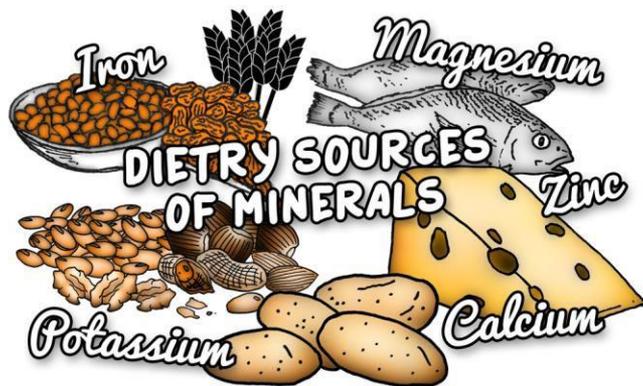
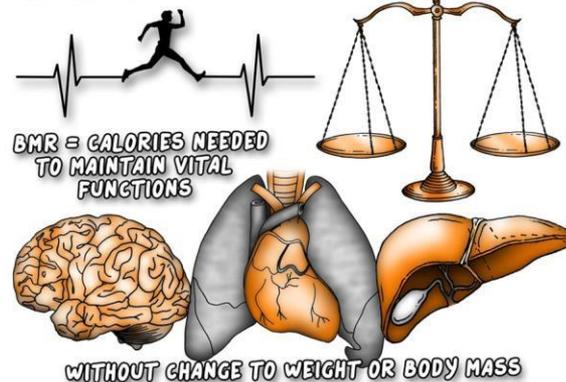


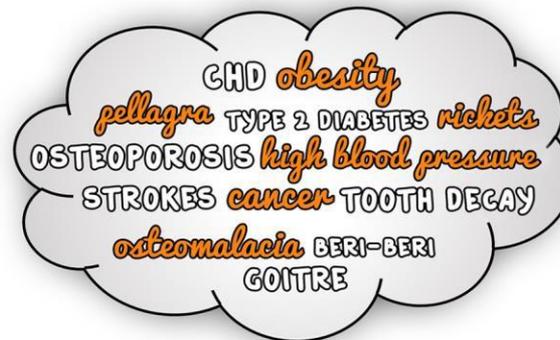
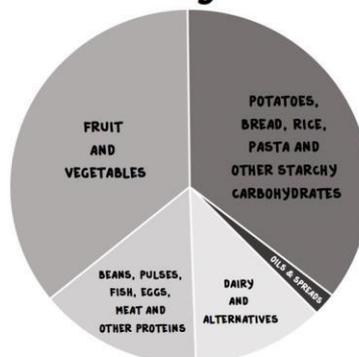
KnowIT

NUTRITION AND HEALTH

EXERCISE PAL & BMR = BALANCE



Eatwell Guide



Protein

- What are the building blocks of protein?
- What are 3 functions of protein in the body?
- What is a HBV?
- Identify 3 sources in the diet including a vegetarian source?
- What is a LBV?
- Identify 3 sources in the diet?
- What is protein complementation?
- What are the effects of a protein deficiency in the diet?
- What are the effects of a protein excess in the diet?

Fats

- What is the structure of fat?
- What are 4 functions of fat in the body?
- What are the 2 fatty acids which cannot be made by the body known as?
- Identify what foods they are mainly found in?
- What are the main sources of solid animal fat, give both visible and invisible sources?
- What are the main sources of solid vegetable fat, give both visible and invisible sources?
- What are the main sources of liquid animal fat, give both visible and invisible sources?
- What are the main sources of liquid vegetable fat, give both visible and invisible sources?
- What are the effects of a fat deficiency in the diet?
- What are the effects of a fat excess in the diet?

Eat Well Guide & Healthy Eating

- What are the 8 guidelines to a healthy lifestyle?
- What percentage of the diet should be made up of you identify how many portions of potatoes, bread, rice, pasta and other starchy carbohydrates?
- What percentage of the diet should be made up of fruit & vegetables?
- Can you identify how many portions of dairy foods & alternatives should be eaten daily?
- Can you identify how many portions of pulses, fish, eggs, meat & other proteins should be eaten daily?
- What types of fats should be eaten?
- Why is the consumption of water required for a healthy diet?

Carbohydrates

- What is the process known as that traps energy in plants and converts it to carbohydrates?
- What are 2 functions of carbohydrates in the body?
- What 2 groups of carbohydrate are there?
- What are the main sources of carbohydrate in the diet?
- Identify the 3 monosaccharides and their sources in the diet?
- Identify the 3 disaccharides and their sources in the diet?
- Identify the 4 polysaccharides and their sources in the diet?
- What are the effects of a protein deficiency in the diet?
- What are the effects of a protein excess in the diet?



Minerals

- What are minerals?
- What are the functions and sources of calcium in the diet?
- What are the effects of a calcium deficiency in the diet?
- What are the effects of a calcium excess in the diet?
- What are the functions and sources of iron in the diet?
- What are the effects of an iron deficiency in the diet?
- What are the effects of an iron excess in the diet?
- What are the functions and sources of sodium in the diet?
- What are the effects of a sodium deficiency in the diet?
- What are the effects of a sodium excess in the diet?
- What are the functions and sources of fluoride in the diet?
- What are the effects of a fluoride deficiency in the diet?
- What are the effects of a fluoride excess in the diet?
- What are the functions and sources of iodine in the diet?
- What are the effects of an iodine deficiency in the diet?
- What are the effects of an iodine excess in the diet?
- What are the functions and sources of phosphorus in the diet?
- What are the effects of a phosphorus deficiency in the diet?
- What are the effects of a phosphorus excess in the diet?

Vitamins

- What are the 2 main groups of vitamins?
- Can you identify the 4 fat soluble vitamins?
- Can you identify the 2 water soluble vitamins?
- What are the functions and sources of vitamin A in the diet?
- What are the effects of a vitamin A deficiency in the diet?
- What are the effects of a vitamin A excess in the diet?
- What are the functions and sources of vitamin D in the diet?
- What are the effects of a vitamin D deficiency in the diet?
- What are the effects of a vitamin D excess in the diet?
- What are the functions and sources of vitamin E in the diet?
- What are the functions and sources of vitamin K in the diet?
- What are the functions and sources of vitamin C in the diet?
- What are the effects of a vitamin C deficiency in the diet?
- What are the effects of a vitamin C excess in the diet?
- Can you identify the scientific names for vitamin B1, B2, B3, B9 and B12?
- What are their functions and sources in the diet?
- What are the effects of their deficiency in the diet?
- What are the effects of their excess in the diet?
- What is an antioxidant?
- What are the effects of food preparation and cooking on vitamins?

Nutrition

Identify the 5 main nutrients found in food.

- What are the 3 macro nutrients?
- What are the 3 micro nutrients?

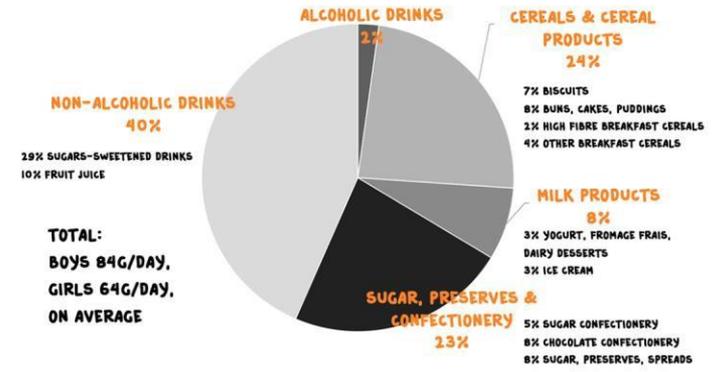
Meal Planning

- What consideration should be made when planning a balanced meal?
- Can you identify a range specific dietary needs groups?
- What is the difference between a food allergy and food intolerance?
- What units are used to measure energy?
- What 3 things affect our daily energy needs?
- What factors affect our BMR?

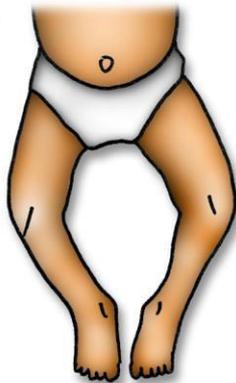
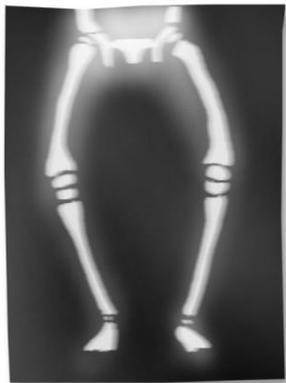
Carbohydrate



11 - 18 YEAR-OLDS: SOURCES OF FREE SUGARS

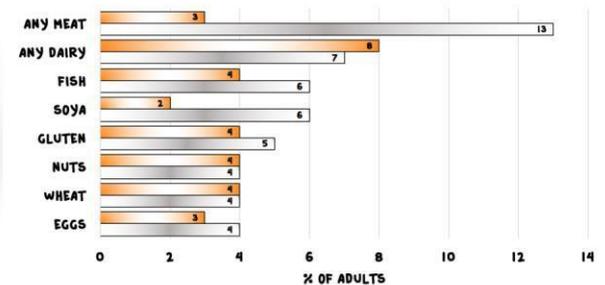


NUTRITION AND HEALTH



OVERWEIGHT **obesity**
 back pain TYPE 2 DIABETES **cancer**
 ARTHRITIS **high blood pressure**
 reduced life expectancy **STROKES**
 INFERTILITY

Food/ingredients avoided, UK, June 2012



□ AVOID BECAUSE I/A MEMBER OF HOUSEHOLD HAVE A FOOD ALLERGY/INTOLERANCE
 □ AVOID, AS PART OF A GENERAL HEALTHY LIFESTYLE

Protein

- Explain how protein complementation is achieved in a vegan jambalaya.
- Explain how a vegetarian diet can include meals that contain HBV proteins. Justify your answer with examples.
- Explain why it is important for toddlers to include plenty of foods containing protein.
- Explain what will happen to the toddler if they do not have enough protein in their diet.

Carbohydrates

- A 26 year old is training for a triathlon in a weeks time. Explain why it is important to consume plenty of carbohydrate rich food in the next few days.
- Childhood dental decay is an increasing problem discuss whether the introduction of a sugar tax would help to resolve the problem.

Vitamins

- A teenage girl is suffering from anaemia. Explain which vitamin she should eat more of and why. Suggest a suitable 2 course meal for dinner which would help to supply the nutrients, justify your choice.
- A 30 year woman is planning to have a baby explain which vitamin she should increase her intake of and why. Suggest a suitable lunch dish to supply the required nutrient.
- An elderly man is experiencing some memory loss and tiredness despite eating potatoes on a regular basis explain which vitamins he may be deficient in and how to adapt his diet to meet his nutritional needs.

Fats

- Explain how fats and oils differ
- Explain why foods containing fats and oils are energy dense.
- Explain how you could reduce the energy content of a sausage roll made from puff pastry and sausage meat for someone looking to reduce their energy intake. Give reasons for your answer..



Nutrition

- Explain the considerations you would make when planning a meal for the elderly.
- Explain which nutrients a vegan maybe deficient in with a poorly planned diet, justify your answer.

Eat Well Guide & Healthy Eating

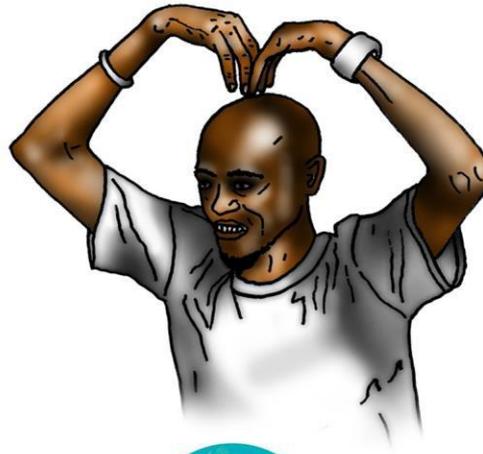
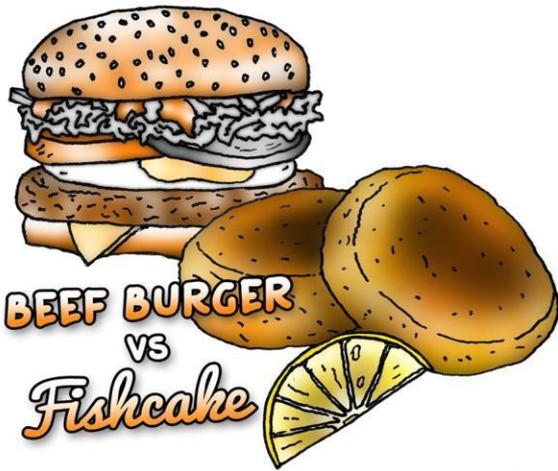
- Explain why it is important to keep the body hydrated.
- Explain how a fried chicken mayonnaise & avocado tortilla wrap can be modified to meet current dietary guidelines.
- Obesity is an increasing problem in the UK discuss the causes of this and describe the long term effects to health.
- Explain what the risk factors are to a person long term health in consuming a diet high in processed, takeaway foods.

Minerals

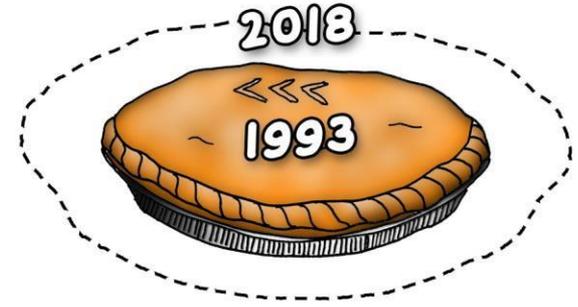
- A child has rickets explain which mineral and vitamin their diet maybe deficient in suggest possible reasons for this.
- Plan a meal that would provide these nutrients. Explain how this meal will help to provide the missing nutrients.
- A 50 year old man is suffering from high blood pressure explain the possible cause and suggest some changes he can make to his diet that could result in reduced blood pressure, but ensures the food he eats is not bland.
- Explain why and how a 13 year old girl may need to increase her iron and vitamin C consumption.

Meal Planning

- Explain how to ensure someone suffering with lactose intolerance can achieve a balanced diet and not be deficient in any vitamins and minerals required by the body.
- Explain which foods a Coeliac needs to avoid and why.
- Explain how a person following a high fibre diet can adapt the following packed lunch to achieve his dietary goals. A cheddar cheese sandwich on white bread, with ready salted crisps and a chocolate biscuit.



INCREASES IN PORTION SIZES



ThinkIT
NUTRITION AND HEALTH



Ready meal

TYPICAL VALUES	100g CONTAINS	EACH PACK (391g) CONTAINS	%GDA*	GDA* FOR A TYPICAL ADULT
ENERGY	505KJ 120KCAL	1960KJ 465KCAL	23%	2000KCAL
PROTEIN	5.1g	19.9g		
CARBOHYDRATE	17.2g	67.3g		
OF WHICH SUGARS	1.1g	4.3g	5%	90g
FAT	2.9g	11.3g	16%	70g
OF WHICH SATURATES	1.8g	7.0g	35%	20g
MONO-UNSATURATES	0.6g	2.3g		
POLYUNSATURATES	0.3g	1.1g		
FIBRE	1.8g	7.0g		
SODIUM	0.2g	0.8g		
SALT EQUIVALENT	0.5g	2.0g	33%	6g

*GUIDELINE DAILY AMOUNTS

Protein

- Consider how a shepherd's pie recipe could be adapted to a vegan diet.
- Compare the nutritional profile of a beef burger and a fishcake. Which would you give a child? Justify your choice.
- Consider what lunch dish you would give a teenage boy recovering from an operation, justify your answer.

Carbohydrates

- Mo Farah has been injured whilst training and it has been recommended that he rests for a month. Think about how and why he would change his diet to maintain a healthy weight.
- Many processed foods are made up of empty calories, evaluate this statement. Justify why manufacturers may do this to their products.

Vitamins

- Consider the importance of having a good supply of antioxidants in our diets.
- Compare how different food preparation methods can affect a food's vitamin content. Give examples.
- Explain why a vegan may be deficient in vitamin B12 and identify their symptoms.

Fats

- Justify the advice to use unsaturated oils in small quantities during food preparation and cooking.
- Obesity figures in the UK rose from 15% in 1993 to 27% in 2015. Explain what factors may contribute to this.
- Government recommendations are that we get 35% or less of our energy requirement from fat. Consider the reason for this and explore where the remaining 63% of energy should come from, considering why.



Nutrition

- Consider how a coeliac can access their daily carbohydrate requirement.
- Consider the factors that may contribute to someone following a vegetarian diet.
- Think about how a diabetic can control their blood sugars through their food choices.
- Explore the choice of dishes you can make for an elderly person and a child using minced beef or lamb. Justify your choice.
- Consider why keeping our body hydrated is essential to health.

Eat Well Guide & Healthy Eating

- Consider the Eat Well Guide and plan a packed lunch for a 6-year-old going on a school trip. Justify why each of your choices are suitable and important in meeting the dietary requirements of the child.
- With an increase in obesity levels in the UK, consider the long-term consequences to the health of the population, and explain why it is important that young people are aware of it.
- Consider why more people in the UK are changing their diet to a vegetarian one.

Minerals

- Osteoporosis levels are increasing in the UK. Why is it important for young people to know about it? Justify your answer.
- Consider why it is important that teenagers, especially girls, consume the correct amount of iron and vitamin C together.
- Consider why it is important that young children consume the correct amount of iron and vitamin C together.

Meal Planning

- Explore the differences and similarities between a lacto-vegetarian diet and a Pescatarian diet.
- Justify the advice to eat wholegrain or high fibre starchy foods with less added sugar, fat and salt.
- Justify the advice to reduce the consumption of red and processed meat and to increase the intake of fish and pulse vegetables.
- Consider why a supply of fibre or NSP is essentially to the body despite it not being digested.