



Y8: Food & Nutrition Knowledge organiser

Why is breakfast so important?

In the morning, our bodies need to refuel for the day ahead after going without food for 8 to 12 hours during sleep. Skipping breakfast can make you feel tired, restless, or irritable. Your mood and energy can drop by midmorning if you don't eat at least a small morning meal.



Breakfast also can help keep your weight in check. Breakfast kick-starts the body's metabolism

... the process by which the body converts the fuel in food to energy. People who don't eat breakfast often consume more calories throughout the day and are more likely to be overweight. That's because someone who skips breakfast is likely to get **famished** before lunchtime and snack on **high-calorie** foods or **overeat at lunch**.

SOURCES OF VITAMIN C



SOURCES OF VITAMIN A



VITAMIN C



functions of vitamin A



FUNCTION of Fats and Oils



Fat Soluble Vitamins & Sources			
A	D	E	K
Highly bioavailable from animal sources	Obtained from sunlight	Found in plant oils	Found in animal products



- Lactose intolerance
- Cows' milk allergy
- Vegans
- Reduce energy intake – Fat intake

The nutrients and types of fat in dairy are involved with bone health, cardiovascular disease, and other conditions. Calcium, vitamin D, and phosphorus are important for bone building, and the high potassium content of dairy foods can help lower blood pressure.

Function of Carbohydrates

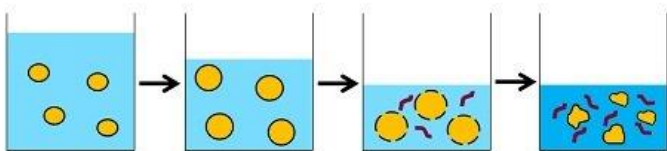
Starchy carbs give us a **slow release of energy** and keep us feeling full for longer.

Sugary Carbs give us a **quick boost of energy**



Function of Fats, Oils and Spreads

Fats are **very high in energy** and should be used in small amounts. [they have other functions too]



Heat starch granules in liquid → Starch granules absorb water and swell → Starch granules continue to swell and eventually rupture → The liquid thickens and gelatinizes

Gelatinisation

The Thickening Process



- There are four main cakes making methods
- **Whisking**- Swiss rolls, sponge cakes
- **Rubbing in** – scones, rubbed in cakes
- **Melting**-gingerbread
- **Creaming and all in one** -Victoria sandwich cakes.

white rice	brown rice	black rice
1/4 cup dry (45g)	1/4 cup dry (45g)	1/4 cup dry (45g)

Rice cultivation originated in China over 4,000 years ago and remains an important agricultural commodity in many Asian diets. In addition, its **low cost** and the **high caloric value** make rice a staple commodity for many poor and developing countries.

INSOLUBLE FIBER

BENEFITS

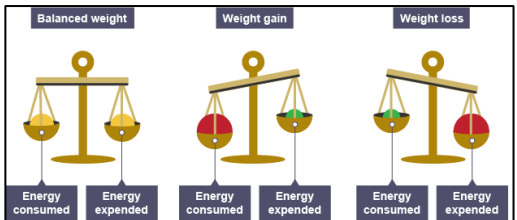
- Good for Colon Health
- Eases and Prevents Constipation

SOLUBLE FIBER

BENEFITS

- Stay Fuller Longer
- Lowers Blood Cholesterol
- Improves Blood Sugars

The Energy Balance



PROTEIN			
ANIMAL		VEGETABLE	
HBV = High Biological Value		LBV = Low Biological Value	
High Biological Value (HBV)	Also known as complete proteins. They contain the 9 essential amino acids your body cannot produce	Low Biological Value (LBV)	Also known as incomplete proteins. They need to be complemented with other LBV or HBV foods to get all of the missing essential amino acids.
Meat		Plants	
Poultry		Legumes	
Fish		Grains	
Eggs		Nuts	
Milk (cow, goat, soya)		Seeds	
Cheese		Beans	
Yogurt	Vegetables		