

Food Preparation and Nutrition Knowledge Organiser Year 7

What is seasonal food?

- Seasonal food is fresh food that is ready to eat during its preferred season.
- For example, Scottish **raspberries** are juicy and delicious in the summer and early autumn. They do not grow wild in Scotland during winter as it is too cold.

Are all foods seasonal?

Some foods are not seasonal. **Meat** and **dairy** are available all year. Cows are milked and chickens produce eggs from January all the way to December.

How has technology and transport affected food?

Today we can buy and eat a wide variety of foods all year. Technology and transport mean they do not need to be in season.

- Food can be transported around the world on **lorries**, **boats** and even **planes**.
- Farms use **large greenhouses** to control the temperature and create the perfect growing conditions. That is why we can buy berries like **strawberries** and **blueberries** in the winter when they would not naturally grow outside.
- Tropical fruit comes from places with **hot climates** like Asia, Latin America and Africa. Most of our **pineapples** come from Costa Rica. **Mangoes** come to the UK from a number of countries, including Brazil, Peru, Kenya, Uganda, Pakistan, and Bangladesh.



What are the advantages of seasonal foods?

- Food **tastes much better** when its grown in its natural season.
- Tasty fresh food grown locally in season is **cheaper** to buy.
- Seasonal food is **better for the environment**.

What is the impact on the environment?

Growing and transporting food so that it is always available uses lots of energy which creates **CO2**. This greenhouse gas is harmful to the environment.

Ingredients are selected for their nutritional, functional and sensory characteristics, as well as provenance and seasonality.

Seasonal and Sources of Ingredients

Adding flavour, colour or texture

- Fresh and dried herbs and spices can be added to dishes to provide flavour and replace the salt in some dishes, e.g. garlic and ginger.
- Fruit, vegetables, herbs and spices can all be used in recipes to add colour.
- Nuts, seeds, grains, fruit and vegetables can be added to recipes to provide texture.
- The cooking method and cooking time can impact the texture, e.g. steaming or microwaving vegetables quickly can retain their colour, flavour and firm texture.
- Equipment used to process food can impact the texture, e.g. using a food processor to blend soup for a smoother texture.
- Natural, nature identical or artificial additives may be added to foods to perform specific functions.
- The main food additives are antioxidants, colours, flavour enhancers, sweeteners, emulsifiers and stabilizers, and preservatives.

Selecting ingredients

Ingredients are chosen for a number of reasons, such as:

- to add **flavour**, **colour** or texture;
- to provide a particular function, e.g. to thicken;
- to provide nutrients or change the nutritional profile of a dish, e.g. to increase **fibre**;
- to extend the shelf life, e.g. vinegar for pickling or chemical preservatives;
- cost and availability, e.g. fruit in season;
- to satisfy a need to buy food with a certain provenance, e.g. Red Tractor.

Functional characteristics of ingredients

Ingredients provide a variety of functions in recipes, such as:

- browning, e.g. flour in a bread roll (**dextrinisation**);
- raising, e.g. yeast in bread (aeration);
- setting, e.g. scrambled eggs (coagulation);
- thickening, e.g. flour in a roux sauce (**gelatinisation**).

Food functions		
	Example	What happens?
Aerate	Cake	Baking powder makes the cake light
	Meringue	Egg white is whisked to form a foam
	Scone	Self-raising flour helps the dough rise
	Bread	Yeast makes the dough rise
Bind	Fish cake	Egg holds other ingredients together
	Naan bread	Yogurt binds dry ingredients into a smooth dough
	Pancake	Milk and egg combine flour into batter
Bulk	Pastry	Water combines flour and fat into a dough
	Cottage pie	Textured vegetable protein may be mixed with minced meat and vegetables
	Fruit pie filling	Sugar is boiled with fruit to form a thick puree
Glaze	Nut roast	Breadcrumbs absorb liquid and increase in size
	Vegetable samosa	Potato is the main filling
	Hot cross bun	Sugar solution is brushed over bun after baking
Set	Gammon	Honey is poured over to glaze
	Pie	Milk is brushed over before baking
	Sausage roll	Egg is brushed over to give a shiny golden colour
Thicken	Blancmange	Cornflour is boiled with milk and flavourings and then cooked
	Cold souffle	Gelatine forms a gel
	Jam	Pectin mixed with sugar and acid forms a gel
	Quiche	Egg is mixed with other ingredients and then baked
	Egg custard	Egg thickens when gently heated
	Sauce flour	Flour thickens a liquid when boiled
	Soup	Potato thickens soups
	Syrup	Sugar is boiled with water or fruit juice