

Eating after Orthognathic (jaw mobilising) Surgery

This leaflet is designed to guide you through your recovery after jaw surgery and contains information about what to eat and drink after your operation. This is to ensure that your nutritional status and hydration are maintained in order to promote good healing and minimise complications. If you have any further questions, please speak to a doctor or nurse caring for you.

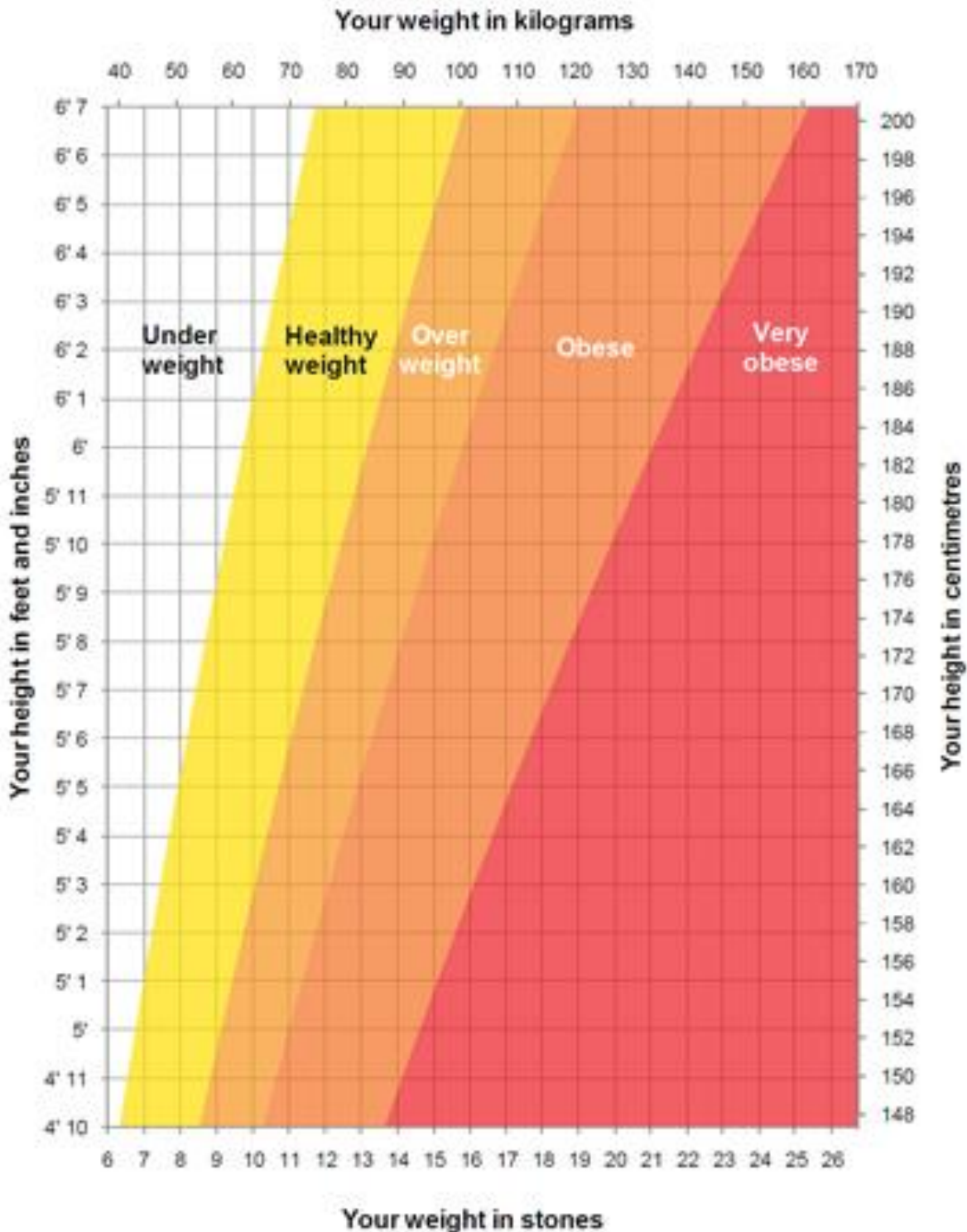
Orthognathic Surgery

- Orthognathic or jaw mobilising surgery changes the way your teeth bite together by altering the relationship between your upper and lower jaw. The upper jaw, lower jaw or both may need to be mobilised and then secured with small plates and screws.
- The operation is carried out under general anaesthetic (while you are asleep) and small incisions are made inside the mouth to leave no visible scars. Dissolvable stitches are used to close the incisions and usually take around two weeks to fall out.
- After the operation you may have some swelling which can limit how wide you can open your mouth. You will be provided with painkillers to control any discomfort and antibiotics to prevent infection. You will also need to adapt your diet while your jaw heals; beginning with a liquid only diet and slowly upgrading to soft textured foods until your jaw can manage increasingly solid foods.

Pre Surgery Measurements

Date:	
Weight:	
Height:	
Body Mass Index (BMI):	

Body Mass Index (BMI) Chart



You can use the above chart to check your BMI. Plot your weight in kg or stone and your height in cm or feet and inches and follow the lines until they intercept. This is your weight in proportion to your height or BMI. You can also see within which weight category your BMI is (Underweight, Healthy weight, Overweight, Obese, Very Obese).

Monitoring your weight

Throughout your recovery, it is important that you monitor your body weight to ensure you are receiving enough nutrition. A large loss of weight could indicate malnutrition which might compromise your health and rate of healing. If you notice a large change in your weight please contact the dietitian for review.

	Date	Weight (kg)	Weight change (i.e. +0.4kg)
Week 1			
Week 2			
Week 3			
Week 4			
Week 5			
Week 6			
Week 7			
Week 8			
Week 9			
Week 10			

Nutrients for health

When recovering from illness or surgery it is essential that your body is well nourished. After jaw surgery, you will need to modify the texture of your diet while still ensuring you get everything you need for a fast recovery. Adequate amounts of protein, calories and fluid are just as important as vitamins and minerals.

Key macro-nutrients for recovery

- **Protein** is the building block of the body and is important for repair and immune function. Inadequate protein intake can lead to muscle loss. High protein foods include meat, chicken, fish, eggs, beans, milk, yoghurt (especially high protein yogurts) and cheese.
- **Calories** (energy) are fuel for the body and come mainly from carbohydrate foods and fat. Carbohydrates contain fibre for healthy bowels and energy (calories) to keep us moving and our organs functioning. Fats are also essential to life and provide vitamins as well as energy. Inadequate intake of carbohydrates can make you feel dizzy, tired and low in mood.
- **Water** is the lubricating fluid of the body. Inadequate fluid can cause dehydration which will leave you feeling weak and dizzy and can make you vulnerable to urine and kidney infections.

How much nutrition do I need?

Protein requirement

When recovering from jaw surgery you need slightly more protein than usual. You should aim to have around 1g of protein per kilogram (kg) of your body weight each day.

For example: a 70kg man (x 1g) will need 70g protein per day.

Your protein requirements

Pre op weight in kg x 1g = grams protein per day

Pint of milk = 19g Chicken breast = 15 - 20g Cheese slice = 4g

Small tub yoghurt = 5g 1 medium egg = 6g 1/2 cup baked beans = 15g

Fluid requirement

To remain adequately hydrated you should aim to have 35mls fluid per kilogram (kg) of your body weight (depending on your age).

For example: a 70kg man (x35mls) needs 2450mls fluid per day.

Your Fluid requirements

Pre op weight in kg x 35mls = ml fluid per day

Pint = 570mls

Cup = 250mls

Teacup = 180mls

Energy (calorie) requirement

If you aim to eat six to eight small meals and snacks each day and choose high calorie options you will meet your energy needs. It is not necessary to count the number of calories you eat each day.

Monitoring your body weight will guide you as to whether you are eating enough. Weight loss can be a sign that you are not managing adequate calories (energy).

Week 1 – Liquid Diet

During the first week of your recovery your face may feel swollen and tight and your mouth may not open very wide. It is recommended that you initially only have liquid foods to rest your jaw.

What is a liquid only diet?

Liquid only foods are runny, smooth, have no lumps and require no chewing. They can be swallowed easily and taken with a teaspoon, through a straw or using a large syringe into the corner of your mouth (this is often the method for the first day only).

What foods should I include?

Most food can be 'liquidised' by blending in a food processor or liquidiser. By combining with gravy, sauce, milk or water you can change the thickness of the mixture.

If you do not have a blender, you can push already soft foods through a sieve using a metal spoon to smooth out any lumps.

Baby foods are NOT suitable for adults as they are low in nutrition.

Liquid Food Ideas

Eggs

Liquidised scrambled egg with milk or cream

Homemade egg custard

Cereals and porridge *(add honey or syrup and use full fat milk)*

Ready Brek oat cereal ®

Activia Bio Yoghurt with cereal ®

Rice Krispies (soaked well)

Weetabix ® with hot milk to soften

Dairy and Sweet Foods

(Choose full fat. Remove large fruit pieces or lumps by pushing through a sieve)

Greek style yogurt

Yeo Valley Yeo tubes ®

Fage Total yogurt ® (high protein)

Skyr yogurt (high protein) ®

Danio yogurt (high protein) ®

Liberté yogurt (high protein) ®

Alpro soya yogurt ®

Custard pots (Ambrosia ®)

Muller fruit corner ®

Fromage frais ®

Actimel drinking yoghurt ®

Muller vitality drinking yogurt ®

Angel Delight ®	Tiramisu
Crème caramel	Mousse
Jelly	Creamed rice ®
Cheese triangles	Philadelphia cheese ®
Panacotta, cottage cheese	Hot chocolate drink with cream
Cheese cake (remove base)	Milk pudding

Fruit and Fruit Smoothies

(Liquidise fruit with milk, fruit juice or ice cream and sieve to remove seeds and skins)

Canned stoned fruits or pears	Fresh or frozen berries
Stewed apple	Fruit compote
Ella's kitchen smoothie fruits ®	Innocent smoothies ®
Happy Monkey smoothies ®	

Vegetables and Soup *(Blend until smooth to remove lumps)*

Creamy homemade soup with beans, lentils and meat /chicken	
Covent Garden soup ®	Glorious Meal soup ®
Innocent veg pots ®	Fresh vegetable juice

Week 2 – Fork Mashable Diet

By the second week of your recovery you should be able to start eating with a small spoon or fork. You can start to take food with a little more texture that requires minimal chewing. In some circumstances however, you may not be able to commence fork mashed food until week three.

What is fork mashable food?

As the name suggests, fork mashable foods are soft, tender and moist and may contain small lumps which can be mashed easily with a fork.

Fork Mashable Food Ideas

Yogurt, Fruit, Custard and Pudding

Yoghurt with banana	Custard and canned fruit
Creamed rice	Trifle or sponge cake
Egg custard tart (no pastry)	Biscuits soaked in tea / coffee
Sticky toffee pudding	Semolina pudding
Tinned or soft fresh fruit (banana, melon, pear, mango)	

Snacks

- Wotsits ®, Quavers ®
- Dip (i.e. houmous, tzatziki)
- Cheese Balls ®

Bread and Cereal

(avoid muesli, toasted cereals, nuts and dried fruit)

Porridge oats	Ready Brek ®,
Weetabix ®	Shreddies ®
Cornflakes	Rice Crispies ®
Bread soaked in soup	

Vegetables

Lentil stew / dahl	Mashed potato
Fresh or frozen vegetables	Cauliflower and broccoli cheese
Pulses (i.e. kidney beans)	Avocado with lemon
Jacket potato with soft fillings (i.e. cheese, baked beans, tuna)	

Pasta and Rice

(must be well cooked until soft)

Tube pasta with tomato	Shell pasta with cheesy sauce
Creamy moist risotto	

High Protein Foods

(remove skin, bones and gristle)

Skinless hotdogs / sausages	Frittata
Moist bolognaise sauce	Quiche with crusts removed
Soft boiled egg	Scrambled /poached egg
Omelette cheese	Omelette with soft vegetables
Canned beans and pork sausages	Casseroled meat
Cottage or shepherd's pie	Meatballs in tomato sauce
Poached fish	Fish pie
Fish cakes	
Tinned fish with mayonnaise	
Peanut butter	

Weeks 3 to 8

From the third week onwards you should be able to manage foods with some light chewing. You still need to avoid tough and fibrous food (like nuts and celery) but gentle chewing is fine. Doughy foods like pizza and pastry may be too difficult to manage at first.

You are able to eat most foods although some may need to be adapted. For example, finely chopping, mashing or mincing can help make meat and poultry easier to manage. If you do not have a food processor or mincer buy ready minced meat or ask a butcher to mince it for you.

Food Ideas

Breakfast

Toast with plenty of butter / margarine and condiment of choice

Pancakes with butter, syrup, ice-cream or jam

Eggy bread (French toast) with syrup or honey

Main meals

Ready meal

Casseroled meat / chicken / fish Moussaka or lasagne

Corned beef hash Meat loaf

Spaghetti Bolognese Macaroni cheese

Ravioli with cream sauce Baked potatoes

Extra nutrition support

During your hospital stay and for the first week of your recovery you may have been given some nutritional drinks. It is generally recommended that you are given a high protein drink like Fortisip 2kcal ® to be taken up to four times per day (depending on your body weight and age).

These drinks contain concentrated nutrients, energy (calories) and protein in a small volume so can be useful at first when eating is difficult. These drinks need to be prescribed by the dietitian and are not suitable for everyone.

My daily nutrition support prescription:

Bottles of Fortisip 2kcal ® for

days after surgery

Each bottle contains 400kcal and 20g protein.

If you have not been prescribed a nutritional drink, there are varieties that may be purchased from your local pharmacy. These are not essential to take and should not be required after the first week in your recovery.

Complan® (up to four times per day)

Nestlé Meritene® (up to four times per day)

Another high energy liquid alternative is to make your own smoothies using Ovaltine®, Horlicks® or drinking chocolate with full fat milk or cream. Two to three spoons of dried milk powder can also be added.

Oral Hygiene

Keeping your teeth and mouth clean after surgery is very important.

- Use a small toothbrush to clean your teeth (a children's toothbrush might be easier).
- Brush gently using standard toothpaste at least three times a day starting from the day of your operation.
- Rinse your mouth with a salt water rinse three times per day for the first fortnight.
Salt water rinse: dissolve two tablespoons of salt into a glass with 100ml warm water. Rinse around your mouth for two minutes, then spit out.
- You may have been given Corsodyl mouth rinse, but be aware you should only use it for a short timeframe (e.g. two weeks) as it can cause temporary black staining to the teeth.

Swallowing safely

It is very important that you read and follow this advice when you eat, drink and take medication.

- Sit upright in bed or a chair every time you eat or drink and for at least half an hour afterwards.
- Only eat and drink when you are awake and alert.
- Take one mouthful of food or fluid at a time.
- Swallow and clear your mouth before you take the next mouthful - this might mean swallowing twice.
- Don't rush - take time in between mouthfuls.
- Take a sip of fluid every three to four mouthfuls.
- At the end of each meal or snack make sure your mouth is empty and check for any food in the cheeks.
- If you feel something has gone down the wrong way, try to clear it with a cough.
- Rinse your mouth with warm salt water at the end of a meal to keep your mouth clean.

Managing constipation

Constipation can be a problem after an anaesthetic and a change in diet. Some pain control medications can also cause bowel habits to change.

For healthy and regular bowels

- Eat regular meals and snacks to stimulate the transit of food and waste through your gastrointestinal tract.
- Include plenty of high fibre foods each day such as:
 - Oats, or other cereals (even when pureed) are high in fibre
 - Digestive biscuits 'dunked' in hot drinks
 - Fruit and vegetables (still beneficial if peeled and pureed).
- Stay well hydrated at all times.

- Move around daily (walking, standing and light movement out of bed or chair will help to stimulate bowels).
- If you feel bloated and uncomfortable or have a painful abdomen ask your pharmacist or GP about taking a laxative. Commonly prescribed laxatives include: Benefibre, bran, Fybogel, senna, lactulose and Movicol.



Useful Contacts

St George's Healthcare Maxillofacial Unit: 020 8725 1233
 St George's Healthcare Switchboard: 020 8672 1255
 The Department of Nutrition and Dietetics: 020 8725 0518 Fax 020 8725 1951

Further information

British Association of Oral and Maxillofacial Surgeons www.baoms.org.uk
 British Orthodontic Society www.bos.org.uk/
 British Dietetics Association www.bda.uk.com/foodfacts/home
 British Dental Association www.bda.org

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit www.stgeorges.nhs.uk

Additional services

Patient Advice and Liaison Service (PALS)

PALS can offer you on-the-spot advice and information when you have comments or concerns about our services or the care you have received. You can visit the PALS office between 9.30am and 4.30pm, Monday to Friday in the main corridor between Grosvenor and Lanesborough wings (near the lift foyer).

Tel: 020 8725 2453 **Email:** pals@stgeorges.nhs.uk

NHS Choices

NHS Choices provides online information and guidance on all aspects of health and healthcare, to help you make decisions about your health. **Web:** www.nhs.uk

NHS 111

You can call 111 when you need medical help fast but it's not a 999 emergency. NHS 111 is available 24 hours a day, 365 days a year. Calls are free from landlines and mobile phones.

Tel: 111

AccessAble

You can download accessibility guides for all of our services by searching 'St George's Hospital' on the AccessAble website (www.accessable.co.uk). The guides are designed to ensure everyone – including those with accessibility needs – can access our hospital and community sites with confidence.