East Ayrshire Council

FOOD TECHNOLOGY
INFORMATION BOOKLET

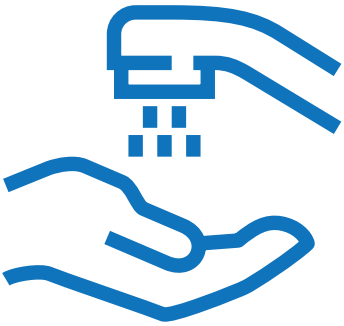
Name _____ Class _____ Date _____

Food Hygiene

Good food Hygiene practice ensures food is safe to eat and protects us from food poisoning.

To make food safe it is important to:-

- Have good personal Hygiene
- Have good kitchen hygiene
- Prepare food safely and cook food thoroughly
- Buy and store food carefully



Tips on good personal hygiene

1. *Always wash hands before touching food and especially after visiting the toilet. Use hot Water, liquid soap and dry hands thoroughly*
2. *Tie back long hair and don't let it hang down over food when preparing it.*
3. *Always wear a clean apron when preparing food.*
4. *Keep nails clean and short.*
5. *Do not wear nail varnish.*
6. *Cover cuts with a blue plaster*
7. *Do no cough or sneeze over food*

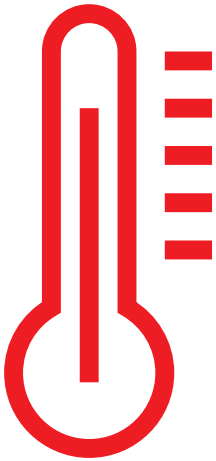
Tips on good kitchen Hygiene

1. *Wipe up spilt food immediately to avoid attracting flies*
2. *All cookery utensils must be kept clean.*
3. *All work surfaces must be well wiped and clean*
4. *Always use clean dishcloths and net cloths for dishes and don't use them for anything else.*
5. *Do not let pets in the kitchen if possible.*

Tips on how to prepare food safely

1. *Wash fruit and vegetables before use*
2. *Don't lick fingers or smoke during food preparation (the bacteria from your mouth can pass on to your hands)*
3. *Keep food covered at all times to prevent germs/pests landing on it*
4. *Keep perishable foods cool, prepare as quickly as possible as bacteria multiplies at room temperature. The danger zone is 5°c to 63°c*
5. *Keep raw and cooked food separately during food preparation to avoid cross contamination*
6. *Make sure food is eaten before the USE BY date*

Tips on cooking safely



1. *Cook food thoroughly to a temperature of at least 75°c*
2. *Follow Instructions on packets etc. and follow cooking times and temperatures.*
3. *Always thoroughly cook poultry, as most chicken contain bacteria.*
4. *Always reheat food thoroughly and only once to a temperature of at least 82°c for 2 minutes. Reheated food in a microwave should be stirred halfway through the heating and given the correct amount of standing time to avoid cold spots.*

Tips on buying and storing food carefully

1. *Buy form shops that are clean and well run*
2. *Check the date mark on food before buying it- make sure it's not out of date*
3. *Pack raw and cooked foods separately to avoid cross contamination*

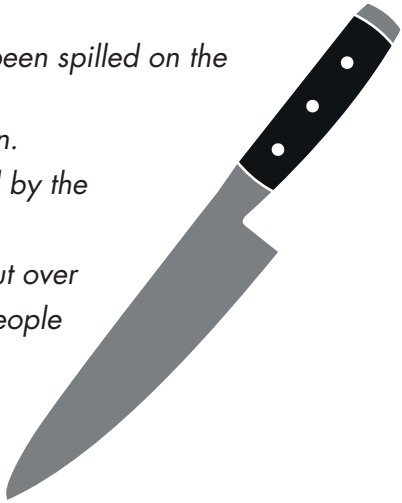
4 *Pack frozen and chilled in a cool bag to take home and take them home as soon as possible.*

5 *Store raw and cooked food in the refrigerator*

Safety in the Kitchen

It's important to work safely in the kitchen to avoid accidents.

Points to remember



1 *Always wipe up anything that has been spilled on the floor to stop people slipping*

2 *Always walk never run in the kitchen.*

3 *Sharp knives should always be held by the handle and carried point down.*

4 *Do not leave pot handles sticking out over the edge of the cooker to prevent people from knocking them off the cooker.*

5 *Always wear oven gloves when putting food into or removing it from the oven.*

6 *Never handle electrical equipment with wet hands.*

7 *Take special care when handling and washing sharp objects e.g. cutters from food processors.*

8 *Sharp objects should NOT be placed in the sink but washed immediately and placed back into storage.*

9 *Glass items should NEVER be placed in the sink to avoid any breakages.*

10 *Cables from wired equipment should not be trailing over work tops or cookers.*

Washing up

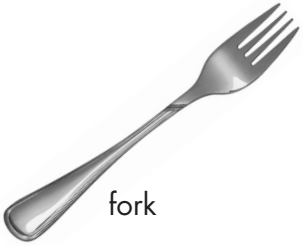
Washing dishes in a dishwasher is hygienic and reduces the number of bacteria on crockery and utensils. In school we wash the dishes by hand/ dishwasher and to do it successfully we should follow the steps below. All cleaning routines can be followed within your household.

1. Scrape food scraps into the food waste bags. Fill dirty pots with soapy water and leave them to soak.
2. Sort the washing up into 5 groups:-
   - Glassware
   - Cutlery
   - Cleanest dishes
   - Dirtiest dishes
   - Pots and baking tins

3. Fill a washing up bowl with water hot enough to put your hands in. Add the correct dosage of washing up liquid to the water depending on the size of the sink, this removes grease and dried up food. A scourer removes stains and a dishcloth wipes off the dirt and grease.
4. Wash glasses first then rinse in hot water and drain.
   Now wash the cutlery, rinse and drain.
5. First wash the cleaner dishes, then the dirtier ones. Rinse them in hot water then stack on a draining board.
6. If the water is very dirty change it now. Then wash the tins, pots and sauce pans. A scourer may be useful for removing difficult marks.
7. The most hygienic method of drying is to let things dry on their own. Use a clean tea towel and put the things away dry.
   Do not use the tea towel for anything else.
8. Empty out the dirty water. Wipe down the sink and draining board and wash and dry the washing up bowl, Remove any food trapped in the plug hole.

Equipment 1

table knife



fork

vegetable knife

chopping knife

potato peeler

palette knife

tea spoon

dessert spoon

table spoon

wooden spoon

pastry brush

rolling pin

whisk

cutters

Equipment 2

mixing bowl

measuring jug

plate

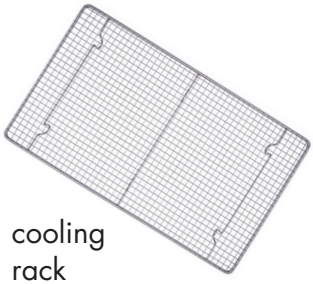
sieve

grater

flour dredger

bun tray

baking tray tin



cooling rack

pot stand

cup and saucer

colander

Weighing and measuring

It is important to weigh and measure ingredients accurately to ensure success in cooking.

Tips for success

- Abbreviations used in recipes:-

g - Grams	**kg** - kilograms
l - Litre	**ml** - millilitre
°c - degrees Celsius	**°F** - degrees Farenheight
tsp - Teaspoon	**tbs** - Tablespoon

- When using measuring jugs place them on a flat surface to take a reading. They will measure up to 500ml.
- When using dial scales always put the pointer to zero before placing food on. Place a plate or bowl on electronic scales before they are switched on and they will measure the contents only when on.
- A 250g block of margarine can be divided into 10 equal parts of 25g.
- Handy measures are a quick way of measuring dry ingredients the spoons used are:

1 tbs = 15ml

$^1/_2$ tbs = 7ml

1 tsp = 5ml

$^1/_2$ tsp = 2.5

When measuring flour and sugar a level tablespoon is equal to

Flour	*Sugar*
25g flour = 3 level tablespoons	25g sugar = 2 level tablespoons
50g flour = 6 level tablespoons	50 sugar = 4 level tablespoons
75g flour = 9 level tablespoons	75g sugar = 6 level tablespoons
100g flour = 12 level tablespoons	100g sugar = 8 level tablespoons

Cookers

The cooker is an important piece of equipment in the kitchen. It may be powered by gas, electricity, solid fuel or calor gas. Most homes will be gas or electric.

Cookers are made up of three parts:-

- **Hob** – Used for boiling, stewing, steaming and frying
- **Grill** – Used for grilling
- **Oven** – Used for Baking, Roasting and casseroles

The parts of the cooker can be in one unit like the cooker shown or they can be in separate parts where the hob can be fitted into the work top and the oven and grill fitted into a wall or counter.

We cook food to:-

- Make it tastier, more attractive and easier to eat.
- Make it safer to eat by killing harmful bacteria.
- Make food last longer as yeasts and mould are destroyed.
- Change and improve the flavour.

How food is cooked

The three ways that heat energy can be passed to food are by conduction, convection and radiation.

Conduction

Heat is conducted from molecule to molecule in solids or liquids. Heat is conducted from one material to the other in this case from the metal pan to the water or sauce inside the pot.

Metals are good conductors of heat which is why they are used to make pots and pans.

Wood and Plastic are poor conductors of heat which is why they are used in stirring spoons and pan handles.

Convection

Heat travels around liquids and air by convection currents. Ovens are heated by convection currents. The hot air rises and the cool air falls which is why a conventional oven is hotter at the top. Cooking methods which use convection currents include boiling food in a saucepan and baking in the oven.

Radiation

Heat travels in waves or rays that heat up objects such as food. Food that is grilled or toasted is cooked by radiation – the direct rays heat the food.

Most food is cooked by a combination of methods of heat transfer, for example a baked potato is cooked in the oven by convection currents to the potato and the heat is conducted through the potato to cook it.

Grill

The grill can be a function built into the oven or can be a separate section entirely and can be controlled by a dial on the control panel of the cooker.

- Grilling is a very quick way of cooking food
- Due to the heat intensity on a grill you shouldn't leave food unattended, this could result in food burning or starting a fire.

Hob

There are usually four rings or burners on a hob, each with varying sizes depending on the size of the pot/pan in use. These are controlled by dials on the hob, usually with a diagram telling you which ring it correspond to. These can be adjusted up and down as more or less heat is needed.

Heating food on a hob works by:-

- Flame or heating ring touching the base of the metal pan.
- The metal pan becomes hot by conduction.
- The liquid inside becomes hot by convection.
- The food within the liquid becomes hot by conduction.

Hob Safety

- Pot handles must not stick out over the edge of the cooker or over another ring. This is to avoid knocks and spills of scalding hot liquid, also reduces the risk of the pan handle heating up and burning the hand when touched.

- Do Not Stretch over to reach the back of the cooker.
- Do not have gas flames licking up the side of the pot, consider swapping to one of the smaller gas burners or turn the gas down to avoid this.
- Always switch rings off when pans are removed.

Oven

- The temperature is controlled by a thermostat
- In electric ovens the temperature is marked in °c ranging from 100°c to 250°c.

  Put the cooker on at the main switch and turn the oven dial to the required temperature, making sure the red light comes on to indicate that the oven is heating up. The light goes out when it reaches the desired temperature.
- Gas ovens are heated to a Mark, Numbers ranging from ¼ to 9

  Open the oven door, turn the control to the mark number required, click the ignition button and wait to make sure the flame is properly lit before closing the door.

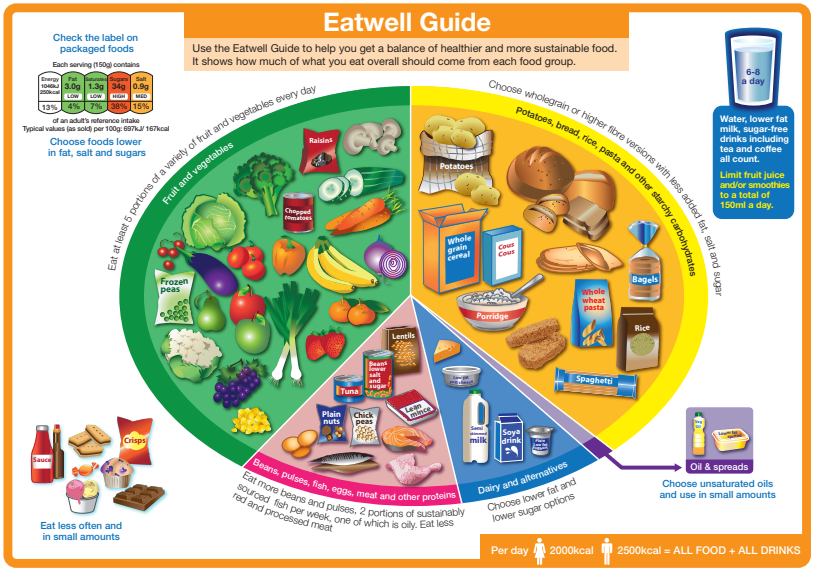
Oven Safety

- Always use oven gloves when putting food into and taking food out of the oven.
- In gas and conventional ovens the top of the oven is the hottest.

Eating a balanced Diet

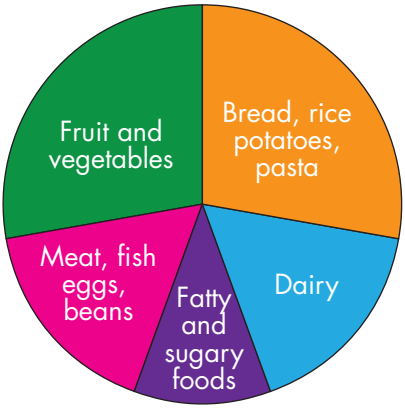
No single food is good or bad for us. The important thing is the balance of the diet as a whole. One way to ensure that we eat a balanced diet, one that contains all nutrients in the correct amount is to eat a wide variety of foodstuffs.

Eatwell plate



The Food Wheel

The food wheel shows us the 5 food groups and the proportions we should choose our food in for a balanced diet.



Food Group	What's included
Eat Most *Bread, Cereals and potatoes*	Breakfast cereals, pasta, rice, oats, noodles, maize, millet and cornmeal. Beans and pulses can be eaten as part of this group
Fruits and vegetables	Fresh, Frozen canned fruit and vegetables as well as dried fruit can be counted for this group. A glass of fruit juice also counts.
Eat Moderately Milk and Dairy Foods	Milk, cheese, yoghurt and fromage frais. This group does not include butter, eggs and cream.
Meat, fish and alternatives	Meat, fish, eggs, nuts, beans [including canned and baked beans] and pulses. Meat includes bacon, salami and meat products such as sausages, beef burgers and pate. Fish includes frozen and canned fish such as sardines and tuna, fish fingers and fish cakes.
Eat least Fatty and sugary foods	Margarine, low fat spread butter other spreading fats, cooking oils oily salad dressings or mayonnaise, cream, chocolate, crisps, biscuits, pastries, cakes, puddings, ice cream, rich sauces and fatty gravies, sweets and sugar.

Nutrients

Nutrient	What it does in the body [Function]	Examples of foods where we find this nutrient [Source]
Protein	Growth and repair of body cells	Meat, fish, eggs, milk, cheese, peas beans, lentils, nuts.
Fat	Heat and energy	Butter, margarine, oils, fried foods, dairy products.
Carbohydrate	Heat and energy	Bread, potatoes, pasta, rice, breakfast cereals.
Vitamins	Protects against disease	Fruits, vegetables, fortified breakfast, cereals, nuts, seeds, eggs, milk.
Minerals	Needed for good health e.g. strong bones and healthy blood	Milk, meat, seeds, eggs, fortified breakfast, cereals.

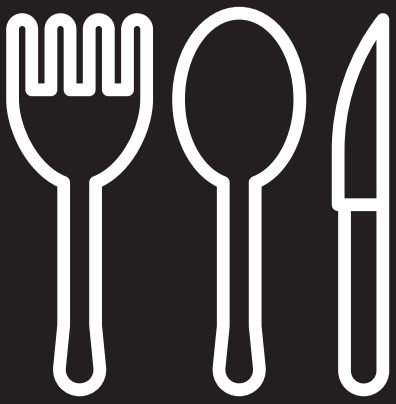
Energy balance

Intake

Calories from food

Output

Calories/Energy used during Physical activity



East Ayrshire Council
Comhairle Siorrachd Àir an Ear

EATING IN EAST AYRSHIRE

FOOD FOR LIFE SERVED HERE
Soil Association