such as Optifast, is recommended. Optifast contains a safe amount of carbohydrates, essential fatty acids and high quality protein, which helps preserve lean body mass while you lose your fat stores.

| Guidelines for Pre-Operative VLCD |   |
|-----------------------------------|---|
| <b>BREAKFAST</b>                  | 1 shake sachet of Optifast <b>Plus</b> Tea / Coffee (no milk or sugar)<br><b>OR</b><br>1 Optifast Bar <b>Plus</b> Tea/ Coffee (no milk or sugar)  |
| <b>LUNCH</b>                      | 1 shake sachet of Optifast <b>Plus</b> 1 cup of "Free" Steamed Vegetables<br><b>OR</b><br>1 Optifast Bar <b>Plus</b> 1 cup of "Free" Steamed Vegetables<br><b>OR</b><br>1 Optifast Soup <b>Plus</b> 1 cup of "Free" Steamed Vegetables  |
| <b>DINNER</b>                     | 1 shake sachet of Optifast <b>Plus</b> 1 cup of "Free" Steamed Vegetables<br><b>OR</b><br>1 Optifast Bar <b>Plus</b> 1 cup of "Free" Steamed Vegetables<br><b>If hungry may include</b><br>65-100g (raw weight) Steamed Chicken or White Fish+ 1 cup of "Free" Steamed Vegetables |

### IN SUMMARY PER DAY





| <b>OPTIFAST FREE FOODS LIST</b>  |  |  |
|--|--|--|
| <b>Low Starch &amp; Green Vegetables</b><br><br><b>Include 2 cups of low starch vegetables</b> | Asparagus<br>Beans<br>Bok choy<br>Broccoli<br>Celery<br>Cabbage<br>Capsicum<br>Carrots<br>Cauliflower<br>Cucumber<br>Eggplant<br>Garlic        | Lettuce<br>Leeks<br>Mushrooms<br>Onions<br>Radish<br>Shallots<br>Silver beet<br>Snow peas<br>Spinach<br>Tomato<br>Watercress<br>Zucchini     |
| <b>Soups</b>   | Stock cubes (in moderation)<br>Bonox (in moderation)<br>Vegetable soups using allowed vegetables<br>Miso soup                                  |  |
| <b>Sauces &amp; Condiments</b>   | Lemon juice<br>Vinegar<br>Worcestershire sauce<br>Soy sauce (in moderation)  | Chilli<br>Mustard<br>Tomato paste  |
| <b>Spices &amp; Herbs</b>  | All spice<br>Basil<br>Celery flakes<br>Chilli<br>Chives<br>Cinnamon<br>Cloves<br>Coriander<br>Cumin<br>Curry powder<br>Dill<br>Fennel<br>Thyme | Garlic<br>Ginger<br>Lite salt<br>Mint<br>Mustard seed<br>Nutmeg<br>Oregano<br>Paprika<br>Parsley<br>Rosemary<br>Sage<br>Turmeric<br>Tarragon |
| <b>Fluids</b>  | Water<br>Tea<br>Diet soft drink  | Diet cordial<br>Mineral water  |
| <b>Miscellaneous</b>   | Artificial sweeteners<br>Diet jelly  | Unsweetened lollies/gum<br>Essence - banana, mint, strawberry  |



## POST OP - PHASE ONE: CLEAR FLUIDS

### **During your hospital stay (at least 24 hours):**

Initially your stomach is swollen and the amount of food you can eat is minimal. It is important that you do not distend the stomach or overfill it as this may stimulate vomiting. To avoid unwanted symptoms such as pain, nausea and vomiting, it is important you follow these recommendations.

#### **RECOMMENDATIONS**

- Continuously sip fluids throughout the day.
- Have small amounts of mostly protein based sources (such as Optifast).
- Stop when you feel full.
- Avoid gulping fluids.
- Avoid fizzy drinks.
- There may be large quantities of liquids brought to you on your tray. You do not have to finish everything, when you feel full stop.

| <b>CLEAR FLUIDS TO INCLUDE</b>   | <b>CLEAR FLUIDS TO AVOID</b>   |
|--|--|
| <ul style="list-style-type: none"> <li>○ Water</li> <li>○ Clear soups and broths</li> <li>○ Strained fruit juice (no pulp)</li> <li>○ Diet cordial</li> <li>○ Black tea/black coffee</li> <li>○ Resource fruit beverage</li> <li>○ Zero sports drink</li> <li>○ Artificially sweetened iced tea</li> <li>○ <b>2 x nutritional products a day (Optifast)</b></li> </ul> | <ul style="list-style-type: none"> <li>○ Fizzy soft drinks</li> <li>○ High energy drinks</li> <li>○ Jelly</li> </ul> |



## POST OP - PHASE TWO: FULL FLUIDS

### **Weeks 1 and 2 Post Operatively:**

After your discharge from hospital, a full liquid diet is required for the first two weeks post operatively. The correct introduction of foods and fluids after surgery is vital to allow the swelling to go down, help with wound healing and to give your body a chance to adapt to the changes. The consistency of the fluids you consume should be able to pass up through a straw.

#### **RECOMMENDATIONS**

- Ensure you keep up your fluid intake. Carry a water bottle with you and sip during the day.
- By the end of weeks 1-2 you should be able to drink a cup of liquid at a time without any concerns such as pain, discomfort or vomiting.
- Aim to have 4- 6 "meals" including dairy products, soups and 2 x nutritional supplements (Optifast).
- Drink slowly and stop when you are full.
- Avoid all fizzy drinks.
- Ensure you take your daily multivitamin.

| <b>FULL FLUIDS TO INCLUDE</b>   | <b>FULL FLUIDS TO AVOID</b>   |
|---|---|
| <ul style="list-style-type: none"> <li>○ Skim or reduced fat milk</li> <li>○ Drinking yoghurt (Jalna, Bulla)</li> <li>○ Strained meat and vegetable soups</li> <li>○ Vegetable juices</li> <li>○ Sustagen</li> <li>○ Optifast</li> <li>○ Soy milk (must be calcium enriched)</li> </ul> | <ul style="list-style-type: none"> <li>○ Full cream ice cream</li> <li>○ High energy milk drinks</li> <li>○ Fizzy drinks</li> <li>○ Jelly</li> <li>○ Fruit Juices (Limit)</li> <li>○ Up &amp; Go</li> </ul> |

### **Multivitamins:**

Due to the restrictive nature of the fluid and the transitional diet, food variety will reduce and you may not receive your recommended dietary intake for vitamins and minerals. It is essential that you take a multivitamin and mineral supplement.

- **Nutrichew:** A Chewable multivitamin available from [www.bandbuddies.com.au](http://www.bandbuddies.com.au) or [www.greatideas.net.au](http://www.greatideas.net.au)
- **BN Multi** A chewable multivitamin available from <http://www.bariatricadvance.com>
- **Accomin Liquid:** A liquid form of supplement.
- **Blackmores Pregnancy and Breastfeeding multivitamin:** A capsule form of multivitamin, available from most local pharmacies.
- **Centrum:** A capsule form of multivitamin, available from most local pharmacies.



## POST OP - PHASE THREE: PUREED DIET

### Weeks 3 and 4 Post Operatively:

**Do not start this diet earlier than two weeks after your surgery**

If you feel as though you are not ready to progress continue with full fluid diet for another 3 days. Now that you have managed full fluid and started to understand your fullness levels without pain or regurgitation, you can progress to pureed food.

| RECOMMENDATIONS   |
|---|
| <ul style="list-style-type: none"> <li>○ Start eating using a baby spoon, progress to a teaspoon, then eventually use a dessert spoon.</li> <li>○ Start eating a very small amount (½-¼ of a cup) then only if you are able, progress to MAXIMUM ½ cup.</li> <li>○ Puree food in a blender- it shouldn't have any lumps and shouldn't need to be chewed.</li> <li>○ Cut food into small pieces first and add fluids when blending if needed.</li> <li>○ Eat meals on a bread and butter sized plate.</li> <li>○ Do not eat and drink at the same time.</li> <li>○ Allow 30 - 45 minutes at any end of a meal before you- have anything to drink.</li> <li>○ Avoid alcohol and soft drinks.</li> <li>○ Ensure you keep up your fluid intake. Carry a water bottle with you and sip during the day.</li> <li>○ <b>Eat slowly:</b> take 10- 20 minutes for each meal. Always stop eating if you feel any discomfort. Remember your new stomach is smaller, the feeling of fullness may be different to what you are used to.</li> <li>○ Ensure you take your daily multivitamin.</li> <li>○ If you feel nauseated or experience gas or bloating when trying a new food, then you are not ready to eat it. Wait a few days before trying it again.</li> </ul> |

| HIGH PROTEIN FOODS  | LOW PROTEIN FOODS   |
|---|---|
| <ul style="list-style-type: none"> <li>○ Pureed meat, chicken, turkey or soft fish including tuna in spring water</li> <li>○ Eggs (scrambled and mashed)</li> <li>○ Pureed legumes (baked beans, peas, beans and lentils)</li> <li>○ Milk based fruit smoothies (strain)</li> <li>○ Blended soups with pureed meat added</li> <li>○ Low fat yoghurt</li> <li>○ Skim milk</li> </ul> | <ul style="list-style-type: none"> <li>○ Pureed vegetables (Avoid: green peas, beans, corn, celery, asparagus or cabbage for now)</li> <li>○ Mashed vegetables (Potato, pumpkin, sweet potato, carrots)</li> <li>○ Pureed fruit</li> <li>○ Apricot nectar</li> <li>○ Porridge</li> <li>○ Weetbix with hot skim milk</li> <li>○ Sago and tapioca puddings</li> </ul> |



## POST OP - PHASE FOUR: SOFT DIET

### **Weeks 5 and 6 Post Operatively:**

If you feel as though you are not ready to progress, continue with pureed diet for another 3 days.

Now you are ready to gradually reintroduce soft foods back into your diet and slowly increase your serve size. At this point you will also focus on your **CHEWING** habits.' A soft diet may include any foods that can be mashed into a pureed consistency. Casseroles and stews are a good option as they are moist and cooked over a long time.

#### RECOMMENDATIONS

- Continue to restrict the volume of meals to  $\frac{1}{2}$  -  $\frac{3}{4}$  of a cup.
- Chew your food well.
- Do not eat and drink at the same time.
- If you find you have problems with a certain food avoid them.
- **Eating out:** try soft white fish, casserole or stew, mashed or baked potato, tomato based pasta or Asian stir-fry.
- Ensure you take your daily multivitamin.
- Ensure you keep up your fluid intake. Carry a water bottle with you and sip during the day.

| SOFT FOODS TO INCLUDE  | SOFT FOODS TO AVOID   |
|--|---|
| <ul style="list-style-type: none"> <li>○ Poached eggs</li> <li>○ Legumes</li> <li>○ Risotto</li> <li>○ Stews</li> <li>○ Casseroles</li> <li>○ Steamed fish</li> <li>○ Sandwich tuna</li> <li>○ Soft cooked vegetables</li> <li>○ Tinned fruit</li> <li>○ Soft ripened fruit</li> </ul> | <ul style="list-style-type: none"> <li>○ Tough, dry or chewy meats</li> <li>○ Stringy foods such as celery or fresh asparagus</li> <li>○ Doughy foods such as fresh white bread</li> <li>○ Tough skins, seeds and pips</li> <li>○ Pasta and rice</li> <li>○ Raw vegetables and salad</li> </ul> |



## POST OP - PHASE FIVE: REGULAR DIET

### Week 7 Onwards:

If you feel as though you are not ready to progress continue with soft diet for another 3 days.

Use this time to experiment with different foods. By week 5 the stomach has healed well and you should have adapted to your new stomach.

| RECOMMENDATIONS   |
|---|
| <ul style="list-style-type: none"> <li>○ Start with very small amounts and aim to have a ½ cup to size serve per meal.</li> <li>○ Have small frequent meals and include protein in between meals to meet requirements.</li> <li>○ Take small mouthfuls (using a teaspoon may help).</li> <li>○ Eat slowly.</li> <li>○ Practice chewing.</li> <li>○ Keep up your fluid intake.</li> <li>○ Daily multivitamin supplement.</li> <li>○ Avoid regular high calorie snacks and fluids.</li> <li>○ Do not drink with meals. Drink at least half an hour before or after meals.</li> <li>○ Always consume protein first.</li> <li>○ <b>Eat until comfortable not full.</b></li> </ul> |

You need to make sure you are eating meals and/or drinking fluids which ensures you are receiving foods from each of the Five Food Groups listed below.

**Meals should include:** protein first, then fruits and vegetables, then wholegrains

| FIVE FOOD GROUPS                       | RECOMMENDATIONS   |
|--|---|
| <b>Low fat milk and dairy products</b> | <ul style="list-style-type: none"> <li>○ Avoid ice cream, milkshakes and flavoured milk</li> <li>○ Good source of protein and calcium</li> </ul>  |
| <b>Lean meat/fish/poultry, eggs</b>    | <ul style="list-style-type: none"> <li>○ Aim for 2 serves of these per day to ensure adequate protein in the diet</li> <li>○ These foods are also a great source of iron, zinc and vitamin b12 which are important in healing and preventing muscle loss</li> </ul> |
| <b>Breads and cereals</b>              | <ul style="list-style-type: none"> <li>○ Limit this group</li> <li>○ Aim for high fibre, low sugar breakfast cereals</li> <li>○ Multigrain bread</li> <li>○ Pasta, rice and couscous</li> </ul>   |
| <b>Fruits and vegetables</b>           | <ul style="list-style-type: none"> <li>○ Include fresh fruits or tinned fruit (no added sugar)</li> <li>○ Start with well cooked vegetables and progress slowly to salad vegetables</li> </ul>  |
| <b>Fats and oils</b>                   | <ul style="list-style-type: none"> <li>○ Use polyunsaturated or monounsaturated margarines and cooking oils sparingly</li> <li>○ Avocado</li> </ul>   |



| FOOD                                   | PORTION (WEIGHT)   | PROTEIN (g)      |
|--|--|------------------|
| <b>Breads and Cereals</b>              |  |                  |
| 1 slice bread (generic)                | 35g including crusts (1 slice)   | 3g               |
| High fibre breakfast cereal (average)  | High fibre breakfast cereal 40g serve (weetbix, vita-brits, Bran, Light and Tasty) | 5g               |
| 4 Vita wheat                           | 24g (1 biscuit = 6g)   | 2.5g             |
| Mountain Bread                         | 25g (1 slice)  | 3g               |
| 10 rice cracker biscuits               | 17g  | 1g               |
| <b>Vegetables</b>                      |  |                  |
| Dry Baked Potato no skin               | 100g (medium serve)  | 3g               |
| Dry Baked Potato with skin             | 100g (* note without skin is 1g less fibre)  | 2g               |
| Mixed cooked veg (inc brassica)        | ½ cup (80g)  | 2g               |
| Cooked peas (from frozen)              | ½ cup (80g)  | 4.5g             |
| Tossed salad                           | ½ cup (40g)  | 0.5g             |
| <b>Dairy Products</b>                  |  |                  |
| 200ml milk: low fat, skim, or soy      | 200ml  | 8-10g            |
| 200g Diet yoghurt                      | 200g (1 tub)   | 8-10g            |
| Reduced fat cheese (<50% reduced fat)  | Devondale Sevens; Kraft extra lights 20g   | 7g               |
| Pauls trim custard                     | ½ cup (125g)   | 6g               |
| Skim milk powder                       | 20g (good to add to skim milk)   | 7g               |
| <b>Meat and alternatives</b>           |  |                  |
| Beef steak (lean/fat trimmed)          | 100g raw weight or 80g cooked weight   | 22g              |
| Lean Premium mince (Ave all varieties) | 110g raw weight or 80g cooked weight   | 22g              |
| Chicken breast/thigh lean fat trimmed  | 100g raw weight or 80g cooked weight   | 20g              |
| Fish                                   | Canned (80g) drained weight<br>Oven Baked fresh (100g cooked)<br>Lobster and Crab  | 18g<br>22g<br>7g |
| Egg                                    | 1 medium whole (60g)<br>Egg white only (1)   | 7.5g<br>3.5g     |
| Tofu                                   | ½ cup  | 10g              |
| <b>Legumes</b>                         |  |                  |
| low fat cottage cheese                 | 40g (2 Tbsp)   | 6.5g             |
| cooked tofu                            | 100g   | 8g               |
| broad beans                            | ½ cup  | 6g               |
| split peas or lentils                  | ½ cup  | 6g               |
| baked beans or 3 bean mix              | ½ cup  | 6.5g             |
| chick peas                             | ½ cup  | 5.5g             |
| kidney beans                           | ½ cup  | 10.5g            |
| <b>Fruits</b>                          |  |                  |
| Banana                                 | 1 medium   | 1.5g             |
| Pomme fruit (average)                  | Apple, pear  | 0.5g             |
| Citrus. fruit                          | Orange, mandarin (2), tangelo  | 2g               |
| Unsweetened orange juice               | 200ml  | 1g               |
| Vegetable juice                        | 125ml  | 1g               |



## NUTRITIONAL DEFICIENCIES

| VITAMINS AND MINERALS          | DETAILS   |
|--------------------------------|---|
| <b>CALCIUM &amp; VITAMIN D</b> | <ul style="list-style-type: none"> <li>○ Calcium is needed for blood clotting, nerve and muscle function and healthy bones.</li> <li>○ Calcium is found in foods such as milk, cheese, yoghurt and salmon with bones.</li> <li>○ Vitamin D helps you absorb the calcium found in foods.</li> <li>○ Vitamin D is found in foods such as eggs, fish, soy, and organ meats.</li> </ul> |
| <b>FIBRE</b>                   | <ul style="list-style-type: none"> <li>○ Not eating enough fibre after surgery can result in constipation. Found in foods such as muesli, bran, vegetables, legumes and wholegrains.</li> </ul>   |
| <b>PROTEIN</b>                 | <ul style="list-style-type: none"> <li>○ Protein provides building blocks for growth and for repairing cells. Eating insufficient protein can weaken the immune system and cause muscle loss.</li> <li>○ Found in foods such as red meat, chicken, fish, eggs and legumes.</li> </ul>   |
| <b>IRON</b>                    | <ul style="list-style-type: none"> <li>○ A deficiency of iron can result in tiredness, lack of energy, poor concentration and frequent infections.</li> <li>○ Found in foods such as red meats, chicken, fish, nuts, leafy greens and legumes.</li> </ul>   |
| <b>FOLATE</b>                  | <ul style="list-style-type: none"> <li>○ Essential for healthy growth and development.</li> <li>○ Found in foods such as organ meats, lean beef, eggs, wheat, broccoli, fish, dry beans and spinach.</li> </ul>   |
| <b>VITAMIN B12</b>             | <ul style="list-style-type: none"> <li>○ Important in making healthy blood and nerve cells as well as metabolising carbs and fats.</li> <li>○ Found in foods such as oily fish, liver, kidney, milk and dairy products.</li> </ul>  |
| <b>ZINC</b>                    | <ul style="list-style-type: none"> <li>○ Zinc is a mineral that you need in small amounts every day. It helps your body use carbohydrates, proteins and fats.</li> <li>○ Found in foods such as oysters, offal, shellfish, eggs, nuts, legumes, and wheatgerm.</li> </ul>   |



## PROBLEMS AND QUESTIONS

### NAUSEA

- Usually results from eating too much, eating too fast or drinking with meals.
- Avoid becoming too hungry. Even if you don't feel hungry it's important to have three small meals a day.
- Avoid overfilling yourself.
- Eat and drink slowly and stop when satisfied.
- Avoid spicy or strong smelling food.
- Alternative food and fluids may help alleviate nausea such as; peppermint tea, dry crackers and dry toast (remember only consume these if you are up to this stage).

### VOMITING

- Is not normal, even though it may be common.
- Can be a sign of a complication or a poor eating technique (upgrading too quickly, eating too much at one time, eating the wrong type of food or drinking with meals).
- Try to pinpoint the reason for vomiting. If it is not one of the above, contact your doctor.
- If you do vomit your oesophagus can become irritated, so return to free fluid and work your way back up to your stage over 24 hours.

### WHAT IF FOOD GETS STUCK?

- Remain calm and try to relax.
- Sometimes stretching and deep breathing can help encourage food to move downwards.
- Prepare for the food to come back up.
- **SIP** a very small amount of fluid slowly.
- Avoid gulping as this may cause you to regurgitate more.

### I AM FEELING WEAK AND TIRED

- You may find you feel tired for a short while after surgery.
- Ensure your diet is balanced and that you are including a variety of foods from all of the 5 food groups.
- Take your daily multivitamin.
- Drink plenty of fluids.
- Consume enough protein (count your protein if necessary).

### I HAVE TASTE CHANGES, BAD BREATH OR A METALIC TASTE IN MY MOUTH

- D Some patients find sweet foods too sweet or that they dislike certain food items such as meat, coffee and water.
- This may be a side effect of surgery, the anaesthetic, the weight loss or not enough carbohydrates.
- Ensure you are hydrated. Adding a little diet cordial to water may help improve the taste.
- Avoid high calorie liquids.
- Ensure your iron and zinc intake levels are adequate if you are avoiding red meat.

### AM I REALLY HUNGRY

- Is it physical hunger? Or hunger arising from stress, boredom or emotions.
- Pause and reflect on your recent food intake. Do you need food now?
- If it is hunger choose small, healthy meals.
- If you are not hungry you do not need to snack.