

Health and Food Technology



NATIONAL 4 and NATIONAL 5

The Health & Food Technology course is made up of 3 Units of work.

Evidence from these units is used to determine entry level for this course.

The units studied are:

Food For Health : This unit of work develops pupil's knowledge and understanding of the relationship between food, health and nutrition. They will learn about differing dietary needs for individuals at various stages of life and also current dietary advice. Pupils will also have the opportunity to prepare and cook dishes to meet individual nutritional needs.

Food Product Development

This unit of work develops pupil's knowledge and understanding of the functional properties of ingredients in food and their use in developing new food products. Pupils will learn about the stages involved in developing food products and, through a problem solving approach, produce a food product to meet specified needs.

Contemporary Food Issues

This unit of work explores factors which may affect food choices and looks at contemporary food issues such as genetically modified and organic foods. They will also develop knowledge and understanding of food labelling and how it helps consumers make informed food choices.

Assignment/Added Value Unit

National 5 pupils will complete an Assignment and National 4 pupils will complete an Added Value Unit. In both instances pupils are given a design brief that they have to then research and produce a food product to meet the specified needs.

Research activities are an important part of this course and pupils take increasing responsibility for their own learning as they progress through the course. A variety of different learning activities take place throughout the course including; class and group discussions, individual and group research tasks, poster presentations and design and make activities.

The pictures below illustrate some of the pupil's work.

Anaemia

What is anaemia?

A shortage of iron is one cause of anaemia.

Iron forms red blood cells which carry oxygen around the body - to be used as energy.

If you become short of iron there won't be enough red blood cells in the blood to carry oxygen around your body.

Causes

- * Not eating enough iron-rich foods
- * Low intake of vitamin C
- * High intake of fibre/plastic acid prevents iron being absorbed.
- * Less red meat being ate in the diet
- * Snacking instead of having a full traditional meal could mean you don't have enough iron.

How anaemia affects health

- * You feel weak, tired and breathless
- * You might feel cold more and less resistant to infections.
- * Wounds may take time to heal

How to prevent it

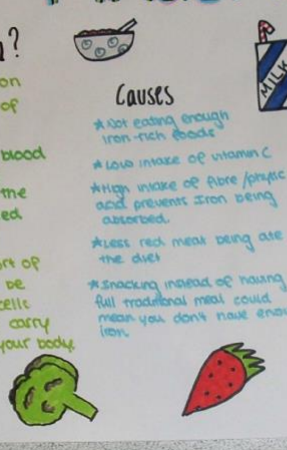
Make sure you have a balanced diet can also help prevent it.

Eat and drink foods that help you absorb iron e.g. orange juice strawberries and vitamin C foods.

Make sure you consume enough zinc and vitamin B12, essential for haemoglobin.

Eat foods high in iron

- Spinach, beetroot & aubergine
- Liver
- Prunes
- Oysters
- Green leafy vegetables
- Lean red meat
- Fish



BOWEL DISORDERS

What the condition is

Bowel disorders mainly affects the small intestine. There are many types of bowel disorders, such conditions can affect the way food is digested or absorbed within the body.

A diet which contains high amounts of meat which are low in fibre may lead to an increase in bowel disorders.

What are the causes of bowel disorders?

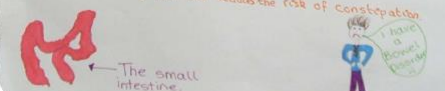
- Constipation - It's caused by a lack of fibre and water in the diet. You get fibre from starchy carbohydrates such as flour, cereal and pasta.
- Diverticular Disease - If lots of strain is put on the muscular walls of the small intestine because of constipation, then diverticular disease may develop. If you don't eat enough fibre then your faeces may become hard, making it more difficult to empty your bowel.
- Bowel Cancer - A diet high in fat and red meat and low in fibre, fruit and vegetables can increase the risk of bowel cancer.

How do these affect your health?

- Constipation - Faeces become hard and difficult to remove from the body.
- Diverticular disease - If it's left untreated, it may become infected and be very painful.
- Bowel Cancer - Obesity, high alcohol intake and a lack of exercise are linked to obesity.

How can you prevent bowel disorders?

- Drink plenty of fluids 6-9 glasses of different fluids each day
- Take plenty of exercise
- Change your diet. A high fibre diet reduces the risk of constipation.



Coronary Heart Disease

By Megan Steacie

Diet Related Causes

- High sugar intake
- High total of saturated fat intake
- Too few polyunsaturated fats
- High salt intake
- Alcohol
- Lack of fruit and vegetables
- Diet low in fibre

How to prevent Coronary Heart Disease

- Eat a healthy, balanced diet. Decrease in lard, cream, meat pies, sausages and fatty cuts of meat.
- Be more physically active. Combining a healthy diet with regular exercise is the best way to maintain a healthy weight.
- Give up smoking. This will reduce your risk of developing Coronary heart disease.
- Keep your blood pressure under control. You can do this by eating a diet low in saturated fat.

How Does Coronary Heart Disease Affect Health?

- Narrowing of arteries → struggle to deliver enough oxygen-rich blood to the heart.
- Not enough oxygen can lead to angina (chest pains)
- If a piece of cholesterol breaks off it may cause a blood clot to form and block the arteries
- If the blockage is close to the heart it may cause a heart attack.
- If the blockage is close to the brain, it may cause a stroke.

What is Coronary Heart Disease?

- Heart Disease results when the arteries that carry blood from the heart becomes narrowed with a gradual build up of fatty material called cholesterol.

Each group chose one diet-related health condition, researched what it was, the causes, how it affects health and how to prevent it. Each group then presented their posters to the class and taught the class about the diet-related health condition.



Pupils were asked to design a new healthy, savoury flan suitable for teenagers. They had to research possible solutions, then make and sensory test their chosen solution.

NATIONAL 5 ASSESSMENT:

There are **two parts** to the National 5 course assessment:

*An **assignment** worth **60 marks**.*

*The **SQA exam** worth **60 marks**.*

NATIONAL 4 ASSESSMENT:

Each unit is assessed - Pupils need to **pass all assessments** order for them to get the course award.

Students must also complete an Added Value Unit at National 4.

REVISION WEBSITES:

- **SQA.org.uk** - past papers & specimen papers are available online
- **Bitesize (BBC.co.uk)** - GCSE Design & Technology - Food Technology.
- **S-cool.co.uk** - GCSE Food Technology
- **Brightredbooks.net/n5hft** – complements the Bright RED study book available with additional notes & quizzes.
- **Food a Fact of Life**

TEXT BOOKES

Leckie and Leckie: N4 and N5 Health and Food Technology Course Notes

Bright Red Study Guide: N5 Health and Food Technology