DIET & GOOD HEALTH

A Healthy diet is a balanced diet.

Eating a variety of different foods to provide all your required nutrients.

Benefits of healthy eating:

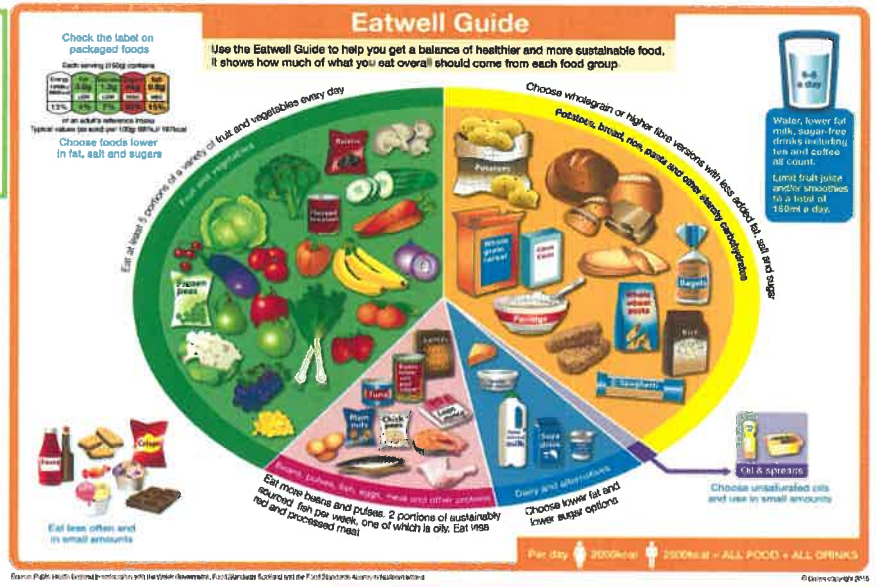
- Prevents obesity
- Prevents illness such as CHD & Type 2 Diabetes
- Increased energy and concentration
- Healthy immune system

- **DRV—Dietary Reference Value**
- **RI—Recommended Intake**
- **NRV—Nutrient Reference Value**
- **BMR—Basal Metabolic Rate**

Food Labelling

- Must show: energy, RI, RI%,
- Colour coded labels show fat, sat fat, sugar and salt
  - ⇒ Green= low.
  - ⇒ Amber = medium.
  - ⇒ Red = High





8 tips for healthy living

1. Base your meals on starchy foods
2. Eat lots of fruit and veg
3. Eat more fish
4. Cut down on sat fat and sugar
5. Eat less salt
6. Get active and be a healthy weight
7. Drink plenty of water
8. Don't skip breakfast

RI of an average adult	
Energy	2000Kcal
Fat	70g
Saturated Fat	20g
Carbohydrate	260g
Sugar	90g
Protein	50g
Salt	6g

Different ages have different nutritional needs

- Children– a balanced, varied diet to ensure they grow and stay healthy
- Adults—should not eat more than they need as they may be less active than they were as children and are not growing
- Pensioners—Should limit their food more due to inactivity

5-a-day

- We should eat 5 or more different fruits and vegetables each day
- Fresh, frozen, juiced and tinned all count
- Choose tinned fruits in juice or water not syrup
- Only 1 glass of juice counts as a portion
- Portion examples:
  - ◊ 2 satsumas
  - ◊ Handful of grapes
  - ◊ 1/2 tin beans
  - ◊ 1 apple
  - ◊ 7 strawberries
  - ◊ 3 tablespoons of peas



FACTORS EFFECTING FOOD CHOICE

WHY DO WE CHOOSE THE FOODS WE EAT?



- COST
- CULTURE/RELIGION
- SEASONS
- MEDICAL ISSUES
- MARKETING/ADVERTISING
- ETHICS

ORGANIC FOOD

- Can be of a higher quality
- Can taste better
- More ethical
- Less environmental impact
- More sustainable
- Can be expensive

FAIRTRADE

Supports farmers in developing countries by offering better prices and better working conditions.

Products such as: bananas, chocolate, tea, coffee and rice.

- **FOOD MILES**



Food miles refers to the distance the food has travelled from farm to fork. It also refers to the potential impact on the products carbon footprint

RELIGION AND FOOD



ISLAM

Food must be HALAL. Cannot eat pork or pork products and cannot drink alcohol

CHRISTIANITY

No dietary restrictions. Some eat fish on Friday instead of meat

JUDAISM

Food must be KOSHER. Cannot eat pork, shellfish. Also cannot eat meat and dairy together.

SIKHISM

Cannot eat beef or drink alcohol

HINDUISM

Beef is forbidden, many follow a vegetarian diet. Some will not eat garlic, onions or mushrooms.

BUDDHISM

Most are vegetarian, some will eat fish

HOW TO SAVE MONEY WHEN BUYING FOOD



- Compare prices
- Buy food seasonally/locally
- Use coupons or offers
- Plan your meals
- Only buy what you need

MEDICAL CONDITIONS



DIABETIC

A diet high in starchy carbohydrate. Low in fat and sugar

CORONARY HEART DISEASE

Less sat fats from animal products. High in fibre.

ANAEMIA

Diet high in Iron, fortified cereals, dark green veg, meat, fish and eggs

COELIAC

Must avoid wheat and gluten such as flour, bread, cakes.

LACTOSE INTOLERANT

Must avoid milk and dairy products.

SEASONAL FOOD

- Reduces food miles and environmental impact
- Costs less
- Supports local producers
- Taste and looks better/fresher



FOOD ADDITIVES



Preservatives:

Prevent food spoilage

Antioxidants

Prevent foods going rancid or brown

Colours

Help restore a foods colour after processing

Flavour enhancers

Monosodium glutamate added to enhance the flavour of processed food

FOOD LABELLING

Labels provide the consumer with information that they can then use to justify their choice.

- Ingredients list
- Dietary information
- How to store and cook the food
- Origin
- Animal welfare

CONVENIENCE FOODS

Canned, frozen, jars, ready meals, packet mixes are all examples of convenience foods.



Advantages:

Saves time, keeps for longer, easy to cook, easy for one portion, huge ranges

Disadvantages:

High in fat/sugar/salt, expensive, poor quality/

NUTRITION



Carbohydrate

Carbon—hydrogen—oxygen

- Should make up 1/3 diet
- Monosaccharides, disaccharides, polysaccharides
- 1g Carb = 3.75 Kcal
- Sugar is a carb



Protein

- HBV: Animal
- LBV: Plant
- Made up of Amino acids
- Complimentary proteins = combining LBV to make HBV
- 1g protein = 4 Kcal



Fat

- Saturated: Animal
- Unsaturated: Plant
- Trans-fats are unhealthy
- 1g fat = 9 Kcal

NUTRIENTS:

MACRONUTRIENTS—NEEDED IN LARGE AMOUNTS (GRAMS)

PROTEIN—FAT—CARBOHYDRATE—WATER—FIBRE

MICRONUTRIENTS—NEED IN SMALL AMOUNT (MICROGRAMS)

VITAMINS—MINERALS—TRACE ELEMENTS

Calcium	Dairy, green veg, nuts	Healthy Bones and Teeth
Iron	Red meat, beans, nuts, green veg	Healthy red blood cells, carry oxygen around body
Sodium	Salt	Balanced body fluids
Iodine	Water, fish, tea	Preventing tooth decay
PROTEIN	Energy, growth, repair	Meat, fish, eggs, beans, nuts
CARBOHYDRATE	Energy	Fruit, vegetables, cereals
FAT	Energy, insula-tion,	Oil, butter, dairy, meat

Vitamin A (fat)	Dairy, eggs. Leafy veg	Helps see in dim light
Vitamin D (fat)	Oily fish, eggs, sunlight	Healthy bones and teeth
Vitamin E (fat)	Plant oil, nuts, seeds	Healthy skin and eyes
Vitamin K (fat)	Green veg, cereals	Blood clotting, wound healing
Vitamin B1 (water)	Eggs, peas, fortified cereals	Energy release, nervous system
Vitamin B2 (water)	Milk, eggs, rice	Energy release, nervous system
Vitamin B3 (water)	Meat. Fish, eggs	Energy release, nervous system
Vitamin B5 (water)	Meat, potatoes, whole grains	Energy release
Vitamin B6 (water)	Red meat, dairy. Nuts	Nerve and brain development
Vitamin B7 (water)	Milk, vegetables, nuts	Energy release (protein)
Vitamin B9 (water)	Milk, broccoli, cereals	Healthy red blood cells
Vitamin B12 (water)	Meat, eggs, cheese	Healthy red blood cells, energy release
Vitamin C (water)	Citrus, sprouts, green veg	Fights infection



Sugar is an empty calorie

It contain no nutritional value other than energy

Too much fat?

- CHD, obesity, type 2 diabetes,

Too much sugar?

- Obesity, type 2 diabetes, tooth decay



Fibre

- Insoluble: passes through unchanged, helps remove waste and prevent digestive problems
- Soluble: broken down, helps reduce cholesterol and prevent CHD,







Water

- Dehydrated? Thirst, hunger, headache
- 6—8 glasses a day
- Helps with transporting nutrients, removing waste, regulating body temp

FOOD SPOILAGE & FOOD SAFETY

WHAT CAUSES FOOD SPOILAGE?

- Bacteria, mould, fungi, yeast
- Insects, rodents, pests
- Chemical reactions
- Moisture, warmth, oxygen
- Time

STORAGE OF FOODS

- Ambient foods—stored in a cool dry place at room temperature
- Frozen foods—stored in a freezer at –18°c
- Refrigerated foods stored in a fridge at 5°c



Use-by-date/Best Before Date

- Use by date—food will be unsafe to consume after this date
- Best before date—food will be safe to consume but the

SIGNS OF FOOD SPOILAGE

- Discolouration
- Change in texture (soft, slimy)
- Mould
- Unpleasant smell
- Off tasting

TYPES OF CONTAMINATION

- **PHYSICAL:** Hair, jewellery, plasters, glass, plastic
- **CHEMICAL:** cleaning products, pesticides
- **BIOLOGICAL:** bacteria, fungi, mould

- **Key temperatures**
- Freezer = -18°c
- Fridge = 5°c
- Cooked food = 75°c
- Hot Held Food = 63°c
- Danger zone = 5°c to 63°c





Food Poisoning	Found in
Campylobacter	Raw chicken, meat, milk
Salmonella	Humans and animals. Raw chicken, eggs
Staph A	Humans—nose, eyes, hair
E.Coli 0157	Raw meat, vegetables from the ground (carrots)
Bacillus cereus	Cooked rice and pasta

PREVENTING CROSS CONTAMINATION

- Washing hands before and during food prep
- Washing hands after handling raw foods
- Using colour coded chopping board
- Wearing correct clothing (apron, hat)
- Keeping raw foods separate from cooked foods
- Cleaning equipment thoroughly
- Keeping food stored at the correct temperature

FOOD PRESERVATION

- **Heat**—kills most microorganisms
- **Freezing/refrigerating**— microorganisms become less active and reproduction slows down
- **Drying**—removes moisture stopping microorganisms from reproducing

HACCP

Hazard Analysis Critical Control Point—a process where food businesses highlight potential hazards and put measures in place to reduce the risk

SYMPTOMS OF FOOD POISONING

- Sickness
- Diarrhoea
- Nausea
- Fever
- Abdominal pain





HIGH RISK FOODS

- High in protein and moisture
- Raw meat, eggs, cheese, milk, fish

PREVENTING FOOD POISONING

- Cook food thoroughly and to correct temperature
- Store food correctly
- Wash hands regularly
- Check the dates of food
- Wash surfaces and equipment thoroughly
- Use correct equipment such as colour coded chopping boards