

Knowledge Organiser

Food & Nutrition

Topic: Diet & Good Health

Diet: What you consume (food & drink) on a daily basis.
*everyone is on a diet! It doesn't mean losing weight

Balanced Diet: A diet containing all of the correct nutrients in the correct amount, contributing to good health.

Government Guidelines

1. Base your meals on starchy carbohydrates
2. Eat lots of fruit and vegetables
3. Eat more fish, including a portion of oily fish
4. Cut down on saturated fat and sugars
5. Eat less salt
6. Get active and be a healthy weight
7. Don't get thirsty
8. Don't skip breakfast



Eatwell Guide

Fruit & Vegetables (Vitamins & Minerals)

5 a day. (a variety).
Fresh, frozen, tinned, dried & juiced all count - fruit juice/ smoothies should be limited to 150ml per day in total & dried fruit should be limited to 1 tablespoon per day.
1 portion = 80g
Tips: grate or blend vegetables into a Bolognese. Add fruit to cereal. Swap potato chips for sweet potato.



Traffic Light Labelling

To help consumers see nutrition at a glance & compare products. Shows amounts per 100g & per portion. Colour-coded. (not for energy due to varying requirements)

Energy	Fat	Saturated	Sugars	Salt
1046kJ 250kcal	3.0g	1.3g	34g	0.9g
LOW	LOW	HIGH	MED	MED
13%	4%	7%	38%	15%

RI =

recommended daily intake of nutrients

(per 100g)	High	Medium	Low
Sugar	>15g	5-15g	<5g
Fat	>20g	3-20g	<3g
Sat. fat	>5g	1.5-5g	<1.5g
Salt	>1.5g	0.3-1.5g	<0.3g

Percentage Reference Intake (% RI)

How much of the daily intake is in a portion. i.e. 50% RI of salt means that the serving contains ½ the daily intake for salt & so try to choose options lower in salt for the rest of the day. Shows energy, sugar, fat, sat. fat & salt

Diet Related Health Problems

Obesity - When the body has too much fat. BMI (Body Mass Index) is used to calculate body mass BMI of 18.5 - 25 is normal, 30+ is obese. Cause: energy in > energy out; Eating too many high energy foods (fat & sugar); Low exercise levels. Problems: High blood pressure and cholesterol = heart problems; Increased risk of type 2 diabetes & cancer Breathing difficulties, fatigue & low self esteem.



Diabetes - Blood glucose levels cant be controlled. Insulin helps glucose be absorbed by the body. The body produces more insulin when blood glucose levels are too high in the blood. Type 2 Diabetes - the body cant produce insulin so blood sugar levels get too high.

Coronary Heart Disease

Arteries clogged up with fatty cholesterol. Cause: saturated fats, low physical activity, smoking & high blood pressure. Health Problems: Blood cannot pass through arteries properly which causes heart to pump faster and harder, causing chest pains (angina); blood flow and oxygen to the heart gets blocked which causes heart attacks.



Bone Health

Rickets (soft and weak bones in children) Cause: lack of vitamin D or calcium. Leads to bone pain, deformed growth (i.e. Bowed legs) and increased risk of fractures. **Osteoporosis** (bone disease, brittle bones in elderly)



Anaemia

Caused by an iron deficient Iron helps make red blood cells which carry oxygen round the body. People who are anaemic lack red blood cells Cause: not enough iron in the diet (i.e. Red meat, green leafy veg) women who lose blood through menstruation; pregnant women who pass their iron to their baby. Health problems: fatigue (tiredness); pale skin



Tooth Decay

Plaque is a substance which contains bacteria. This builds up from food in the mouth. Bacteria feed on sugars and form acids which eat away at tooth enamel and cause tooth decay (caries/cavities) Cause: high sugar foods.



Modifying meals, recipes & diets

Reduce salt

Less processed meat (i.e. ham, bacon, sausage) Less ready-made foods (pasta sauces in jars, ketchup) - make your own Be cautious of naturally salty foods - cheese, olives, soy sauce Use other seasoning such as herbs and spices Foods can be preserved in brine (salted water). Choose non brine alternative (i.e. Tuna) Use low salt stock cubes



Reduce saturated fat

Swap butter for low fat spreads made from unsaturated oils Eat lean cuts of meat or trim off the visible fat Grill, bake, steam instead of frying Allow fat to drain away when cooking Swap high fat snacks like muffins, pastries for lower fat alternatives such as fruit loaf or rice cakes with houmous.



Reduce sugar

Often listed as sucrose, glucose etc. Look out for 'use' ending. Use less sugary sauces (ketchup, beans, BBQ) Swap fizzy drinks for dilute juice/water & lemon Avoid sugary breakfast cereals. Reduce sugar in hot drinks & baking. Sweeten plain yogurt with fruit Swap sugar for natural sweetener (not artificial) Choose tinned fruit in natural juices rather than in syrup



Increase fibre

Swap white starchy foods such as pasta, rice, bread, flour) for wholemeal Use more lentils, beans in meals Keep skin on potatoes Add more fruit and vegetables to the diet. Keep frozen vegetables in the freezer so they are always available Choose high fibre cereals



What might be asked in an exam?

- Grade 1-3** - categorise foods into the EWG, explain traffic light labelling
- Grade 4-6** - explain the importance of the guidelines & the health implications.
- Grade 7+** - analyse or evaluate a recipe, menu or diet with regards to government guidelines.



Useful sites. Type these links into your browser or scan the QR codes:

EWG videos: tinyurl.com/kebn67u
Nutrition: tinyurl.com/ydastevq
Health problems: tinyurl.com/yan6wlz9



Hydration Aim for 6-8 glasses of fluid per day. Water is the best choice as it hydrates you without adding any extra calories to your daily intake. Unsweetened tea and coffee, sugar free drinks and low fat milk all count

Bread, rice, potatoes, rice, pasta & other carbohydrates (carbohydrates and fibre if wholemeal)

Choose wholegrain or higher fibre versions with less added fat, salt and sugar.

Oils and spreads (Unsaturated fat)

This includes olive, vegetable & rapeseed oil, and margarine which is oil hardened to a solid by pumping hydrogen through it. This is the healthier fat. It lowers blood cholesterol rather than raising it like saturated fat. It is however still very high in energy (kcal) so it is a very small proportion.

Energy requirements (kcal)

Shows the average energy requirements for adult males and females. Females -2000 kcal and males - 2500kcal. If energy intake is greater than energy expenditure (i.e. From exercise), = weight gain. These are only averages - depends on age, gender, activity level & body size.

Dairy & Alternatives (Calcium)

Dairy sources come from milk. Cheese, yogurt and cream are made from milk so are also included. Non dairy alternatives include almond and products made from soya, coconut, almond etc. These are not made from milk and are suitable for lactose intolerant and are lower in saturated fat. Food in this group can be high in saturated fat and sugar (i.e. Cheese, whole milk, sweetened yogurts) so choose low fat & sugar versions

Composite foods

A dish or meal with more than 1 kind of food component in them. E.g. pizzas, pies, lasagne and sandwiches are all made with ingredients from more than one food group.

