



TEACHER NOTES

S6. Food for diabetics

Pupils are presented with basic information on the dietary requirements of people with diabetes and asked to find out more. They are required to produce a booklet for a diabetic (of their own age) which details diet, menus and a recipe.

Research

Information about diabetes is available from many different sources.* The amount of research will depend upon interest and ability.

The overall aim is to produce a booklet which concentrates on the special dietary aspects of this condition. The booklet is to be aimed at the pupils' own age group. Pupils are asked to design, prepare and test one dish in which an artificial sweetener is used.

The most important and obvious area in a diabetic's diet is the intake of **carbohydrate**.

When someone without diabetes eats food which contains carbohydrate, the pancreas produces a correct dosage of insulin to cope with any glucose which eventually reaches the bloodstream after digestion of the carbohydrate. This is not the case with diabetics.

Diabetics must balance the amount of carbohydrate they eat with the amount of insulin they are injecting and with the amount of exercise they are taking. They must try to keep the level of blood glucose as near normal as is possible. Both situations of too much blood glucose and too little blood glucose are potentially very dangerous. The diet of a diabetic is therefore of considerable importance.

Designing menus

Pupils are asked to produce *menus* but not to cook vast quantities of food. The aim of the exercise is to give a greater understanding of the special dietary needs of a diabetic, particularly in relation to carbohydrate intake.

Diabetics are advised to adapt their existing diets rather than to buy specialist diabetic products. This should be reflected in the work produced by the pupils. However, the inclusion of the so called 'diet' drinks in a diabetic's diet is encouraged since they do not contribute to blood glucose levels. You could carry out parts of the activity S5 *Sweeter than sugar*, page 73, to show this.

The use of artificial sweeteners in tea, coffee, etc. is also recommended. These sweeteners, in granulated form, can also be used to produce puddings, cakes, biscuits, etc. and it is in this area that pupils are asked to develop their own recipe and product.

KS4
project in food technology

Timing - various

Pupil activity sheet S6 accompanies this activity.

Diabetics do not have to drastically alter their diet. They do have to keep a much closer check on the food, particularly carbohydrate, that they eat. There are guidelines for them to follow. These include:-

- Eat regular meals. Try to eat similar amounts of starchy foods from day to day.
- Try to eat more high fibre (non-starch polysaccharide (NSP)) foods. The fibre in beans, peas, lentils, vegetables, fruit and oats is particularly good.
- Cut down on fried and fatty foods such as butter, margarine, fatty meat and cheese.
- Reduce the amount of sugar you eat by swapping high sugar foods for low sugar foods.
- Try to get to the body weight that is right for your height and build and stay there.
- Be careful not to use too much salt.

Task

Your task is to produce a Diet Booklet for Diabetics aimed to help them to eat a healthy diet for their special needs. Aim the booklet at your own age group.

Suggestions for research:

- Find out as much as you can about the dietary needs of a diabetic.
- Carry out a survey of the information and products available to diabetics. This could include looking in supermarkets and chemists for specialist products and facts about diabetes.
- Find special recipes for particular dishes.
- Collect the labels of diabetic products or write down their ingredients. You can then compare them to their equivalent 'normal' product.

It is not necessary that a diabetic diet should include specialist products. It is better to just adapt ordinary food. However, imagine that one of the days' meals includes a party, maybe for a birthday, at which guests will want to eat some special dishes. Some of these must be suitable for a diabetic and will contain an artificial sweetener. Your final booklet must contain menus (not recipes) for 2 days' worth of meals.

Plan, prepare, cook and market test one of the dishes from your menus which uses an artificial sweetener. The recipe for this dish should appear in your booklet.