

1. SPECIALIST EQUIPMENT	2. FUNCTIONS OF FLOUR	3. FUNCTIONS OF RAISING AGENTS
<p>Equipment – The necessary items needed for a particular purpose.</p> <p>When preparing and cooking food we use a range of different equipment. Some is more specialist than others.</p> <p>Specialist equipment are tools that are only used for one specific purpose for example a whisk.</p> <p>Knives can be a dangerous piece of equipment when preparing and cooking foods. It is important to use a knife safely.</p> <p>Chopping boards are used to prepare foods. A separate chopping board should be used for meat and a different one should be used for fruits and vegetables. This is to avoid cross contamination.</p> <p>Digital scales/ weighing scales can be used to ensure that ingredients are measured correctly.</p>	<p>Structure— A structure is something of many parts that is put together.</p> <p>Flour—Flour is a powder made by grinding raw grains, roots, beans, nuts, or seeds.</p> <p>Flour provides the structure in baked goods.</p> <p>Flour is composed of many components such as protein, starch, lipids, sugars and enzymes. The starch and protein for the “crumb” of a baked good.</p> <p>There are many types of flour, the most common are:</p> <ul style="list-style-type: none"> • Self-raising • Plain • Strong Bread Flour <p>The difference between self-raising and plain flour: Self-raising has a raising agent already added to it. Plain flour requires you to add your raising agents separately to make your bakes rise.</p>	<p>Expanding— To become or make larger or more extensive.</p> <p>Raising agents— In baking, a substance added to dough to make it rise.</p> <p>We split the raising agents into four categories: Biological, Chemical, Mechanical and Lamination.</p> <p>There are different types of raising agents that you will probably recognise, such as yeast and baking soda.</p> <p>Yeast—Yeast is a living organism, a type of fungus, yeast is an example of a biological raising agent.</p> <p>Bread is made with strong flour, yeast and warm water. Yeast is needed to make sure that the bread rises.</p> <p>Water control: Warm water is needed to activate the yeast. If the water is too hot it will kill the yeast, too cold will prevent it working.</p>
4. PROTEIN—COAGULATION	5. ENZYMATIC BROWNING	5. PREVENTION OF ENZYMATIC BROWNING
<p>Solidify— Make something change from a liquid to a solid structure.</p> <p>An enzyme is a type of protein. Protein molecules can be easily denatured due to acid (A change in PH) or heat.</p> <p>Coagulation is the change in the structure of protein (from a liquid form to solid) brought about by heat, mechanical action or acids.</p> <p>Denatured protein molecules take up more space than normal. Because of this they knock into each other and start to join together which is called coagulation.</p> <p>Coagulation is irreversible, the protein cannot be turned back into a liquid form.</p> <p>Coagulation changes the appearance and texture of foods.</p> <p>For example, frying an egg. As heat is applied, the egg turns from a liquid form to a solid.</p>	<p>Enzyme—A natural substance that is found in foods and all living things.</p> <p>Enzymes cause foods to ripen. Enzymes change the texture, flavour and aroma of foods.</p> <p>Enzymic browning is an chemical reaction that takes place in some foods, mostly fruit and vegetables, causing the food to turn brown.</p> <p>Oxygen causes the browning, this is called oxidation.</p> <p>This can appear when you cut, bite, crush, grate, bruise or peel fruits or vegetables.</p> <p>Enzymatic browning can result in negative effects on colour, taste, flavour and nutritional value.</p> <p>Adding citric, ascorbic or other acids, such as vinegar, lowers the pH and prevent enzymatic browning</p>	<p>Catalyst—A biological catalyst has the ability to speed up chemical reactions. An enzyme is a catalyst.</p> <p>Enzymic browning is an chemical reaction that takes place in some foods, mostly fruit and vegetables, causing the food to turn brown.</p> <p>Oxygen causes the browning, this is called oxidation. To prevent enzymatic browning you can:</p> <ul style="list-style-type: none"> • Acid (E.g. lemon juice) This denatures the enzyme protein. • Cooking the food. • Putting the food into cold water. <p>Blanching—You can also blanch fruits and vegetables to prevent enzymatic browning.</p> <p>Blanching is to plunge the food into boiling water, drain the water, plunge into ice cold water so they retain their colour and flavour, drain again and freeze them.</p>