

Food Top Trumps

Card sort activities

1) Nutrient lists activity

Form students into pairs or small groups of three or four.

Ask them to look through the cards and to pick out the eight or ten foods that are highest in a particular nutrient. See below for suggested discussion points and background info on nutrients:

Calories

Discuss why the human body needs calories (energy) and why people (such as athletes) might want to eat energy-rich foods at certain times.

Higher ability: discuss caloric ratios.

Energy is needed by the body to stay alive, grow, keep warm and move around. It is provided by the fat, carbohydrate and protein the diet contains. To maintain body weight, it is necessary to balance the energy derived from food with that expended in physical activity. To lose weight, energy expenditure must exceed intake, and to gain weight, energy intake must exceed expenditure.

Ask students to list the foods that people who are obese, or overweight, should avoid in their diet, plus foods that they should eat more of instead.

Total fats

Discuss why the human body needs some fats and why people (such as people who are overweight) might want to consume fewer foods that are high in fats (and therefore high in calories). Discuss which fats are healthy (unsaturated - polyunsaturated fats and monounsaturated fats) and which unhealthy (saturated and hydrogenated fats or trans fats).

Fat is the richest source of dietary energy available in the diet and so can readily contribute to weight gain. The structure of the building blocks of dietary fat – fatty acids – determines their health effects. Some fatty acids are essential components of the diet but others can be detrimental.

Saturated fat

Next ask students to select the eight or ten foods high in saturated fat. Ask them how this list differs from the 'Total fats' list? Were there any foods in that list that surprised them? What foods would students recommend that people with high cholesterol in their blood avoid eating?

Eating a diet high in saturated fat can cause the level of cholesterol in your blood to build up over time. Raised cholesterol increases your risk of heart disease. Most people in the UK eat too much saturated fat.

Carbohydrate

Discuss why the human body needs carbohydrate and why people (such as athletes) might want to ensure that they consume plenty of carbohydrates.

Carbohydrates are key components in the diet, comprising sugars, starchy carbohydrates and dietary fibre. Starchy carbohydrates provide an important source of energy.

Sugars such as glucose and fructose are simple carbohydrates that are quickly absorbed by the body to produce energy. To maintain body weight, it is necessary to balance the energy derived from calorie-rich foods such as sugar with that expended in physical activity.

Dietary fibre

Discuss why the human body needs dietary fibre. Ask students to list foods that people who don't eat enough fibre should consume more of. Which foods are low in fibre?

Dietary fibre has many health benefits. It can reduce your risk of heart disease, diabetes and some cancers, and also help weight control. Fibre is also important for digestive health. In the UK most people don't eat enough fibre. Dietary fibre used to be known as 'roughage'.

Protein

Discuss why the human body needs protein and why people (such as athletes) might want to ensure that they consume plenty of protein-rich foods. Discuss what foods vegetarians or vegans might eat to obtain sufficient protein.

Protein is essential for growth and repair and the maintenance of good health. Protein typically provides the body with approximately 10 to 15% of its dietary energy and it is the second most abundant compound in the body.

Calcium

Discuss why the human body needs calcium. Discuss what foods vegans and people who are Lactose-intolerant might eat to obtain sufficient calcium.

Calcium is the most abundant mineral in the body and is essential for a number of vital functions. The body needs adequate dietary calcium (alongside vitamin D and several other nutrients such as vitamin K) to develop and maintain healthy bones and teeth. The skeleton contains about 99% of the body's calcium. An adequate calcium intake is vital for health, particularly in times of growth (in childhood, adolescence and pregnancy).

Iron

Discuss why the human body needs iron. Discuss what foods non-meat eaters - vegetarians or vegans - might need to eat to obtain sufficient iron in their diet. What foods would students recommend for people who are suffering from iron deficiency anaemia to raise their iron levels?

Iron is essential for the formation of haemoglobin in red blood cells; haemoglobin binds oxygen and transports it around the body. Iron has an important role in the immune system. A lack of dietary iron depletes iron stores in the body and this can eventually lead to iron deficiency anaemia. Iron deficiency anaemia is a condition where a lack of iron in the body leads to a reduction in the number of red blood cells. In particular, women of child-bearing age and teenage girls need to ensure they consume adequate dietary iron because their requirements are higher than those of men of the same age. More than 2 billion people worldwide suffer from iron deficiency anaemia, making it the most common nutritional deficiency condition.

2) Balanced diet activity

Form students into pairs or small groups of three or four.

Display the Eatwell plate image on the white board, and/or hand out photocopies to groups of students.

Ask students to select cards illustrating foods to create a balanced main meal, or meals providing a balanced intake of nutrients - a variety of different foods from the four main food groups - throughout the day.

Discuss with students what is meant by a 'balanced meal' or 'balanced diet'.

If they have selected any meat, fish or dairy options, ask them to suggest alternative options for vegetarians and vegans. Ask them to discuss which option would be the healthier option – meat/dairy or veggie/vegan - and why.

3) The Eatwell plate activity

Form students into pairs or small groups of three or four.

Display the Eatwell plate image on the white board, and/or hand out photocopies to groups of students. You may also wish to hand out copies of the Eatwell plate work sheet.

Ask students to sort the foods into the relevant food groups using the Eatwell work sheet.

Ask students which food groups people should eat most of and why. Discuss the importance of each food group. Discuss protein sources for vegetarians and dairy alternatives for vegans and people with lactose intolerance.