

DT Y5/6 Cooking & Nutrition Healthy Bolognese	Concept	Enquiry Objective	Activities	Vocabulary	Resources
Week 1 & 2	Research	<p>To understand where food comes from.</p> <p>I know that beef is the name of meat from cattle (cows)</p> <p>I know how beef is reared and processed</p> <p>I have an understanding of the ethical issues around the way in which cattle should be farmed.</p>	<p>Attention grabber</p> <p>Ask the children whether they like spaghetti Bolognese. The children work in pairs to write a list of ingredients that might be used to make spaghetti Bolognese. Have all the children got the same ingredients? Which are the same and which are different?</p> <p>The children will design and make their own bolognese sauce.</p> <p>Watch the video 'BBC - Spaghetti bolognese' on VideoLink, describing the dish and giving an insight as to where the main ingredient, beef, comes from (If you want you can stop at 3:51– this is when the video moves onto pasta!).</p> <p>Ask the children where they think the other ingredients of the sauce might come from.</p> <p>Main event</p> <p>Watch the video: 'Tesco- Burly Beef' on VideoLink. Ask the children:</p> <ul style="list-style-type: none"> • What did they learn? • What do they think about the farm? • Do they think all farms are like this one? <p>Vegetarians, vegans or children with a religious background (such as Hinduism) may share differing points.</p> <p>Depending on the way in which the clip sparked the children's interest, ask them to make one of the following posters:</p> <p>Beef: From farm to fork</p> <ul style="list-style-type: none"> • An educational poster for younger children outlining the process that brings beef to our supermarket shelves. <p>Cattle welfare</p> <ul style="list-style-type: none"> • Children can use the link: . • This presents specific points to ensure that beef cattle are well looked after – these tie in with the RSPCA's 'Five Freedoms', that every animal is entitled to freedom. <ol style="list-style-type: none"> 1. From hunger and thirst – by providing enough water and the right amount and type of food to keep them healthy. 2. From discomfort – by making sure the animal has the right shelter and somewhere comfortable to rest. 3. From pain, injury and disease – by preventing the animal from getting ill or injured and making sure they get treated rapidly if they do. 	Beef Reared Processed Ethical Diet Ingredients Supermarket Farm	<ul style="list-style-type: none"> • Whiteboards and pens (per pair of pupils) • Access to the internet for research • Link: 'BBC- Spaghetti bolognese' on VideoLink • Link: 'Tesco - Burly Beef' on VideoLink

			<p>4. To behave normally – by making sure animals have enough space, proper facilities and the company of other animals of their own kind. 5. From fear and distress – by making sure their conditions and treatment avoid mental suffering.</p> <p>Remind children that a poster should be eye-catching and include simple key points that are easy to read, ie: not too much writing. This poster could be simply presented as a list of 'Dos' and 'Don'ts'.</p> <p>*Access to the internet would enable children to recap information from the video and research additional facts and figures.</p> <p>Key questions</p> <ul style="list-style-type: none"> •What ingredients go into a bolognese? •Do you know where these ingredients come from? •How do cattle find their way onto our supermarket shelves as beef? •Do you think it is fair to eat meat? Why/Why not? •Is it important that cattle and other animals we eat are well looked after? Why? <p>Wrapping up</p> <p>The children share their posters with the class, discuss what the children have found out about the way cattle can be kept and how they should be kept. Do the children have a view on free-range or organic products?</p> <p>* Ask children to begin collecting the following for 'Lesson 4: Mamma-mia what a tasty, healthy bolognese!':</p> <ul style="list-style-type: none"> • Supermarket bolognese packets (low and high priced, jars and ready meals) • Empty jars (the bigger the better) <p>*You will also need to ask parents to help during the making of the bolognese in 'Lesson 4' (unless you have access to an adequate number of adults within the school who can help).</p>		
<p>Week 3 & 4</p>	<p>Research</p>	<p>To understand the term 'healthy'.</p> <p>I know what foods make up a balanced diet</p> <p>I know how a recipe can be adapted to make it healthier</p> <p>I can use keywords to research for alternative ingredients for a well-known dish</p> <p>Based on my research I can suggest healthy substitutions and additions to a recipe.</p>	<p>Attention grabber</p> <p>Choose two bolognese sauces for children to taste. Use two quite different examples, such as a standard supermarket brand and a more gourmet version or homemade sauce, with a variety of ingredients and packaging. Then:</p> <ul style="list-style-type: none"> •Heat both sauces and let the children taste them. •Show the children the packaging, but do not let the children know which sauce belongs to which packaging. •Ask the children their preference and why. Record their responses. •The children decide which sauce they think is healthier. •Discuss what 'healthier' means and why they came to that conclusion. 	<ul style="list-style-type: none"> •Beef •Reared •Processed •Ethical •Diet •Ingredients •Supermarket •Farm •Balanced 	<p>Whiteboards and pens (one per pupil)</p> <p>Two beef bolognese sauces for children to taste test. * If you have vegetarians in your class, also provide similar examples of bolognese sauces without beef.</p> <p>An enlarged photocopy of the nutritional value for each sauce you have bought or a photograph (one per pair of pupils) or display this</p>

•Reveal the packaging that each sauce came in – would these examples influence their buying decision? Why?

Give the children photocopies of the nutritional values of each sauce or show them on your interactive whiteboard. Ask the children what they notice about the ingredients and nutritional values:

- What values are different – by how much?
- What might the significance of that difference be?
- Compare the ingredients list – ingredients are always listed by quantity, with the main ingredient put first.
- Discuss the similarities and differences in ingredients and quantities – why might they vary? Do the ingredients explain the differences in nutritional values?

Children’s opinions as to which sauce is healthier may differ here, some may feel that a high salt or saturated fat content outweighs the benefits of having the highest percentage of tomato. It is likely that ‘RDI’ (Recommended Daily Intake) will be included on the label next to each nutritional value – ask the children what this refers to.

Main event

Research (15 minutes)

The children work in table groups to invent two different healthy adaptations of a basic bolognese recipe and ultimately make one of them in Lesson 4.

The children familiarise themselves with the ingredients that might be found in different bolognese recipes.

Ask the children to work in pairs using a search engine to look for recipes online using the phrases ‘unusual bolognese recipe’, ‘different bolognese recipe’, ‘vegetarian bolognese recipe’ and ‘alternative bolognese recipe’.

The children make a note of any ingredients or quantities that are noticeably different from recipe to recipe.

Ask the children to share any recipes that substitute, add or use very different amounts of ingredients. Do the additions/variations found make the recipe more or less healthy?

Plan (15 minutes)

Divide children into their teams (two teams per table) and give the children a copy of the sheet on link: ‘NHS- Eatwell guide’ which shows a plate divided proportionally into the different food groups we should be eating per day.

Create a definition of what a healthy meal should be and record and save this for the next lesson; for example, ‘A healthy meal should...’

- Include at least three portions of vegetables (per serving)
- Be made from whole ingredients
- Have as little added saturated fat, added salt or chemicals in as possible

information on the interactive whiteboard

Access to computers/tablets that are connected to the internet (one per pair of pupils)

Recipe printouts

Print

Recipe on link: ‘BBC Food- Easy spaghetti bolognese recipe’ printed (one between each team)

Sheet on link: ‘NHS- Eatwell guide’

			<p>Discuss:</p> <ul style="list-style-type: none"> •What foods can be added in abundance •Which foods are not healthy •Which foods won't compliment the other flavours of a bolognese sauce <p>Give each team a copy of the recipe from link: 'BBC Food- Easy spaghetti bolognese recipe'. The children read the recipe and decide together on at least three adaptations they are going to make to the recipe to make it healthier. For example:</p> <ul style="list-style-type: none"> •adding healthy ingredients •substituting ingredients •reducing the number of ingredients that are high in fat or salt <p>In their separate table teams, and referring to the sheet on link: 'NHS- Eatwell guide', the children decide how they will make their recipe more healthy. The children consult the other team in their table group to make sure that the adaptations they have chosen are not the same because each table needs two different recipes.</p> <p>When the children's amendments are finalised, each team records their new recipe ingredients, including quantities.</p> <p>Key questions</p> <ul style="list-style-type: none"> •What ingredients did you expect to be included? •Are any of these ingredients surprising? •What might that ingredient add to the recipe? •How are the ingredients/quantities different/the same in the recipes you have found? •Is there a difference as to how you prepare or store the two products? •What might you add? •What might you remove? •How will 'X' change the sensory characteristics of the dish? •How might that alter the nutritional information of the dish? <p>Wrapping up</p> <p>Ask both teams in each group to share their healthy adaptations with the class – do all pupils agree that the adaptations are for the better/healthier?</p>		
<p>Week 5</p>	<p>Plan Design</p>	<p>To adapt a traditional recipe.</p> <p>I know that the nutritional value of a recipe can change if you remove, substitute or add additional ingredients I can calculate and compare two adapted bolognese recipes using a nutritional calculator.</p>	<p>Attention grabber</p> <p>The children familiarise themselves with the two bolognese recipes that they came up with in 'Lesson 2: What could be healthier?'. The children will be making just one of these sauces in 'Lesson 4: Mama mia! What a tasty, healthy bolognese'; the healthier of the two recipes. Re-cap what it means for a recipe to be healthy – ask the children for the definition decided upon in 'Lesson 2: What does healthy look like?'.</p>	<ul style="list-style-type: none"> •Beef •Reared •Processed •Ethical •Diet •Ingredients Supermarket •Farm •Balanced 	<p>Have ready</p> <ul style="list-style-type: none"> •Whiteboards and pens (one per pupil) •Each group's ingredient list from 'Lesson 2: What does healthy look like?' •Access to computers or laptops to access the link: 'Very Well Fit - Nutrition Calculator'

		<p>Based on this information I can decide which recipe is healthier</p> <p>I can write an amended method for my recipe to incorporate the relevant changes to ingredients.</p>	<p>Show the children how to use the calculator on link: 'Very Well Fit- Nutrition Calculator' so that the children can then work out the nutritional values of their two recipes.</p> <p>Ask the children:</p> <ul style="list-style-type: none"> •In a nutritional table, which figures should be kept low and which can be higher? •What is our recommended daily intake? •Why have you decided that your chosen sauce is healthier? •Did other members of your group disagree with your choice? Why? <p>Main event</p> <p>Nutritional values (10 minutes)</p> <p>Each team will use their ingredient list from 'Lesson 2: What does healthy look like?', inputting the ingredients and finding out the nutritional values of their recipes on the 'Nutrition Calculator'.</p> <p>Both teams download and print a copy of their nutritional label and compare to decide which recipe is the healthiest.</p> <p>This may cause some debate and ultimately require an unbiased third opinion, but the one deemed healthier is the one that the children will make in 'Lesson 4: Mama mia! What a tasty, healthy bolognese'.</p> <p>Recipe adaptation – Ingredients and method (20 minutes)</p> <p>Each table knows which sauce they are going to make next lesson, the children write up the ingredients and method of their recipe.</p> <p>Give each pupil a copy of the recipe on link: 'BBC Food - Easy spaghetti bolognese recipe'. The children work as a table to amend the recipe – taking away, substituting and adding ingredients from their recipes. You could copy and paste the recipe into a Word document so the children can digitally amend the method rather than creating it from scratch.</p> <p>If the children's bolognese is to be successful then they all need to be following the same method, each should discuss the steps as a group before it is recorded.</p> <p>Extension: Each team should give their recipe a name and come up with a brand name that represents the values of their product.</p> <p>Wrapping up</p> <p>Children share their team's final recipe adaptations and explain why this is the healthier option.</p> <p>Encourage children to feedback on the recipes in relation to aspects of taste and health.</p> <p>Confirm with each group what their ingredient list includes so that you can gather these ingredients for making next lesson.</p> <p>Ask children to continue collecting supermarket bolognese packets (low and high priced) for next lesson.</p>		<ul style="list-style-type: none"> • Optional: Access to a greater number of computers or laptops for each group to type up their recipe •Paper and pens for groups to handwrite their recipes <p>Print</p> <ul style="list-style-type: none"> •Recipe on link: 'BBC Food - Easy spaghetti bolognese recipe' printed (one between each team) •Sheet on link: 'NHS - Eatwell guide' •Link: 'Very Well Fit - Nutrition Calculator' – printed per group
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<p>Week 6</p>	<p>Make Evaluate</p>	<p>To complete a food product</p> <p>I know how to avoid cross-contamination</p> <p>I can clean surfaces and equipment hygienically.</p> <p>I know how to hold and use equipment safely.</p>	<p>Play the part of the Teacher video: Mamma mia! What a Healthy Bolognese! demonstrating the basic method children will follow to make a bolognese sauce as described in the recipe on link: 'BBC Food - Easy spaghetti bolognese recipe'. During the video ask the children to refer to their own recipe method and stop the video at various points to ask them what they might do differently. Draw the children's attention to:</p> <ul style="list-style-type: none"> •The cutting of the onion •Not mixing chopping boards (red for meat and green for vegetables) •How meat should be cooked properly (beef will go from red to a brown colour and should be hot all the way through not just on the outside) <p>Explain what is meant by cross-contamination: Cross-contamination is how bacteria can spread. It happens when liquid from raw meats or germs from unclean objects touch cooked or ready-to-eat foods.</p> <p>It is very important to wash your hands before cooking, keep raw and cooked foods separate and use clean equipment for each raw or cooked food you prepare and handle. Do not use dirtied equipment across multiple foods. Germs that have been passed onto cooked food that gets consumed, could make a person ill with food poisoning.</p>	<p>Beef Reared Processed Ethical Diet Ingredients Supermarket Farm Balanced</p>	<p>Watch</p> <ul style="list-style-type: none"> •Teacher video: Mamma mia! What a healthy bolognese! <p>Have ready</p> <ul style="list-style-type: none"> •Each group's final recipe (ingredients and method) from 'Lesson 3: Adapting and improving a recipe' (one per pupil) •Each group's required ingredients for their recipes •Access to a cooker hob •Cooking utensils: <ul style="list-style-type: none"> o Chopping boards (red and green) o Peelers o Knives o Pans o Wooden spoons o Graters o Garlic crushers •A collection of supermarket bolognese sauce packaging (low and high priced) •Empty, clean jars (one per pupil) •Thin card (for children to cut to size to fit their jars) •Each group's nutritional labels for their final recipe from 'Lesson 3: Adapting an improving a recipe' – photocopied (one per pupil) *An adequate number of additional adult helpers (either parents or TAs) <p>Print</p> <ul style="list-style-type: none"> •Recipe on link: 'BBC Food- Easy spaghetti bolognese recipe' printed (one between each team)
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<p>Week 7</p>		<p>To complete a food product I can use equipment safely, including knives, hot pans and hobs I can carefully follow a method to make a recipe I know how to chop an onion I can design appealing packaging that reflects my recipe.</p>	<p>Attention grabber</p> <p>Main event</p> <p>Plan (10 minutes) The children work together to prepare their adapted recipes. Encourage pupils to think about the jobs they need to do and divide these so that everyone has a task. The children will need to prepare their working area, ingredients and their own personal hygiene before they begin. Make pasta for the children to have with their sauce or let the children can take their bolognese sauce home in their jars. Making (20 minutes) You may want children to cook at separate times so when some groups are cooking, the rest of the class are making their bolognese jar labels. Cooking The cooking of the bolognese will require close supervision by at least one adult per group given the use of hot pans and oil. Remind the children that they must be very careful and sensible and listen to the adult they are with. You may want children to work on each step of the method in pairs to avoid crowding. The children refer to the instructions that they wrote in to complete the cooking process. Product design Give children some card and ask them to measure it and adjust the size as necessary so that it fits comfortably when wrapped around their jar (ask them to try to share an A4 piece to avoid waste). Using scrap paper, children complete a rough design of their bolognese label. The children should take inspiration from any bolognese packaging that has hopefully been brought in from home. The children design a label that represents their bolognese sauce considering:</p> <ul style="list-style-type: none"> • Colours used • Drawings of the ingredients • The healthy aspect • Any ethical considerations • Brand name, brand logo and sauce name <p>*If there is time, children can copy the nutritional table of their sauce from 'Lesson 3: Adapting an improving a recipe' onto their label. Wrapping up</p>		

			<p>Depending on what you choose to do with your end product, this time should include an opportunity for children to:</p> <ul style="list-style-type: none">• Taste their own sauce and reflect on how it turned out.• Consider what they would have done differently if working alone.• Experience external judgment or to give/sell their product to the local community.• Reflect on how healthy their sauce ended up.		
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