

# **The King's C.E. School**

**A Specialist Visual Arts and Sports College with Science**



## **WHOLE SCHOOL FOOD POLICY**

This school actively supports healthy eating and drinking  
throughout the school day

September 2009

# THE KING'S SCHOOL WHOLE SCHOOL FOOD POLICY

## Mission Statement:

- ◆ This is an inclusive Voluntary Aided Christian School where all faiths are valued, respected and celebrated in the school's daily life.
- ◆ We recognise that every student is unique and precious and we seek to develop their full academic, social and spiritual potential within a secure and safe community.
- ◆ As an Arts College, we seek to extend the aesthetic and creative experience of young people in their individual journeys into adulthood.
- ◆ As a Sports College with Science, we encourage all students to increase their participation and achievement in sport, developing an understanding of the importance of an active, healthy lifestyle. This is supported through learning in Science.

## Whole School Food Policy

### Introduction

The King's C.E. School is a Voluntary Aided Church of England school for eleven to nineteen year olds. It is our fundamental aim, through the Christian ethos of spiritual and moral values, to develop young people who are well-balanced and responsible citizens.

As a Specialist Visual Arts College, also designated as a Specialist Sports College with Science, we are dedicated to realising the potential of all our students by providing opportunities for academic, creative, sporting and personal development.

The facilities at the school are constantly improved. The staff are experienced, skilled and devoted to their profession and your children's learning. We are committed to the delivery of a broad and balanced curriculum, relevant to the challenges of the modern world.

The school is located approximately 3 miles from Wolverhampton City Centre, with the village of Tettenhall, which has various shops and food outlets, around ½ mile away.

The school is currently engaged with the National Healthy Schools and the Building Schools for the Future (BSF) Programmes.

In the academic year 2009-10, there are 913 students on roll. The average free school meal eligibility during 2008-09 was 18%.

In 2006, the school installed a cashless system, to reduce perceived stigma associated with taking free school meals, to enable monitoring and reward of healthy food choices.

During 2008-09, the uptake of free school meals amongst those entitled was around 80%, with an average spend of £1.61 of the allowance of £1.70.

For the academic year 2009-10, the recommended allowance for a free school meal is £1.90.

### Statutory Nutritional Standards

Further details about the statutory nutritional standards for food and drink across the whole school day are available at [www.schoolfoodtrust.org.uk](http://www.schoolfoodtrust.org.uk).

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The following extract explains further the reasons behind the Government's introduction of statutory nutrient-based standards, with which secondary school lunches must comply from September 2009:

*"[Young people] need the right balance of food and nutrients to develop and grow. For many [young people], school lunch is the main meal of the day. It is important that school lunches contain sufficient energy and micronutrients to promote good nutritional health in all [young people] and to protect those who are nutritionally vulnerable. This group includes those who are at risk of micronutrient deficiencies, those who are underweight and those who are overweight.*

*The nutrient-based standards for school lunches aim to make the food offered healthier by:*

- *increasing the vitamin and mineral content; and*
- *decreasing the fat, saturated fat, non-milk extrinsic (NME) sugars and sodium (salt) content.*

*There are 14 nutrient-based standards including energy. Some nutrients have minimum standards (because too little can be harmful) and some nutrients have maximum standards (because too much can be harmful).*

*The standard for energy is based on an average value, rather than a minimum or a maximum value. An average has been used to reflect the range of energy requirements of [young people], who are all developing and growing at differing rates and have different levels of activity."*

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***Date of Policy:***

September 2009

***Date of Review:***

September 2010

***Lead Person:***

The named member of staff with responsibility for food and drink provision at the school is Mr Terry Griffiths, Property & Contracts Manager.

**Signed:**

**Date:**

**Principal**

**Chair of Governors**

**Lead Person**

**Student Representative**

**Staff Representative**

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### **Rationale**

The Governors recognise the important connection between a healthy diet and a student's ability to learn effectively, to achieve high standards in school and to enjoy good health. The Governors also recognise the role a school can play, as part of the wider community, to promote family health and wellbeing.

A healthy diet is one which allows for a balance of different foods that sustain the wellbeing of the individual. Different lifestyles result in different dietary needs and individuals need to be aware of these, and the effects of different foods on their minds and bodies.

The Governors recognise that sharing food is a fundamental experience for all people; a primary way to nurture and celebrate our cultural diversity; and an excellent bridge for building friendships.

The school's own catering team are committed to providing healthy food in schools which appeals to students and staff. The school is committed to providing appropriate support and training for the catering staff to enable them to deliver an efficient, safe and beneficial service.

### **Aims**

1. To improve the health of students, staff and their families by helping to influence their eating habits through increasing their knowledge and awareness of food issues, including what constitutes a healthy diet and hygienic food preparation and storage methods.
2. To ensure students are well nourished at school, and that every student has access to safe, tasty and nutritious food, and a safe, easily available water supply throughout the school day.
3. To ensure that food provision in school reflects the ethical and medical requirements of students and staff, e.g. religious, ethnic, vegetarian, medical and allergenic needs.
4. To make the provision and consumption of food an enjoyable and safe experience.
5. To introduce and promote practices within the school to reinforce these aims, and to remove or discourage practices that negate them.
6. To inform parents / carers and the local community about the food service provision in school.
7. To review the formal curriculum, ensuring that information relating to food and nutrition in different subject areas is delivered in a consistent and up-to-date format.

### **Objectives**

The overall objective is to improve the health of the entire community by teaching staff, students and their families ways to establish and maintain lifelong healthy eating habits. This objective shall be achieved through food education and skills, the food served in school and core academic content in the classroom.

Following consultation with the whole school community, and in line with current statutory nutritional standards, the mid-morning break and lunchtime menus offer a range of nutritious and good value meals, a range of hot and cold foods, snacks and drinks, reflecting the cultural diversity of the school.

The school will work towards ensuring that this policy is informed, accepted and embraced by:

- Governors
- Senior management
- Teachers, support staff and catering staff
- Students
- Parents / carers
- The school's wider community

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We will integrate these aims into all aspects of school life, in particular:

- Food provision within the school
  - The curriculum
  - Pastoral and social activities
1. The school will establish an effective structure to oversee the development, implementation and monitoring of this policy, and to encourage a participatory approach in meeting the objectives.
  2. The school will work to develop an understanding and ethos within the school of safe, tasty and nutritious food, through both education and example.
  3. The school will create an environment, both physical and social, conducive to the enjoyment of safe, tasty and nutritious food.
  4. Using the cashless system, the school will monitor students' food choices, and encourage healthy eating through the use of appropriate rewards.

### **Consultation Process**

This Whole School Food Policy has been developed in consultation with the whole school community through the use of questionnaires for students, parents / carers and staff, as well as school council, staff and Governor meetings.

### **Responsibilities**

Since the school receives a delegated budget for school meals, the responsibility for ensuring compliance with national standards for food in schools rests with the Governing Body. These standards apply to all foods and drinks regularly provided in school.

### **Food provision**

#### *Special Dietary Requirements*

Parents / carers are responsible for notifying the school of any special dietary, cultural or religious needs relating to food and drink provision.

The school's own catering team will endeavour to make appropriate provision to cater for individual needs as far as reasonably possible. The school's own catering team will ensure that students with food allergy and intolerance are easily identified, through the use of the cashless system, to ensure a safe eating experience.

The use of food in the classroom is monitored by teaching and support staff to ensure a safe educational experience for students with food allergy or intolerance.

The school will ensure that teaching and non-teaching staff have appropriate training to enable them to deal with issues arising from special dietary, cultural or religious needs and food allergy or intolerance.

#### *Training*

Catering staff receive regular training to ensure full compliance with statutory standards for the provision of safe and nutritious food in school.

#### *Vending*

The school's vending provision meets the statutory standards for food and drinks across the whole school day. Drinks-only vending machines are located in the dining room and the Cretney building.

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### Other Non-Lunch Provision

The school provides a mid-morning break service whereby students may purchase a range of hot and cold drinks and snacks, including toast, fresh fruit and sandwiches, tea, coffee and fruit juices, which are fully compliant with the statutory nutritional standards for food and drink across the whole school day.

Students are permitted to bring snacks from home, but these must be consumed in the dining hall. Students are not permitted to eat or drink anything other than water in any other areas of the school.

Information regarding food and drink choices that support a healthy, balanced diet is communicated to students via the curriculum and special assemblies and to parents / carers via the school newsletter.

### Water Provision

Plumbed-in water coolers are provided in the dining room and Arts block. Students are encouraged to fill their own water bottles brought from home and have access to free, fresh, chilled water throughout the day.

Students are responsible for ensuring the water bottles they use are hygienic and clean.

Since students are encouraged to drink water throughout the day, water bottles are permitted in all areas of the school.

Students using the sports facilities, including the gym, are encouraged to regularly drink water before, during and after exercise, as required.

### Dining Environment

Students may not take food out of the dining room. Food brought from home must be eaten in the dining room.

The dining room is occasionally used for whole school assemblies and sporting activities. Integral seating and table units are laid out daily for students to sit where they choose during the mid-morning and lunchtime breaks.

The school continuously invests in maintaining and updating the school environment. Changes to the dining room are carried out in consultation with students and staff.

Students are encouraged to clear their trays to a central station, which is cleared by staff. Staff are responsible for wiping down the tables and clearing the dining room throughout service to maintain a clean, tidy and pleasant dining environment.

Lunchtime supervision is carried out by teachers, support staff and members of the School Leadership Team. Students are expected to comply with the school's Behaviour Policy throughout school, including the dining hall. Lunchtime supervisors will encourage and support good behaviour at lunchtime in accordance with the school's Behaviour Policy. Training is provided to staff undertaking lunchtime supervision duties in areas such as Child Protection and Behaviour Management. Staff also have access to training in aspects of healthy eating via an annual "Healthier Eating" training programme communicated via Engage.

The school operates a cafeteria-style service. Students are encouraged to have a school meal through the promotion of "meal deals" (various two-course meals and drinks, including hot and cold options). All hot meals and snacks are provided on a plate, with cutlery and a tray. Sandwiches are made fresh daily and packed in disposable containers. Students and staff are not permitted to take hot food or snacks out of the dining room.

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Menus are circulated to students, parents / carers and staff at the start of the academic year. Further copies of the menus, including special offers and theme days, are displayed outside the dining room, in classrooms and are also available on request.

The menu for 2009-10 is attached herewith, and is also available to view on the school website: ([www.kings-wton.co.uk](http://www.kings-wton.co.uk)).

### Cashless System

Staff and students are expected to ensure that their accounts contain sufficient credit to enable them to pay for their food and drinks. Students with insufficient credit may seek special permission to have a meal provided, at the discretion of the Property & Contracts Manager or any other member of the Senior Leadership Team (SLT). Students with debit balances on their accounts must endeavour to resolve this debit as soon as possible.

Any queries regarding account balances must be raised at the earliest opportunity. All reasonable steps will be taken to address queries promptly. Students must take every precaution to safeguard their PIN number. The school can accept no responsibility for losses occurring as a result of inappropriate use of the cashless system.

Student menu choices are routinely monitored through the cashless system. Parents / carers may request a print out of student account activity. The school will consult parents / carers if it considers that a student is not eating an adequate lunch during the school day.

### Behaviour, Rewards and Sanctions

Student behaviour is monitored by lunchtime supervisors. Inappropriate behaviour will result in sanctions in line with the school's Behaviour Policy. Students will be rewarded for good behaviour, also in line with the school's Behaviour Policy.

The school does not use food as a reward.

### Special Occasions

The School Friends' Association (SFA) is responsible for the provision of foods and drinks at special / occasional events (e.g. school disco, fundraising events, etc.).

Although such events are exempt from the Government's statutory standards, the SFA are encouraged to provide a variety of foods and drinks to support the delivery of consistent messages about a balanced diet.

Every Christmas, members of the local community are invited to attend the school for a celebratory event, including a seasonal lunch.

### External Agencies

The school occasionally uses external agencies to provide workshops, for example, the "Junk Food Roadshow", to highlight and encourage healthy eating practices. The content of such workshops is appraised to ensure the delivery of consistent healthy eating messages. Providers are made aware of special dietary, cultural or religious needs and food allergy or intolerance amongst students taking part in workshops.

### Food Hygiene

Hand-washing facilities are located in the toilet areas.

All catering staff regularly receive training in food hygiene commensurate with their duties. In addition, it is planned to deliver nutrition training to catering staff.

In the event of a food poisoning outbreak, the school's Health and Safety Policy procedures would be followed. Staff regularly receive training in Health and Safety Policy procedures.

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### On-Site Policy

Students are not permitted to leave school premises during the school day, unless to attend classes at our partner schools in the delivery of the extended 6<sup>th</sup> form curriculum provision.

Students may be granted leave to return home during the lunch break by their Head of Year. Alternatively, a permission slip signed by a parent / carer must be submitted to Student Services.

### Recycling

The school actively encourages recycling and encourages the use of local suppliers in the provision of foods and drinks.

### Packed Lunches / Food Brought from Home

Students are encouraged to use the canteen facilities provided by the school. However, students wishing to have packed lunches for a particular reason are expected to adhere to the school's packed lunch policy.

We aim to ensure that packed lunches brought from home and consumed in school provide students with healthy and nutritious food that is similar to food served in school, and to promote consistency between packed lunches and food provided by the school, which must adhere to the Government's statutory standards.

Packed lunches will be regularly reviewed by lunchtime duty staff. The school will contact parents if it is felt that a student is not eating an adequate meal at lunchtime, or if the packed lunch policy is routinely not adhered to.

Our guidance applies to all students and parents providing packed lunches to be consumed within school or on school trips during normal school hours, beginning from September 2008:

- The school will provide facilities for students bringing in packed lunches and ensure that free, fresh drinking water is readily available at all times;
- Chilled storage facilities for packed lunches are not available. Students are advised to bring packed lunches in insulated bags, with ice packs where possible to stop food going off;
- The school will ensure that packed lunch students and school meal students will be able to sit and eat together.

In line with the provision of food and drinks at school, packed lunches should include:

- At least one portion of fruit and one portion of vegetables every day;
- Meat, fish or another source of non-dairy protein (e.g. lentils, kidney beans, chickpeas, peanut butter, etc.) every day;
- Oily fish (e.g. salmon), at least once every three weeks;
- A starch food such as any type of bread, pasta, rice, couscous, noodles, potatoes or other type of cereals every day;
- A dairy food such as milk, cheese, yoghurt, fromage frais or custard every day;
- A drink (chosen from water, still or sparkling, fruit juice, semi-skimmed or skimmed milk, yoghurt or milk drinks or smoothies)

In line with the provision of food and drinks at school, packed lunches should not include:

- Snacks, such as crisps (instead include nuts, seeds, vegetable or fruit snacks, with no added sugar, salt or fat. Savoury crackers or breadsticks, served with fruit, vegetables or dairy food, are also a good choice);

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- Confectionery, such as chocolate bars, chocolate-coated biscuits and sweets. Cakes and biscuits are permitted, but students should be encouraged to eat these only as part of a balanced meal;
- Meat products (e.g. sausage rolls, sausages, corned meat and individual pies or pasties) should only be included occasionally.

The school recognises that some students may require special diets that do not allow for the standards to be met exactly. In this case, parents and students are encouraged to be responsible in ensuring that packed lunches are as healthy as possible.

Students are asked to be aware of food allergies, particularly to nuts and peanuts. For this reason, students are asked not to exchange food items.

### *Dissemination of the policy*

The school will write to all new and existing parents / carers to inform them of the policy via the school newsletter.

The policy will be available on the school website, and available on request.

All school staff, including teaching and catering staff, will be informed of this policy and will support its implementation.

### **Food education**

The school educates students about the importance of eating a healthy balanced diet through the curriculum and extra-curricular activities detailed on the attached food in schools audit.

### **Summary of Policy Statements**

- ◆ Free, fresh, chilled drinking water is available throughout the whole school day.
- ◆ The school is committed to maximising uptake of school meals, in particular amongst students who are entitled to receive a free school meal.
- ◆ The school is committed to seeking and acting on the feedback of students and staff, and carries out regular whole-school consultation with regard to food in school.
- ◆ We recognise the value of a healthy diet and will consult parents if we consider that a student is not eating an adequate lunch during the school day.
- ◆ All school staff are encouraged to use the school lunch service.

The King's Menu 2009 - 10

Weeks commencing:	Week 1	Dish of the Day (served with vegetables and one side order)	Dish of the Day [V] (served with vegetables and one side order)	Vegetables	Side Order	Sweet of the Day	Available Daily
7 September 2009	MON	Lamb Pilaf	Quorn Savoury Mince	Broccoli Sweetcorn	Naan Bread Brown Rice	Bread & Butter Pudding with Custard	Jacket Potatoes
5 October 2009	TUES	Spaghetti Bolognese	Lentil & Tomato Quiche	Mixed Salad	French Bread	Sultana Sponge with Custard	Pasta Bar
9 November 2009							Hot and Cold Wraps
7 December 2009	WED	Hot Dog Sausage Savoury	Shepherdess' Pie	Baked Beans	Mashed Potato Jacket Wedges	Fruit Crunch with Custard	Assorted Sandwiches
18 January 2010							Yoghurts
22 February 2010	THUR	Roast Lamb	Mixed Bean Casserole	Cabbage Carrots	Mashed Potato Roast Potatoes	Apple Crumble with Custard	Fresh Fruit
22 March 2010							Homemade Cakes
3 May 2010							Assorted Hot and Cold Drinks
7 June 2010	FRI	Battered Cod Fillet	Pizza	Peas Mixed Salad	Chips	Banana & Chocolate Brownie	Bread Rolls
5 July 2010							

**Please ask if you require something not on the menu.**

*This menu may change due to seasonal availability of fresh produce.*

The King's Menu 2009 - 10

Weeks commencing:	Week 2	Dish of the Day (served with vegetables and one side order)	Dish of the Day [V] (served with vegetables and one side order)	Vegetables	Side Order	Sweet of the Day	Available Daily
14 September 2009	MON	Lamb Rogan Josh	Spanish Omelette	Cauliflower Mixed Salad	Naan Bread Brown Rice Bread Roll	Fruit Crumble with Custard	Jacket Potatoes
12 October 2009	TUES	Minced Beef Pie	Vegetable Curry	Broccoli Sweetcorn	Mashed Potato Couscous	Fruit Salad with Ice Cream	Pasta Bar
16 November 2009							Hot and Cold Wraps
14 December 2009	WED	Lamb Meatballs	Bean Goulash	Mixed Salad	Jacket Wedges	Eve's Pudding with Custard	Assorted Sandwiches
25 January 2010							Yoghurts
1 March 2010							Fresh Fruit
29 March 2010	THUR	Roast Pork	Cheese & Potato Pie	Parsnips Carrots Baked Beans	Mashed Potato Roast Potatoes	Fruit Flan with Custard	Homemade Cakes
10 May 2010							Assorted Hot and Cold Drinks
14 June 2010							Bread Rolls
12 July 2010	FRI	Salmon & Creamy Pasta	Broccoli Bake	Peas Mixed Salad	Chips	Chocolate Crunch	

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The King's Menu 2009 - 10

Weeks commencing:	Week 3	Dish of the Day (served with vegetables and one side order)	Dish of the Day [V] (served with vegetables and one side order)	Vegetables	Side Order	Sweet of the Day	Available Daily
21 September 2009	MON	Pork & Pineapple Curry	Lentil & Tomato Quiche	Cauliflower Mixed Salad	Couscous Bread Roll	Lemon Surprise Pudding	Jacket Potatoes
19 October 2009	TUES	Shepherd's Pie	Mixed Bean Casserole	Carrots Mixed Salad	New Potatoes	Banana Flan	Pasta Bar
23 November 2009							Hot and Cold Wraps
4 January 2010	WED	Hot Dog Sausage Savoury	Chick Pea Dahl	Broccoli	Mashed Potato Couscous	Hawaiian Crumble with Custard	Assorted Sandwiches
1 February 2010							Yoghurts
8 March 2010	THUR	Roast Lamb	Spicy Vegetable Burgers	Cabbage Mixed Salad	Mashed Potato Roast Potatoes	Cherry Pie with Custard	Fresh Fruit
19 April 2010							Homemade Cakes
17 May 2010							Assorted Hot and Cold Drinks
21 June 2010	FRI	Fish Crumble	Potato & Baked Bean Pie	Peas	Jacket Wedges	Choc-Orange Cake	Bread Rolls
19 July 2010							

**Please ask if you require something not on the menu.**

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The King's Menu 2009 - 10

Weeks commencing:	Week 4	Dish of the Day (served with vegetables and one side order)	Dish of the Day [V] (served with vegetables and one side order)	Vegetables	Side Order	Sweet of the Day	Available Daily
28 September 2009	MON	Lamb Madras	Roasted Vegetable Couscous	Cauliflower Green Beans	Chapatti	Fruit Charlotte	Jacket Potatoes
2 November 2009	TUES	Chilli con Carne Pie	Vegetable Cobbler	Sweetcorn Mixed Salad	Brown Rice Mashed Potato	Pineapple Upside-Down Cake with Custard	Pasta Bar
30 November 2009							Hot and Cold Wraps
11 January 2010	WED	Spaghetti with Meatballs	Vegetable Quiche	Coleslaw Mixed Salad	Boiled New Potatoes	Fruit Salad with Ice Cream	Assorted Sandwiches
8 February 2010							Yoghurts
15 March 2010							Fresh Fruit
26 April 2010	THUR	Chicken Korma	Broccoli Quiche	Carrots Peas	Couscous Pitta Bread	Apple & Blackberry Crumble with Custard	Homemade Cakes
24 May 2010							Assorted Hot and Cold Drinks
28 June 2010							Bread Rolls
	FRI	Tuna Pasta	Cheese & Potato Pie	Sweetcorn Broccoli	Jacket Wedges	Chocolate Cake	

**Please ask if you require something not on the menu.**

*This menu may change due to seasonal availability of fresh produce.*

## Curriculum Overview (2009-10)

KS3 Curriculum Area	Y7		Y8		Y9		Y10		Y11	
	Autumn	Spring	Autumn	Spring	Autumn	Spring	Autumn	Spring	Autumn	Spring
Art	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dance	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Design Technology	Textiles - Water Bottle Coat (See Additional Information attached)									
Drama	Healthy Eating - Healthy Lifestyle and the Dangers of Obesity									
English	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Food Technology	Various Theoretical and Practical Work (See Attached Sheet)		Healthy Eating Project (See Attached Sheet)		(See Attached Sheet)		(See Attached Sheet)		(See Attached Sheet)	
Geography	Local Produce - Food Miles, Waste, Grow Your Own		Rainforest - Palm Oil in Foodstuffs		Climate Change - Impact on Food Production					
Health & Social Care	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
History	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ICT	Healthy Eating - E-portfolio (SoW under development)									
Mathematics	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Modern Foreign Languages	German - Packed Lunches; Healthy vs Unhealthy Snacks				German / French - Snacks; Food & Drink; Cooking; Recipes		Coursework on Healthy Eating (also includes Exercise, Dangers to Health, etc.)			
Music	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Physical Education	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PSHE	CoPE - Independent Living Module (Healthy Eating and Lifestyles) - visit to Base 25 and produce a healthy lunch									
Religious Education	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Science	Fit and Healthy (See Attached Scheme of Work)		Food and Digestion (See Attached Scheme of Work)		Fit and Healthy (See Attached Scheme of Work)					
Extra-Curricular	Environment Club - Growing Fruit & Veg on site (to encourage healthy eating and reduce food waste)		Environment Club - Growing Fruit & Veg on site (to encourage healthy eating and reduce food waste)		Environment Club - Growing Fruit & Veg on site (to encourage healthy eating and reduce food waste)		Environment Club - Growing Fruit & Veg on site (to encourage healthy eating and reduce food waste)		Environment Club - Growing Fruit & Veg on site (to encourage healthy eating and reduce food waste)	

## Curriculum Overview (2009-10)

KS4 Curriculum Area	Y11 Autumn	Y11 Spring	Y11 Summer	Y12 Autumn	Y12 Spring	Y12 Summer	GCSE	Y13 Autumn	Y13 Spring	Y13 Summer	Y14 Autumn	Y14 Spring	Y14 Summer	A-Level
Art & Design	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BTEC Business	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Business Studies	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dance	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Design - Engineering	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Design - Food Technology	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Design - Graphic Design & Realisation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Design - Textiles	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Drama	Eating Disorders - Healthy Eating, Food and Feelings	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Double & Applied Science	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
French	Covered in some part by general revision													
German	Covered in some part by general revision													
Geography							Farming Topic - Visit to Farms: Different Cultures							Food Production and Waste - Feeding the World's People
Health & Social Care														
History	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Music	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Physical Education							The Role of a Healthy Diet in Good Health & Fitness							
Punjabi	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Religious Studies	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Urdu	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Extra-Curricular	Environment Club - Growing Fruit & Veg on site (to encourage healthy eating and reduce food waste)			Environment Club - Growing Fruit & Veg on site (to encourage healthy eating and reduce food waste)				Environment Club - Growing Fruit & Veg on site (to encourage healthy eating and reduce food waste)			Environment Club - Growing Fruit & Veg on site (to encourage healthy eating and reduce food waste)			

## Curriculum Overview (2009-10)

### Year 7 Textiles - Water bottle coat (Keeping my water cool in school)

All year 7 students are required to design and make an individual bottle coat cover.

All students make a bottle coat to hold their water bottles in school- this is to keep their water cool.

The main aim of this project is to inspire students to drink more water - as this helps students with part of a healthy lifestyle.

#### Student Design Brief

During my 10 week Textiles project I am required to design and make a bottle coat to keep my water cool in school.

I must remember it has to be: Modern, suitable for school, individual and based on my interests and identity, use a mixture of materials, hand sewing and with some assistance the sewing machine.

#### GCSE PE :

Pupils need to be able to :

Describe and explain the role that a healthy diet plays in good health and fitness; including the function of the seven essential components; e.g. carbohydrates, protein, fats, minerals, vitamins, fibre and water.

# Food Technology

## Year 8 Healthy Eating Project

### Project Outline

The Government is very concerned about the number of Primary school children who are over-weight.

### Design Brief

As a new Primary school canteen manager you have been asked to produce healthy main meals and puddings that follow the Dietary Goals.

### Task 1

Describe in your own words what the design brief is asking you to do and why?

### 2. Research

- List the dietary goals.
- Visit a supermarket and list the main course dishes and puddings on sale under the headings Healthy and Unhealthy.
- Look in recipe books, magazines and on the Internet to find healthy dishes and pictures. Stick these in your project giving reasons for choice.

### 3. Specification

Using all the information gathered so far describe exactly what you have got to do in order to produce a healthy main meal and pudding.

### 4. Design

Complete for both dishes:

- Recipe and method.
- Flow chart
- Reasons for choice
- Labelled sketch

### 5. Practical work

Produce your dishes

### 6. Evaluation

- Complete star diagrams using the views of 2 different people.
- Produce a written evaluation and suggest improvements.

### Week 1

- Introduction to room/course to include Safety, Hygiene and Equipment.
- Quiz on equipment.

## Food Technology

# Year 8 Healthy Eating Project

- Discuss Healthy Eating and Balanced diet in relation to students' own diet and different cultures.
- Discuss next week's practical lesson ie. Coleslaw Salad.
- Write up recipe for coleslaw salad.

Homework.

Complete hazardous kitchen worksheet and get ingredients for coleslaw salad.

### Week 2

- Coleslaw practical. Spot demos to complete each stage.
- Write up method as a flow diagram
- Star diagram analysis and oral evaluation of outcome.

Homework.

Written evaluation of Coleslaw using star diagram headings.

Research cultural types of bread and healthy fillings.

### Week 3

- Design a sandwich. Group discussion of different types of bread and fillings.
- Use Design Brief to produce own design for a healthy sandwich.

Homework.

Get ingredients for next lesson.

Plan own making and sequencing of practical tasks in written format.

### Week 4

- Sandwich practical.
- Present on a plate for group assessment and marking.
- Star diagram and evaluation in pairs to compare results.

Homework.

Research work into toppings and different types of bread base.

### Week 5

- Design a pizza - brainstorm toppings.
- Draw own idea for next week's practical lesson to develop concept of the importance of colour, flavour and texture in food products.
- Write a list of ingredients with quantities for your practical.

Homework.

Prepare ingredients for next week's practical.

### Week 6

- Practical Pizza.

## Food Technology

# Year 8 Healthy Eating Project

- Evaluate results.
- Plan a day's diet around your Pizza.

Homework.

Keep a diary for 2 days recording all the food you eat during this time.

### Week 7

- Discuss healthy plate and portion size.
- Students complete own healthy plate using diary homework.
- Evaluate personal diet.

Homework.

Prepare ingredients for small cakes with a healthy ingredient e.g. Sunflower margarine.

### Week 8

- Practical- small cakes by the All-in-one method.
- Spot demos. Weighing and new skills.
- Discuss use of healthy ingredients, and Quality control of results.

Homework.

Get ingredients for scones.

### Week 9

- Scone practical.
- Discuss suitable and appropriate packaging for Scones.

Homework

Find out about the effects of packaging on the environment.

### Week 10

- Design and make packaging for scones.

End of module.

## **Food Technology Year 9 Scheme of Work**

### **Lessons 1 – 3    Developing a standard product (i.e. biscuits)**

#### **Lessons 1 – 2    Theory**

All pupils to receive N/C level and target-write in planner

#### **Targets**

Learn about the function of ingredients

Learn how to adapt a basic recipe

#### **Core Level**

Introduction to biscuit manufacture (video)

Discuss the function of ingredients in a “Jammy Dodger” biscuit

Find out how a basic recipe can be simply adapted

**Extension Level** Design a flow chart to show how they will produce own adapted biscuit

#### **Resources**

Biscuit production

Biscuit samples

Worksheet: 5.6 – Developing a standard product

Writing frame

Basic biscuit recipe

#### **Homework**

Complete A3 design sheet and prepare practical

#### **Lesson 3        Practical**

#### **Core Level**

All pupils produce own design for a biscuit

Use of spot demonstrations to revise basic skills

Marking and evaluation of results

**Extension Level** Recipes produced by pupils demonstrate a higher level of skill

#### **Homework**

Star Analysis of results. Hand in next week with design sheet.

### **Lessons 4 – 5    Hazard Analysis when producing a product (i.e. lasagne)**

#### **Lesson 4        Theory**

#### **Targets**

Learn how to identify a risk and produce a control check

Learn how to make a lasagne

Investigate the function of ingredients in a sauce

#### **Core Level**

Watch a demonstration and identify hazards when making a lasagne

Worksheet: Flow chart showing the production of a lasagne

**Extension Level** Pupils produce A3 design sheet showing cross-section of a lasagne and a HACCP chart

#### **Resources**

Basic recipe

Worksheet (Flow Chart)

Dem. Ingredients

A3 writing frame

#### **Homework**

Planning for next week’s practical

#### **Lesson 5        Practical**

#### **Core Level**

All pupils produce a lasagne

Spot dem. to reinforce sauce making

Marking and evaluation of results

**Extension Level** Pupils work independently following the recipe

#### **Homework**

Evaluation of results

## Food Technology Year 9 Scheme of Work

### Lessons 6 – 7    Quality Control (i.e. mini Bakewell tarts)

#### **Lesson 6            Theory**

<b>Targets</b>	Learn about the importance of quality control when mass-producing a product. Revise pastry-making and the all-in-one method
<b>Core Level</b>	Pupils watch and participate in demonstration of Bakewell tarts Identify stages at which quality controls need to be made and why
<b>Extension Level</b>	Pupils produce a table showing quality control checks Evaluate tarts and assess quality of product compared with a manufactured product
<b>Resources</b>	Basic recipe Dem. ingredients Bought Bakewell tarts
<b>Homework</b>	Planning of practical

#### **Lesson 7            Practical**

<b>Core Level</b>	Pupils produce own batch of Bakewell tarts Group evaluation of quality of products
<b>Extension Level</b>	Pupils evaluate in small groups the quality of the products produced
<b>Homework</b>	Investigate pizza toppings

### Lessons 8 – 9    Pizza production

#### **Lesson 8            Theory**

<b>Targets</b>	Find out about the different toppings that can be used on the top of pizza and the function of these  Investigate how products are designed to satisfy the needs of different target groups
<b>Core Level</b>	Pupils use research work and basic pizza recipe to produce own design to suit a target group (i.e. teenagers) Sketch and label cross section of design
<b>Extension level</b>	Pupils produce A3 design sheet on own design for pizza
<b>Resources</b>	Basic pizza recipe Research material Recipe books
<b>Homework</b>	Complete design sheet Planning of next lesson's practical

#### **Lesson 9            Practical**

<b>Core Level</b>	Pupils produce own designs for a pizza Evaluation and marking of designs Spot dem. to revise rubbing-in method
<b>Extension Level</b>	Pupils evaluate each others' designs to assess quality of products and suitability for target group

**Food Technology**  
**Key Stage 4 – Year 10**  
**Duration –**

**Unit Title – Nutrition / Basic Skills**

<b>Week</b>	<b>Content / Learning Targets</b>	<b>Support Level</b>	<b>Core Level</b>	<b>Extension Level</b>	<b>IT Opportunities</b>	<b>Resources Materials</b>	<b>Homework</b>
1	Introduction to GCSE Food Nutrition and eating for health	Brainstorming on key words associated with nutrition. Highlight key words on sheet	Structure of course. Revise lower school work on nutrition and NACNE	Nutrition questions on w/s		Revision guide p5: Eating for Health Coursework guide sheet Folder checklist sheet N.C. – levels sheet	Task sheet p4-5 Revision guide workbook: Eating for Health
2	Test knowledge and understanding of NACNE  Design a casing and a suitable filling	Work in pairs Cut and paste matching statements  Guidance on suitable choice of recipe for a casing and filling (modelling pasties)	Pupils look at info Match how and why statements  Learn about a casing and a filling Develop 4 suitable ideas	As for Core Level  Pupils choose own recipe design without help		Activity sheet matching NACNE statements  Worksheets on designing a casing and a filling: 3.11; 3.8 / 3.9 A3 paper	Research into recipes for casings and fillings
3	Begin works on each of main nutrients Protein – types / uses and deficiencies Practical Pupils produce own design for a casing and filling	Spot dem. new skills	Produce table showing sources and uses of main protein goods  Pupils produce a casing and a filling Group evaluation of results	As for Core Level Plus high and low biological protein foods and chemical comp. – amino acids	Produce table on computer	Info on protein p6 – 7 rev. guide  Basic equipment	Star analysis and evaluation of results

## Food Technology Key Stage 4 – Year 10

Week	Content / Learning Targets	Support Level	Core Level	Extension Level	IT Opportunities	Resources Materials	Homework
4	Learn about fats and types, uses, sources and problems of eating		Discuss – 2 types Animal and veg sources and health problems associated with a high fat diet	As Core Level Plus molecular structure of fats	Nutrition programme to identify high fat foods	Worksheet p8 Revision guide	Revision questions on fats
	Plan practical on sweet / savoury flans Revision of shortcrust pastry	Guide pupils to suitable recipe	Give pupils a choice of recipe	Pupils research own recipe	Research recipes on internet Costing of recipe	Recipe sheets Recipe books Design brief Sheet on sweet / savoury flans	Prepare ingredients Work out cost of ingredients in flan
5	Theory on carbohydrates, sources and uses	Simple breakdown of types of carbohydrates Pictures Labels	Types of carbohydrates • Sugars • Starches • Fibre Problems of / risks to health i.e. diabetes			Magazines Revision guide	
	Practical Sweet / savoury flans	Spot dem. – remind pupils of basic skills	Produce simple recipe of a flan. Revise sc. p	Practical – own design		Basic equipment Flan rings / food disks	
6	Quality making Quality control HACCP		Pupils learn the principles of quality making and quality control in relation to cakes Questions	Pupils choose own cake recipe to plan practical Comparison in pairs		“Design and Make It” (Hazel King) p126-127	
	Pupils learn about input, process and output		Pupils produce a table showing input, process and output for a Victoria sandwich			Info sheet p202 Design and Make It folder p202	

## Food Technology Key Stage 4 – Year 10

Week	Content / Learning Targets	Support Level	Core Level	Extension Level	IT Opportunities	Resources Materials	Homework
7	Revise creaming method of cake-making Learn how to use a hand-held electric mixer Learn how to use an electric mixer safely and correctly to produce cake mixture Compare quality and	Pupils given recipe sheet to work from  Guidance given with new skills	Discuss design brief on cakes Pupils work through tasks Relate to key points in lesson 6  Pupils work in pairs and make 2 cakes to compare methods and results		Research recipes on internet	Worksheet: comparison of cakes Recipe sheets	Complete worksheet tasks
8	Pupils learn about vitamins		Pupils learn the uses, basic functions and deficiency diseases associated with vitamins A, B, C and D			Worksheet: making quality cakes 56 p209 – Design and Make It  Revision guide pp10-11	Complete evaluation of practical
9	Pupils learn about the functions, sources and importance in diet of iron and calcium Test knowledge on NACNE Nutrition	Minerals, iron and calcium Functions, uses and deficiency diseases Simple test paper	Pupils complete test on nutrition			Revision guide pp12-13  2 tiers of test paper	Revise for test on diet and nutrition  Research into dessert recipes
10/11	Mini design task on “Just Desserts” to give pupils the opportunity to have a taster of what is expected for GCSE coursework	Borders on A3 Guidance with choice of suitable desserts	Pupils work through tasks on developing and designing a new dessert	Encourage pupils to present design work in an imaginative way using full / busy pages Also choose recipes with a high level of skill	Research into desserts on the internet Produce design tasks on computer	“Just Desserts” task sheet A3 paper	Complete design tasks on desserts

## Food Technology Key Stage 4 – Year 10

Week	Content / Learning Targets	Support Level	Core Level	Extension Level	IT Opportunities	Resources Materials	Homework
12	Pupils produce own design “Just Desserts”	Help given with new skills Spot dem.	Practical – Just Desserts Group evaluation of results against requirements of design brief	Pupils work independently producing own recipe design		Basic kitchen equipment	Evaluation of results in rough and star analysis
	Revise knowledge of how to evaluate work accurately	Examples of completed evaluation to guide pupils	Pupils produce A3 evaluation sheet on “Just Desserts”	Detailed evaluation		Samples of evaluations A3 paper	
13	Pupils learn how to make a cake by whisking method		Dem – gateaux using whisking method			Recipe sheet	Complete any outstanding work for folder check next week
	End of term folder check to check pupils’ progress						

Week	Content / Learning Targets	Support Level	Core Level	Extension Level	IT Opportunities	Resources Materials	Homework
14	Pupils learn the whisking method of cake-making		Practical – whisking method – gateaux			Basic equipment Electric hand whisks Piping bags	Learn work on methods of cake-making for test next lesson
	Test knowledge and understanding of basic methods of cake-making					2 tiers of test paper	

## Food Technology Key Stage 4 – Year 10

Week	Content / Learning Targets	Support Level	Core Level	Extension Level	IT Opportunities	Resources Materials	Homework
15	Topic – bread Find out origin and function of ingredients in different types of bread		Bread-tasting Identify different types, their origin and use Revise work on sensory tasting		Find out countries of origin on internet	Bread samples Sensory tasting word bank	Research in supermarket to expand knowledge of other types of bread and cost
	Mass production of bread – “Chorley Wood Process”	Label diagram of bread-making process	Complete recipe for bread rolls Construct diagram showing how bread is mass-produced			Bread recipes Diagram showing “Chorley Wood Process”	
16/17	Pupils learn how to make a batch of bread rolls	Pupils produce basic bread shapes	Dem. and pupils make a batch of bread rolls	Variety of bread rolls		Basic equipment	Research work into pizza Types of bases and toppings
	Pizza product development	Guidance given to pizza design	Pupils learn about the function of test kitchens Learn how to apply design criteria to designing a pizza	Pupils produce own design		Worksheet on Pizza Product Development Pizza recipes A3 paper	
18	Pupils apply knowledge on bread-making to the production of pizza design	Use basic recipe to guide pupils with designs	Brainstorm ideas for pizza design using design criteria	Pupils investigate and produce own pizza designs	Research on supermarket sites and internet for pizza designs	Basic pizza recipe Research material Worksheet on pizza product development	Complete tasks on worksheet
19	Practical – extension of work on bread-making and product development		Pupils produce their own pizza design			Basic equipment	Rough star analysis and evaluation of results

## Food Technology Key Stage 4 – Year 10

Week	Content / Learning Targets	Support Level	Core Level	Extension Level	IT Opportunities	Resources Materials	Homework
20	<p>Evaluate last lesson's practical</p> <p>Pupils learn how to adapt products to meet different dietary needs</p>	Practical star used to reward results	<p>Pupils use star analysis to evaluate results of last lesson's practical</p> <p>Brainstorm different dietary needs</p> <p>Discuss how recipes can be adapted and why</p> <p>Complete table 8.2 to show how recipes can be adapted</p> <p>Worksheet 8.1 – complete for Shepherd's Pie – suitable for a vegetarian</p>	Detailed evaluation against original design criteria	Star analysis on computer	<p>A3 paper</p> <p>Homework evaluations</p> <p>Adapting products info sheet pp68-79 – "Food Tech" Worksheets 8.1 and 8.2</p> <p>Shepherd's Pie recipe</p>	<p>Prepare practical ingredients for Shepherd's Pie</p>
21	<p>Pupils adapt a recipe for a special dietary need (i.e. vegetarian)</p>		<p>Practical – Vegetarian Shepherd's Pie</p>			<p>Basic kitchen equipment</p>	<p>Evaluate recipe – how successful were the adaptations?</p>
22	<p>Standard food components</p> <p>Plan practical using SFC</p> <p>Pupils learn how to make a tomato sauce</p>	Guidance on how to adapt recipe	<p>Pupils learn what standard food components are and how they are used in the food industry</p> <p>Complete activities pp136-137</p> <p>Basic recipe for lasagne – discuss how the recipe can be adapted to use SFC</p>	Pupils choose own recipe to adapt to show the use of SFC	Complete flow charts on computer	<p>Revision guide p59</p> <p>Design and Make It pp136-137</p>	<p>Revision for test on function of ingredients, adapting recipes and SFC</p>

## Food Technology Key Stage 4 – Year 10

Week	Content / Learning Targets	Support Level	Core Level	Extension Level	IT Opportunities	Resources Materials	Homework
23	End of module test Pupils learn how to use SFC in recipes		Practical – lasagne			Test paper (past exam questions) Basic kitchen equipment	
24	Review test results Pupils learn how to calculate nutritional value of recipe	Only calculate basic nutrients	Go over results of exam questions – model answers Pupils learn how to use food tables using lasagne recipe	Calculate all main nutrients in recipe Produce totals and evaluate against Dietary Reference Values (DRVs)	Look at calculating nutritional value on computer	Lasagne recipe Food table books DRVs	Exam questions Nutritional value of products – 2004
25	Introduce 4 weeks' work on "Food Hygiene Certificate"		Discuss food hygiene and safety in relation to mass production of food Complete tasks 1-8 on worksheet			Design and Make It pp54-57 Worksheet on food hygiene and safety	Complete any outstanding questions
26	Continuation of worksheet on food hygiene and safety		Pupils find out symptoms of food poisoning and main causes; high-, medium- and low-risk foods			Worksheet on food hygiene and safety Design and Make It	Complete worksheet
	Plan practical lemon meringue pie – sauce making; revise shortcrust pastry Theory on sauce-making		Plan practical to revise shortcrust pastry and learn how to make a sweet sauce			Lemon Meringue Pie recipe Sauce making pp84-85 Design and Make It	Prepare practical for next week

## Food Technology Key Stage 4 – Year 10

Week	Content / Learning Targets	Support Level	Core Level	Extension Level	IT Opportunities	Resources Materials	Homework
27	Storage and preservation of foods i.e. chilling and freezing		Pupils learn scientific principles behind chilling and freezing Importance of storage and reheating at correct temperature			Design and Make It Cook Chill pp62-63 Freezing – “All Used Up” (Hazel King) pp84-85	
	Revise shortcrust pastry and learn how to make a sweet sauce	Spot dem. using flan ring and sauce making	Practical – Lemon Meringue Pie			Basic equipment Flan dish Electric whisk Piping bags Freezing – All Used Up	Revise for food hygiene and safety certificate
28	Complete work on freezing food						
	End of unit test – single lesson i.e. food hygiene certificate		Test pupils’ knowledge of food hygiene and safety			Test paper	
29/30	HACCP	Use simple HACCP chart and fill in gaps	Pupils learn what is HACCP in relation to mass production	Produce detailed HACCP chart		Design and Make It pp126-127	
		Practical – biscuits made by creaming method	Learn how to produce a HACCP chart for lemon meringue pie			Video – Biscuit manufacture	Plan practical revision creaming method - biscuits
31	Revise creaming method	Practical – biscuits made by creaming method					
	Risk assessment / Hazards	Learn how to apply risk assessment and HACCP to practicals					

**Food Technology  
Key Stage 4 – Year 10**

<b>Week</b>	<b>Content / Learning Targets</b>	<b>Support Level</b>	<b>Core Level</b>	<b>Extension Level</b>	<b>IT Opportunities</b>	<b>Resources Materials</b>	<b>Homework</b>
32 – 34	Prep sheet for Yr 10 exam					Prep sheet Revision guide	



**The Kings School**  
**Science Department**  
**Key Stage 3**  
**Scheme of Work**

**Year 8**

**Unit 8A**  
**Food and Digestion**



# Unit 8A Food and digestion

## About the unit

### In this unit pupils:

- about different foods and how they can be combined to produce a balanced diet
  - how food is broken down by digestion so it can be used by the body, for energy, growth and repair
- In scientific enquiry pupils:
- consider the extent to which evidence about diet can lead to firm conclusions
  - use a model to explore digestion
  - use chemical tests to identify food types
  - present and interpret data from secondary sources
  - draw conclusions from observations and explain these using scientific knowledge
  - investigate a question about nutrition using secondary sources of information

This unit is expected to take approximately 8 hours.

### Where the unit fits in

This unit draws on ideas about food and nutrition developed in the key stage 2 programme of study. It builds on unit 5A 'Keeping healthy' in the key stage 2 scheme of work and on unit 7A 'Cells'.

The particle model of matter is introduced in unit 7G 'Particle model of solids, liquids and gases' and is revisited in this unit in the context of digestion.

The unit relates to other units that focus on life processes in humans: unit 8B 'Respiration' and unit 9B 'Fit and healthy', which revisits the concept of a healthy diet.

The energy transfer ideas of unit 7I 'Energy resources' are used in the context of digestion. Energy should be distinguished from 'stuff' (food as the energy resource or fuel).

This unit relates to unit 8A(i) 'Exploring materials (food)' and unit 9A(i) 'Selecting materials (food)' in the design and technology scheme of work.

## Prior Knowledge

It is helpful if pupils:

- know that food is needed for activity and growth, and that an adequate and varied diet is needed to maintain health

• know that matter including food consists of particles or molecules which can differ in size



## Language for learning (literacy)

- scientific words relating to the structure of organisms, eg *intestine*, *villus*
- more specialised words relating to nutrition, eg *carbohydrate*, *protein*, *enzyme*
- words and phrases with similar but distinct meanings, eg *take in* and *absorb*, *feeding* and *digestion*
- words that extend their vocabulary, eg *absorption*

Through the activities pupils could:

- show relationships between ideas by using links which show purpose, eg *in order to*, *so that*, and reservations, eg *although*, *unless*, *if*
- select relevant information and link to other information, from a range of sources
- distinguish facts from hypotheses/theories/opinions and consider how far information is complete and helpful

## Resources

- secondary sources to explore the constituents of food, eg *diet software*, *CD-ROMs*, *dietary information leaflets*, *video clips of TV advertisements*, *other literature*, which may include *articles from magazines*
- a range of foodstuffs for testing, sufficient to provide several samples rich in each of the major chemical groups in food, including foods that are found in the diet of other countries
- illustrative material relating to advertising claims for foods, eg *from magazines*
- database and spreadsheet software
- simulation software illustrating digestion and transport of substances in the blood
- a collection of food packaging, including cereal packets showing nutritional contents
- media reports, magazine, newspaper and television advertisements relating to food and diet

# Expectations at the end of the unit

## In terms of scientific enquiry

**most pupils will:** use secondary sources of information to generate graphs or displays relevant to questions asked; recognise that interpretation of evidence about questions of health and diet may be difficult; identify and control relevant variables when investigating the action of an enzyme

**some pupils will not have made so much progress and will:** find information from selected secondary sources about food and diet; generate graphs or displays relevant to questions asked; with help, control relevant variables when investigating the action of an enzyme

**some pupils will have progressed further and will:** choose secondary sources to provide the information needed about food and diet; explain whv interoretation of evidence about questions

## Numeracy opportunities

Lesson 6

Work out energy value in food burned using equation  
Temp. change x Volume of water x 4.2 (divide by mass of

## ICT opportunities

Lesson 6 – demo – datalogging the temperature difference in water for the foods investigated

## In terms of knowledge and understanding

**most pupils will:** name nutrients, fibre and water as part of a balanced diet, identifying examples of foods in which they are found, and describe the role of the main nutrients in the body; use a model to describe how large molecules are broken down during digestion and describe the role of blood in transporting products of digestion around the body

**some pupils will not have made so much progress and will:** name some groups of nutrients and identify some examples of foods in which they are found; describe a balanced diet; recognise that blood transports products of digestion around the body

**some pupils will have progressed further and will:** explain why some nutrients have to be broken down before they can be used by the body and why some foods cannot be digested by humans

## SC1 Opportunity / Assessed task

Lesson 5 – Sc1. Assessment

Salt good or bad? Focus of assessment - Ideas and evidence.

Lesson 11 – Sc1. Assessment

Plan experiment to find out how temperature affects the breakdown of starch by amylase. Focus of assessment planning.



Lesson number	Title	Lesson outline (bold indicates resources to be ordered)
1	<b>On a diet</b>	<p><b>Starter</b> Brainstorm; What does the word diet mean?</p> <p><b>Main Activity:</b> Give out <b>nutrition labels</b> (order from technicians), identify main nutrients in food. Answer questions 1 to 7 in book P4/5 8Aa</p> <p><b>Plenary</b> We need food for - Enjoy Great Health (energy, growth, health) → HW <b>Worksheet 8Aa/3</b></p>
2	<b>Food tests - carbohydrates</b>	<p><b>Starter</b> Name the 7 components needed in a diet</p> <p><b>Main Activity</b> <b>Class practical</b> Testing food for starch and glucose</p> <p><b>Plenary</b> Analysis of results</p>
3	<b>Food tests – proteins and fats</b>	<p><b>Starter</b> What do we need food for (EGH)</p> <p><b>Main Activity</b> <b>Class Practical</b> Test food samples for proteins and fats.</p> <p><b>Plenary</b> Analysis of results</p>
4	<b>Balanced Diet</b>	<p><b>Starter</b> Hold up some examples of food – pupils to identify if contain fats/carbs/proteins - could use coloured cards to represent each)</p> <p><b>Main</b> 8Ab (p6/7) Answer questions 1 to 9.</p> <p><b>Plenary</b> Check pupils' understanding of energy being measured in kJ</p> <p><b>HW</b> Worksheet <b>8Aa/4</b></p>
5	<b>Sc1. Assessed task Different &amp; Special Diets Best books</b>	<p><b>Starter</b> True/false activity about food (use two colours of card for each pupil to show ans.)</p> <p><b>Main Activity</b> : Assessed task W/S 8Ab/7 Salt – good or bad?</p> <p>Read info on pages 8&amp;9 and design a multiple choice quiz using the information.</p> <p><b>Plenary</b> Try out quizzes between groups.</p>
6	<b>Energy in food</b>	<p><b>Starter</b> Look at <b>food labels (ORDER FROM TECHNICIANS)</b> to identify food groups and note energy values.</p> <p><b>Main Activity</b> <b>Class practical</b> Compare energy values of breakfast cereal and pasta. Work out energy values (temp rise x volume of water x 4.2 /mass of food)</p> <p><b>Plenary</b> Discuss energy values of different types of carbohydrate</p>
7	<b>Guts</b>	<p><b>Starter</b> Brainstorm – what is digestion</p> <p><b>Main Activity</b> Read 8Ac – fill in worksheet <b>8Ac/2 Demo</b> Peristalsis using sock and ball.</p> <p><b>Plenary</b> – Summarise functions of different parts of digestive system. <b>Homework</b> learn parts of digestive system.</p>



8	<b>A model gut</b>	<p><b>Starter</b> Identify parts of digestive system.  <b>Main Activity Class practical</b> – Model Gut using visking tubing with starch/glucose solution  <b>Plenary</b> Use results to compare molecule size of glucose / starch</p>
9	<b>Teeth and Decay *optional*</b>	<p><b>Starter</b> What is physical breakdown of food?  <b>Main Activity W/S 8Ac/4</b> Teeth and decay Order <b>model teeth/skull</b> to demo  <b>Plenary</b> How else can we make food smaller (ie chemical digestion)  <b>Homework W/S 8Ac/3</b> In the guts 2</p>
10	<b>Enzymes</b>	<p><b>Starter</b> Use <b>pop-it beads</b> to show how food is broken down  <b>Main Activity</b> Amylase and starch <b>class practical</b> (spotting tile method)  <b>Plenary</b> Review results.</p>
11	<b>Sc1.Assessed activity Effect of temperature on amylase/starch reaction Best books.</b>	<p><b>Starter</b> How could we speed up a chemical reaction?  Sc 1 to focus on predicting and planning skills. Use the terms independent and dependant variables/factors.  <b>Main Activity</b> Use planning sheets (In Staffroom – Science – KS3 activities folder on computer server – can be customised then saved) to plan practical  Carry out practical planned  <b>Plenary</b> Discuss results</p>
12	<b>Sc1 continued</b>	
13	<b>The Liver and the Pancreas</b>	<p><b>Starter Worksheet 8Ad/4</b> cut and paste  <b>Main Activity 8Ad –demo</b> cooking oil and bilesalts (washing up liquid) – emulsification of fats.  Answer 8Ad questions 1 to 4.  <b>Plenary</b> Go over answers. <b>Homework 8Ad/6</b> Digestion 1.</p>
14	<b>In the blood</b>	<p><b>Starter</b> True/False card activity  <b>Main Activity 8Ae</b> In the Blood Read and answer questions 1 – 9.  <b>Plenary</b> Review answers</p>
15	<b>Revision Assessed task Best books</b>	<p><b>Starter</b> Read <b>Summary Sheet</b> and do <b>Quick Quiz</b>.  <b>Main Activity</b> Assessed task levels 5-7 or levels 3-6  <b>Homework</b> Revise for test</p>
16	<b>Test</b>	End of unit test





**The Kings School**  
**Science Department**  
**Key Stage 3**  
**Scheme of Work**

**Year 9**  
**9B**

**Fit and Healthy**



# Unit 9B Fit and healthy

## About the unit

### In this unit pupils:

- how the human respiratory, digestive and circulatory systems interact to maintain activity
  - about the functions of the skeleton
  - about ways in which diet, exercise, smoking and drugs affect health
- In scientific enquiry pupils:
- find out how scientists linked diseases to a lack of specific nutrients
  - consider how the work of different scientists has contributed to a medical advance
  - work collaboratively to collect sufficient valid and reliable data to form conclusions
  - evaluate conflicting evidence
  - investigate reaction time, considering how factors which cannot be controlled can be taken into account

Teachers should make sure that work on tobacco, alcohol and drugs and eating disorders in this unit is consistent with their school's PSHE programme. Teachers will be aware of the need for sensitivity to the circumstances of individual pupils and their families.

This unit is expected to take approximately 8.5 hours.

### Where the unit fits in

The unit builds on unit 7A 'Cells', unit 7B 'Reproduction', unit 8A 'Food and digestion', unit 8B 'Respiration', unit 8C 'Microbes and disease' and unit 9A 'Inheritance and selection'.

Careful planning of the work in this unit alongside the school's drugs policy and the PSHE programme will be required, particularly when pupils are introduced to the effects of smoking, alcohol and drugs, etc.

This unit provides opportunities to revisit and revise work on nutrition and human respiration and the function of the circulatory system. With some pupils, teachers may wish to concentrate on some of the new topics, extending activities, and with others to spend more time on revision of previous work.

This unit relates to unit 20 'Twentieth-century medicine' in the history scheme of work and to unit 9A(i) 'Selecting materials (food)' on special diets in the design and technology scheme of work.

### Prior Knowledge It is helpful if pupils can:

- describe a balanced diet and know this is required for healthy growth
- name the gases exchanged in the alveoli of the lungs
- know that developing foetuses obtain materials from the mother's blood supply through the placenta



## Language for learning (literacy)

Through the activities in this unit pupils will be able to understand, use and spell correctly:

- names of vitamins and minerals
- specialised words, eg *cilia*, *emphysema*
- words with different meanings in scientific and everyday contexts, eg *addiction*, *fit*
- words and phrases relating to scientific enquiry, eg *trial*

Through the activities pupils could:

- discuss and evaluate evidence to arrive at a considered viewpoint
- follow a demonstration and make notes which are then used in another task

## Resources

Resources include:

- secondary sources providing data about effects of smoking, effects of alcohol on reaction time, heart disease
- normal and decaffeinated cola
- leaflets, articles, etc about fitness regimes
- secondary sources providing data about illnesses caused by dietary deficiencies and about sports-related injuries
- information about replacement hip/knee joints
- secondary sources illustrating how joints work
- secondary sources illustrating how energy from food is used
- slides showing smokers' and non-smokers' lungs
- a variety of sources of information about health and disease over the last 100 years

## Expectations at the end of the unit

### In terms of scientific enquiry

**most pupils will:** select and make effective use of secondary sources of information about health, indicating how strongly evidence supports or does not support a conclusion; plan how to carry out appropriately an investigation using human subjects

**some pupils will not have made so much progress and will:** select information from secondary sources about health; use data obtained to draw a conclusion; investigate a question using human subjects safely and appropriately

**some pupils will have progressed further and will:** synthesise information about health and identify limitations in the data assembled; explain some methods adopted to carry out an investigation on human subjects safely and appropriately

### Numeracy opportunities

### ICT opportunities



### In terms of knowledge and understanding

**most pupils will:** describe how the body uses the energy in food, representing respiration by a word equation; describe some effects of diet, smoking, alcohol and other drugs and of exercise on some organ systems; explain how different body systems work together in a healthy individual

**some pupils will not have made so much progress and will:** describe some effects of diet, smoking, alcohol and other drugs and of exercise on the body and on a developing foetus

**some pupils will have progressed further and will:** describe how cells in the respiratory system are adapted for their purpose and how they may be damaged by smoking and other forms of air pollution; represent respiration by a symbol equation

### SC1 Opportunity

## MFL Healthy Eating Audit

### **GERMAN :**

#### **Year 7**

Packed lunches, healthy vs unhealthy snacks

#### **Year 8**

#### **Year 9**

Snacks, food & drink, cooking, recipes

#### **Year 10**

Coursework on HEALTHY EATING ( also includes exercise, dangers to health etc)

#### **Year 11**

Covered in some part by general revision

### **FRENCH**

#### **Year 7**

#### **Year 8**

#### **Year 9**

Snacks, food & drink, cooking, recipes

#### **Year 10**

Coursework on HEALTHY EATING ( also includes exercise, dangers to health etc)

#### **Year 11**

Covered in some part by general revision

# **Unit 9: The Impact of Diet on Health**

**NQF Level 2: BTEC First**

**Guided learning hours: 60**

## **Unit abstract**

It is important for health and social care workers to have a good understanding of the principles of nutrition in order to help them maintain or improve their own health as well as that of the individuals that they care for. It is, therefore, important for those embarking on a career in health and social care to gain knowledge and understanding of, for example, the dietary needs of individuals, the importance of a balanced diet, and the effects of diet on health. The aim of this unit is to develop understanding of these key areas.

Learners will initially consider the dietary needs of individuals at different life stages, including during pregnancy and breastfeeding. The components of a balanced diet will be considered, followed by exploration of the effects on the health of individuals if the diet is not balanced.

The specific dietary needs of two patients/service users with different conditions will be examined, with the production of a two-day diet plan to meet these needs. Learners will then go on to study safety issues in relation to food, and principles of good practice in relation to food hygiene.

This is a specialist unit in the Edexcel Level 2 BTEC First Diploma in Health and Social Care. However, if centres are designing programmes of study to support learners intending to progress on to the BTEC National Diploma in either Early Years, Care or Health Studies, this unit will provide a valuable foundation for the further study of diet and nutrition.

This unit provides opportunities for the production of evidence towards the Level 2 key skills in communication, information and communication technology and improving own learning and performance.

## **Learning outcomes**

**On completion of this unit a learner should:**

- 1 Investigate the **dietary needs of individuals at different life stages**
- 2 Examine the **effects of unbalanced diets on the health of individuals**
- 3 Investigate **specific dietary needs of patients/service users**
- 4 Explore the principles of **food safety and hygiene**.