

Micro Nutrients

Rules of Pastry Making

What are Nutrients?

Nutrients are the building blocks that make up food and have **specific and important roles to play in the body**. Some nutrients provide **energy** while others are essential for **growth and maintenance of the body**.

Macro Nutrients

Macro Nutrient	Role in the body	Food Example
Carbohydrate	The main source of energy for the body.	Bread, rice, pasta, potatoes
Protein	Provides the body with growth and repair.	Meat, poultry, beans, eggs, lentils, tofu, fish
Fat	Provides the body with insulation and a small amount protects vital organs. Provides essential fatty acids for the body.	Butter, oil, cheese, cream, nuts, oily fish, crisps


Source	Where it comes from
Function	Job or purpose

Vitamin	Role in the body	Food examples
A	Helps to keep the eyes healthy and strengthen the immune system.	Dark green leafy vegetables, carrots, liver
B	Helps to release the energy from the food we eat.	Bread, milk, cereals, fish, meat
C	Help with skin healing and healthy skin. Help with the absorption of Iron.	Fresh fruit, broccoli, tomatoes
D	Important for absorbing calcium and help with healthy bone structure.	Oily fish, eggs, butter, Sunshine

Vitamins - Help to keep our immune system up and help our body to stay healthy – they important for body maintenance.

Mineral	Role in the body	Food Examples
Calcium	Important for strong teeth and bones. It also helps with blood clotting.	Milk, yoghurt, soya, dark green leafy vegetables
Iron	Needed for red blood cells which help to transport oxygen around the body.	Nuts, whole grains, dark green leafy vegetables, meat, liver

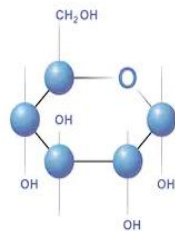
Minerals - Help to keep our immune system up and help our body to stay healthy. Vitamins and minerals are Micronutrients.

Sieve dry ingredients to aerate and to remove lumps	Lift hands out of the bowl, keeps fat cool	Weigh & measure accurately to ensure correct proportions
Use fingertips, coolest part of the hand, to avoid melting fat. Add cold water.		Do not over knead so not to develop the gluten.
No more than 1/2 fat to flour (shortcrust), otherwise difficult to rub in. Flaky pastry has higher fat content	Use hard fat, then you can rub into small pieces without melting	Roll forwards and backwards only, without turning over. Minimum flour to dust

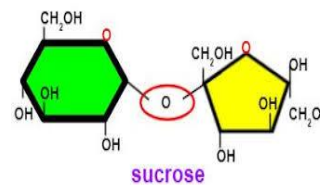
Building blocks of all carbohydrates

A simple **sugar** consists of 2 x glucose units e.g. caster sugar

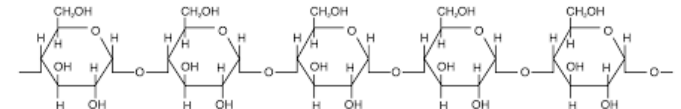
Starchy foods consist of many glucose units e.g. potatoes, rice,

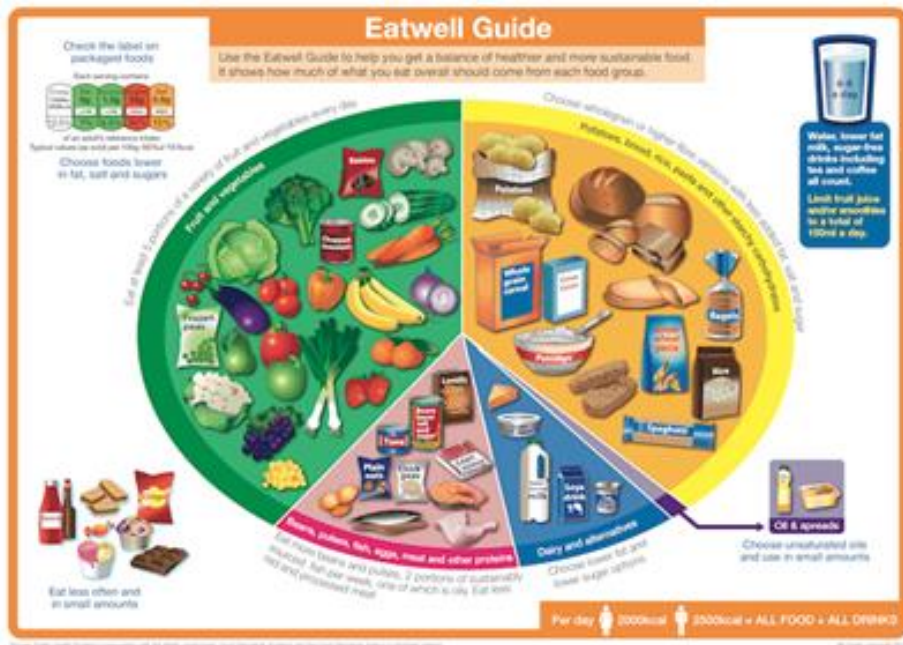


Glucose



Sucrose





Food Safety



To ensure that all pathogenic bacteria are cooked, cooked high risk foods should reach an internal temperature of

75°C

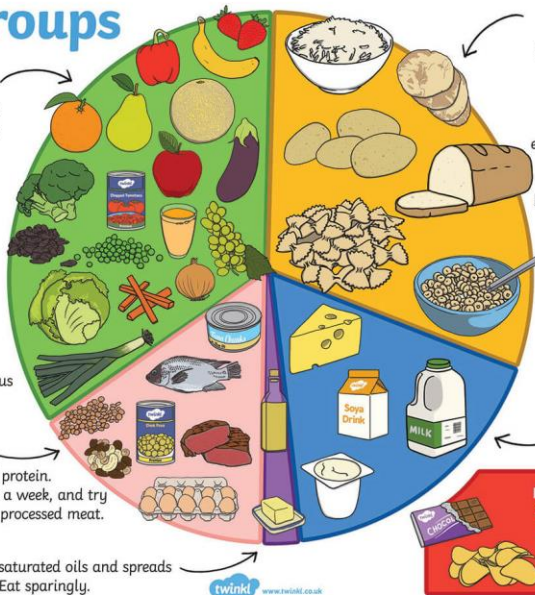
Foods should be cooled for a maximum of 90 minutes prior to putting in the fridge, otherwise the fridge temperature can rise and bacteria can multiply quicker.

Food Groups

Fruit and Vegetables
These are good sources of vitamins and minerals and fibre. Aim to eat 5 portions a day! Choose from fresh, frozen, tinned, dried or juiced. Fruit juice and/or smoothies should be limited to no more than a combined total of 150ml per day.

Proteins
Proteins such as beans, pulses, fish, eggs, meat are very important for helping us grow and build muscles. Beans and pulses are a good alternative to meat as they contain less fat and are higher in fibre and protein. Try to eat 2 portions of fish a week, and try to reduce intake of red and processed meat.

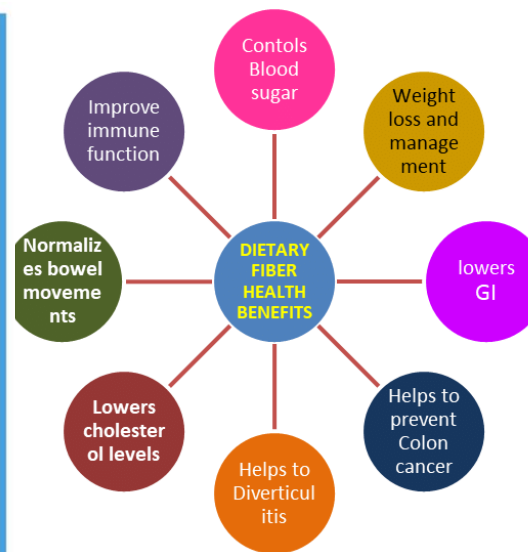
Oil and Spreads Choose unsaturated oils and spreads and use in small amounts. Eat sparingly.



Carbohydrates
Starchy foods such as potatoes, bread, rice, pasta and cereals should make up just over a third of the food you eat. These are important for giving us energy. Choose higher-fibre, wholegrain varieties, such as wholewheat pasta and brown rice, or simply leave skins on potatoes.

Dairy and Alternatives
These are a source of calcium which is important for strong teeth and bones. Choose lower fat and sugar options.

Food and Drinks High in Fat and / or Sugar
Eat less often and in small amounts.



8 tips for healthy eating

- 1) Base your meals on starchy foods
- 2) Eat lots of fruit and veg
- 3) Eat more fish
- 4) Cut down on saturated fat and sugar
- 5) Eat less salt
- 6) Get active and be a healthy weight
- 7) Drink plenty of water
- 8) Don't skip breakfast

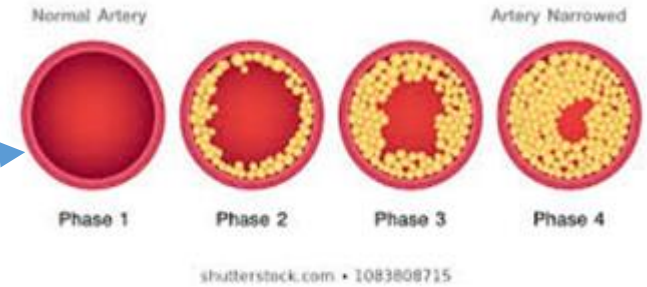
Needed in the body for:

Why do we need some fat?

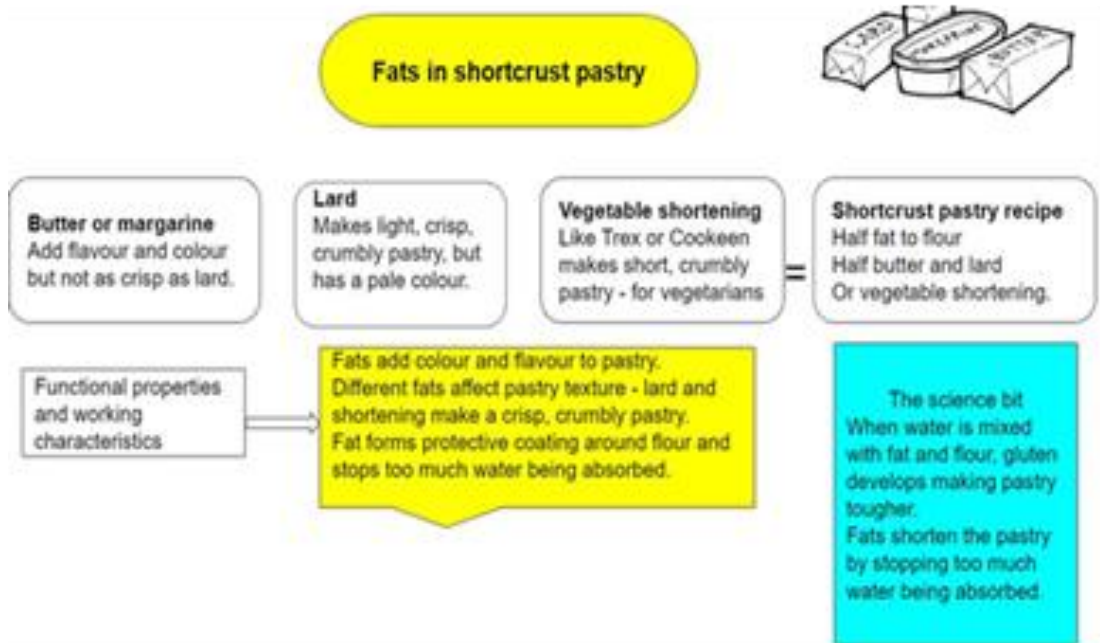
- Energy
- Insulation and warmth
- Protecting the vital organs
- Carries fat soluble vitamins (A, D, E & K)
- Hormone production
- Supplies essential fatty acids

Cholesterol from animal fat can clog up the arteries leading to coronary heart disease.

Cholesterol



Functions of Fat in Pastry Making



HEALTH RISKS of Being OVERWEIGHT OR OBESE

The infographic features a central illustration of an obese woman. Surrounding her are icons and labels for various health conditions: Type 2 Diabetes (hand with blood sugar meter), High Blood Pressure (blood pressure cuff), Heart Disease and Stroke (heart and brain), Sleep Apnea (person snoring), Osteoarthritis (joint diagram), Fatty Liver Disease (liver diagram), and Cancer (cell diagram). At the bottom, it says 'Top 10 Home Remedies' and provides the website 'www.Top10HomeRemedies.com'.

PLANT SOURCES OF

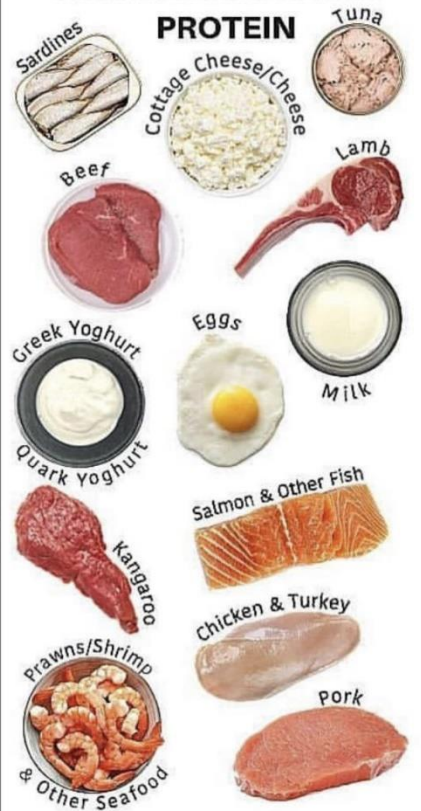
PROTEIN

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ANIMAL SOURCES OF

PROTEIN



Building blocks of protein

