



Healthy high energy food for athletes is one of the key elements of creating a successful Olympic Village. Although athletes bring their own food and chefs with them once they have finished their events they may be keen to sample some local food. The next Olympics will be held in the UK in a working class area that is famous for its pie and mash. These pies were traditionally made with eels from the Thames or minced meat and are still popular today. Pies were served with mashed potato and a fresh parsley gravy known as liquor .

Design a pie and mash meal with a modern twist suitable for athletes competing in London's 2012 Olympics. You need to present at least one of your ideas as a finished menu item with full recipe, costing, & images. You will also need to produce a leaflet for our guest athletes giving the background history of this classic meal.

TEACHERS NOTES - The resources are based around pupils using their knowledge by researching the food culture of the geographical area that the London Olympics are being held to generate ideas. The pie concept exists in many other continents and these should also be researched for ideas generation. For example the empanadas of Latin America, filled steamed buns from Asian cuisine. This resource is suitable for pupils in KS3.

How does the activity link to the Active Kids Get Cooking Challenges?

The meals in the presentations will help your pupils to start planning these Challenges. The design sheet will also help them to record their thoughts as they work through the Challenge.



The AKGC Secondary Challenge

Silver Award

Marvelous meals

Plan and cook a main meal which could be served to older people in a home.

High energy carbohydrate rich foods are also suitable for older people in smaller portions. Make sure you understand the energy in/energy out needs of this group when planning your meal.

Gold Award

Foods of the World – Plan and prepare a range of recipes that use authentic ingredients from a country or region of your choice e.g. Europe, Asia, Africa. Cook one recipe, emphasising its traditional aspect.

The resources include 4 presentations showing the following:

1. **Traditional pie, mash and liquor** – recipes taken from traditional pie shops still serving today .
2. **A Modern twist** – a meat & vegetable pie in a wholemeal pastry case with pumpkin mash and onion gravy.
3. **Vegetarian** – Chunky vegetables with a parmesan crust , spinach mash with a tomato and red pepper liquor
4. **The London smokehouse** – lower fat wholemeal oil based pastry with a smoked fish filling served with kale mash and roasted balsamic tomatoes

Preparing a traditional meat pie, mash and liquor - This presentation shows the practical skills required to prepare filling and mashed potato for a pie. In this presentation a ready made short crust pastry has been used.

The recipe presentations you might like to try or adapt. Use these to provide pupils with ideas of the types of ingredients they could put together for their pies & mash. Pupils could also try out the ideas by following the step-by-step instructions before they come to design and make their own.



A brief outline of a way to tackle the Design and Make Activity

Design and make a pie and mash meal that has its origin in the area of the London 2012 Olympic Village. Using a modern twist the three elements of this meal the pie (pastry and filling) , mash, liquor (gravy) can all be given a contemporary make-over.

Getting started –

1. Introduce the Olympics and its philosophy.
2. Use the '**Getting started**' presentation to inform students of background to pies in the traditional working class diet of London. Discuss the different types of pies in international cuisine an internet search will reveal a large number from all over the world from South American to Scandinavia. All can be used to get ideas for the pupil's own pies.
3. Start discussing the idea that we all need a balanced diet and ask if they can think of any extra needs that athletes may have. Talk about balancing foods and how this can be related to the kind of ingredients that may go onto pies and mash.
4. Use the presentation to introduce the Design and Make Activity for designing a pie and mash meal and the templates to lead pupils through the task. Allow pupils time to investigate foods which have similarities. A practical activity could be making one, some or all of the recipes shown on the four recipe presentations. The outcomes of these could be tasted and results recorded and used to help their own designs.
5. The pupils could make their pie and mash concept and present their dish explaining how it meets the brief.

Food based activities for a cross curricular project.

These resources are a great way to introduce the Olympics and to encourage the pupils to investigate the Olympic movement. The presentations give comprehensive coverage of a range of skills and recipes which use a variety of ingredients and reflect how to incorporate new ideas into a traditional format.

Here are some ideas for areas of research that can be carried out with/by pupils and some templates to use through the activity.

The Olympic Movement.

Originally the Olympics took place in ancient Greece. The modern Olympics were re-introduced in the late nineteenth Century. Frenchman, Pierre baron de Coubertin was a leading figure in this revival. In the first instance it was only amateur athletes who



were allowed to compete, but in the 1980's several events were opened to professional athletes too. The Olympic Games have become one of the foremost sporting events in the world. Check out the website http://www.olympic.org/uk/index_uk.asp

The London Olympics

The decision on where to hold the Olympics is of major significance for the local population as well as the host country itself. A vast area of South London has been cleared to make way for the new Olympic village. Many people had to be rehoused and businesses relocated to allow this to happen. This is in the hope that an area that was economically depressed will be given a new lease of life with 12,000 new jobs the majority of which will go to local people, better transport and infrastructure plus a legacy for the future. This legacy will include better healthcare and education within the rejuvenated area. Some of the sporting facilities will also remain

Athletes competing in the Olympics – dietary requirements.

Use this section of the resources to learn about healthy eating linked to exercise and fitness. With the pupils investigate different foods through the Eatwell plate see www.activekidsgetcooking.org.uk

Healthy eating is the same whether people are participating in sport or not. Athletes should be encouraged to eat the balance of foods as depicted by the Eatwell plate. Athletes within the village will have a personalised, specialist diet which they follow rigorously whilst they are competing. There are many who visit for whom this is their first time in the UK and may be really keen to sample part of the United Kingdoms culinary heritage.

Pupils could identify which sections of the Eatwell plate the ingredients for the pie and mash they have chosen come from. They could suggest accompaniments to their dish to complete the meal and use ingredients from other sections.

The following worksheets could be used with pupils to help structure their design task. They can be modified depending on whether they are being used by primary or secondary pupils.

The following pages contain some useful materials for ideas generation



My ideas for a pie and mash meal –

Ingredients for pastry	Ingredients for filling	Ingredients for liquor/gravy
Draw and label some ideas here	Draw and label some ideas here	Draw and label some ideas here



My chosen idea::

Describe how the completed meal will look:

Chosen ingredients:

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Recipe name:



Ingredients:	Equipment:
Method:	



My finished pie and mash meal looked like this (draw a picture or use a digital photograph).



Costing sheet

If your concept is to be sold at the Olympics with the intention of making a profit you have to work out the selling price. Depending on cost of overheads (staff, rent, energy bills, PR and many other factors) the mark up in restaurants tends to vary from between 40% - 66%. The higher the mark up the more gross profit (before tax) you will make. In some restaurants this can be much higher.

Here are some examples

Food Cost(%)	Number to multiply food cost by	The food cost	The selling price	Gross Profit (%)
60	1.66	1.20	£1.99	40
55	1.75	1.20	£2.10	45
50	2	1.20	£2.40	50
45	2.22	1.20	£2.66	55
40	2.5	1.20	£3.00	60
33.5	3	1.20	£3.60	66.5

Source : adapted from The Theory of Catering – Foskett, Ceserani & Kinton (10th Edition)

We have given a food cost here of £1.20 but you need to work out the cost of the food you have used for your dish.

You can do this on a spreadsheet and save it for other projects. Once you have worked out the cost you can compare your selling price to other similar products as another factor always comes into play here which is “what the market will bear”. Some products are loss leaders for companies but they are kept on the menu as it keeps people using their business whilst other products are incredibly profitable. Many restaurants make a lot more profit from drinks than from food as there are far less labour costs involved in their sale and virtually no waste. Discuss with your pupils some obvious products that might belong to this group. Ingredients can vary in price for many different reasons these include weather, poor harvests, crop devastation by pests and global demand.



Here's example of costing a recipe for vanilla & almond cake

Ingredient	Amount used g/ml	Cost of pack	Weight of pack	Cost per 100g/ml	Cost per g/ml	Cost
Butter	100g	1.25	250g	0.50	0.005	.50p
* 1 vanilla pod	1	5.99	2	2.99 each	n/a	2.99p
Flour	100g	1.34	1500g (1.5kg)	0.09	0.0009	.9p
Soft brown sugar	120g	1.65	1000g (1kg)	0.165	0.0017	.20p
Ground almonds	120g	*1.78	200g	0.89	0.0089	1.07p
Eggs	4 (approx 85g each)	2.50	12 eggs	0.208p each		.83p
Recipe cost						6.49p

- **Vanilla pods** were sold by number not weight
- The almonds were on special offer for **79p** but the normal price was used as it will not give the true cost over time

Once a recipe has been priced its important to look at the ingredients and see if any savings can be made. Immediately you can see that if you replaced the vanilla pod with vanilla extract it would reduce the cost here significantly. A 100ml bottle of vanilla extract sells for £6.49 and you would need 1 x 5ml spoon at a cost of 3.5p a significant saving from a £2.99 vanilla pod. Your recipe would then cost £3.53. Food companies constantly keep an eye on the cost of their raw ingredients because of the factors that affect their price over time.



Profitability is a key ingredient for all businesses to be successful.

Use the table above as a guide to setting up a costing spreadsheet in excel on your computer. Remember to include all the ingredients however small they are such as salt as they all add up in a recipe once its made in bulk. You can express your recipe in percentages as well as weights. This is known as the formulation and would be used in a factory setting. This is essential when recipes are scaled up for large scale production. Take cinnamon as an example. If the amount of cinnamon is 0.5% of your recipe it will stay as that however large a batch you make. Adding pinches or half teaspoons isn't easy to work out for manufacturers. This type of exercise can help pupils recognise where maths skilled are needed in the workplace.



Write a few sentences to describe the recipe that you have made and any changes you would like to make to how you have worked or the finished pie, mash or gravy.

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