Carbohydrates

Substance	Hazard	Comment
Sucrose *Solid*	**Currently not classified as hazardous**	This is ordinary table sugar. It is cane sugar (also obtained from sugar beet). Acids formed by bacterial decomposition of sugar in the mouth cause tooth decay. Excess sugars in the diet, coupled with a lack of exercise can cause obesity and diabetes, and can lead to heart disease. Eating in laboratories is usually illegal under the *COSHH Regulations* because of the risk of contamination.
Glucose *Solid*	**Currently not classified as hazardous**	It is also known as dextrose. Acids formed by bacterial decomposition in the mouth cause tooth decay. Excess sugars in the diet, coupled with a lack of exercise can cause obesity and diabetes, and can lead to heart disease.
Fructose *Solid*	**Currently not classified as hazardous**	It is also known as laevulose or fruit sugar. Acids formed by bacterial decomposition in the mouth cause tooth decay. Excess sugars in the diet, coupled with a lack of exercise can cause obesity and diabetes, and can lead to heart disease.
Maltose *Solid*	**Currently not classified as hazardous**	It is also known as malt sugar.
Lactose *Solid*	**Currently not classified as hazardous**	It is also known as milk sugar.
Starch *Solid*	**Currently not classified as hazardous**	Starch is broken down by saliva and stomach acids into simple sugars.
Cellulose *Solid*	**Currently not classified as hazardous**	It is an approved food additive, E460. Cellulose is derived from the cell walls of fruit, vegetables and cereals. It is not digested. Dietary fibre (roughage) is an important part of the diet, helping prevent various diseases.
Food testing on carbohydrates	See CLEAPSS *Student Safety Sheet 4*	

Typical control measures to reduce risk

- Wear eye protection when transferring/dispensing hazardous solids and solutions, eg, when food testing.
- Do not consume sugars or indeed any food or drink in laboratories; taste-testing investigations must be done outside laboratories unless scrupulous hygiene and no contamination can be ensured.

Assessing the risks

- What are the details of the activity to be undertaken? What are the hazards?
- What is the chance of something going wrong?
- How serious would it be if something did go wrong?
  eg small amounts of contaminants entering the mouth during taste-testing activities.
- How can the risk(s) be controlled for this activity?
  eg can it be done safely? Does the procedure need to be altered? Should goggles or safety spectacles be worn?

Emergency action

In all emergency situations, alert the responsible adult immediately. Be aware that actions may include the following:

- In the eye — Irrigate the eye with gently-running tap water for at least 20 minutes. Call 999/111.
- In the mouth/swallowed — In small amounts, unlikely to be hazardous unless contaminated.
- Spilt on the skin or clothing — Brush solid off contaminated clothing. Rinse clothing or the skin as necessary.
- Spilt on the floor, bench, etc — Brush up solid spills, trying to avoid raising dust, then wipe with a damp cloth.

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