**Biolgoy summary**

**Section 1. Food and nutrients.**

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| **Nutrients** | **Function** | **In food** |
| Proteins | Growth and repair | Fish and eggs |
| Carbohydrates | Fuel, growth and storage | Potatoes |
| Fats | Fuel, growth and storage | Chips |
| Water | Growth  | Drinks, fruits |
| Minerals | Growth and repair | Fish |
| Vitamins | Growth, repair and protection | Vegetables |

**Section 2. Testing for starch and glucose.**

An indicator is a substance that indicates the presence of another substance.

The colour of a substance will change when a certain indicator substance is added. For example± when you add iodine to starch the colour will change from yellow to blue.

**Section 3. Healthy food.**

You should eat healthy because otherwise you'll become fat.

An eatwell plate is a plate where are all the things in that you need to eat or drink per day.

It good be a good diet, because then you eat varied and enough of everything.

**Section 4. How much food and drink do you need?**

It depends on **gender**, **age**, **body size** and amount of **physical exercise** which amounts of food you need.

Body mass index (**BMI**)  is a measure of body fat based on your weight in relation to your height, and applies to most adult men and women. A healthy BMI is between 18.5 and 24.9.

Eating the correct average amount for bread, potatoes, meat and vegetables it the correct way of dieting. Not just eating less or skipping meals.

**Section 5. Fair share.**

Malnutrition is having a permanent shortage of food. A cause of this could be that you don't have enough money to buy enough food or it's hard to get good and healthy food.

There is often a lack of proper nutrition in poor countries because there the food is not distributed fairly. Or they don't have enough money.

You can fight malnutrition by helping people in poor countries and build storage rooms for them. So that they always have enough. So also if there harvest fails.

**Section 6. Digestive system.**

The function of the digestive system is to break food intro smaller pieces so it can pass through.

Digestion is the breakdown of large food particles that cannot pass through the gut wall into smaller food particles that can be absorbed intro the bloodstream. Digestion involves mixing food with digestive juices. Saliva and gastric juice are examples of digestive juices. Digestive juices are produced by digestive glands.

The salivary glands, the glands in the stomach lining, the liver, the pancreas and the glands in the wall of the intestine produce these digestive juices.

Enzymes are chemical compounds that speed up reactions. Without enzymes to accelerate the rate of the chemical reactions would be too slow.

Peristalsis is the contraction and relaxation of the circular and longitudal muscles.

**Section 8. Alimentary canal.**

Fats. proteins and carbohydrates are digested. When they are completely digested or broken down the digestion products are small enough to be absorbed in to the bloodstream.

Many digestive juices are added to the food that passes through the alimentary canal.

This is why food that passes the alimentary canal contains an increasing amount of water.

The function of digestive juices are to absorb most of the water and nutrients in the bloodstream.

The small intestine has a folded inner lining. These folds have finger-like projections called villi. Blood vessels in the villi absorb the digestive products that are dissolved in water.

As it passes along the large intestine much of the water is absorbed into the bloodstream. The undigested material becomes more solid as it passes along the large intestine.