

LESSON PLAN FOR PASTA WITH SARDINES, CHILLI AND LEMON

KEY STAGE 2 & 3

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Links to the key stage 3 National Curriculum

Cooking and nutrition

Pupils should be taught to:

The recipe

Pasta with sardines, chilli and lemon

Topic

Nutritional properties (fish), functional properties (fish), temperature (fish), social and environmental issues (fish), food packaging and labelling (fish) system and procedures of a food product and food product development. (Fish)



Aims

- · To investigate the properties of fish and its role in cooking.
- Learning and mastering the following cooking skills Weighing and measuring, knife skills, chopping herbs, opening a tin, frying/sautéing, cooking pasta, seasoning, presentation and decoration and composting

Level

Key stage 2 & 3

Time

The lesson before the students write their shopping list, prep list, equipment list, time line of work, presentation ideas etc. An hour to make it. Make one practical lesson then present another lesson. Adapt and make again. Remember this means you can focus on different areas on different lessons. For example discuss the sustainability around fish in one lesson and the other nutritional analysis and cost the dish.

Materials

All ingredients x 2 one for student one for teacher to demonstrate. 240g tinned Sardines, if using fresh 2 whole sardines, filleted, skinned and pin boned.

2 cloves garlic
1 whole red chilli or dried chillies or chilli flakes
2tbsp tomato puree
200g spaghetti, or any shape of pasta
Ground black pepper.
2 lemons
Basil leaves or any other fresh herbs

Flash cards for fish, the different in environment, garlic, chillies, tomatoes, wheat, lemons and herbs. Show how they grow, where they grow and the seasonality of them.

Equipment

Can opener
Knife
Garlic crusher
Measuring spoons
Scales
Remer or just use your hands to squeeze the lemon juice



Serving bowl or plate for presenting the dish.

Introduction

In this lesson the students will be learning the following skills;

- Weighing and measuring
- Separating eggs
- · Knife skills
- Chopping herbs
- · Opening a tin.
- Frying/Sautéing.
- Cooking pasta.
- · Seasoning.
- · Opening a tin.
- · Frying/Sautéing.
- Cooking pasta.
- · Seasoning.
- · Presentation and decoration
- · Composting.

Procedure

- · See recipe for method.
- · Make sure you clean all the environment before cooking
- Make sure the students wash their hands, put on an apron, tie their hair back and remove nail varnish.
- Teach the children to wash up correctly. Making sure all high risk equipment is washed thoroughly.

Follow up tasks

- Adding different ingredients. Maybe thinking how you could make a seasonal one. Filleting, skinning and pin boning fresh sardines.
- Give them the challenge to create fish dishes in topic work to encourage them to increase or widen their knowledge of fish eaten.

Health and safety

 Allergies to fish. Make sure you ask all parents or carers if their children have an allergy to fish. You might have a lot of parents saying they are but they might just not like it. See notes below for tips. You have to respect their



- choices. Maybe pose the question about discuss the difference between being allergy and having an aversion.
- Be careful when handling raw and dried chillies. They can release an oil with is very painful when caught in the eye or touching bare skin. Make sure you teach the students to wash their hands thoroughly with hot water and anti-bacteria soap. Encourage them to start with a small amount and build up as some tend to want to put a silly amount if chilli in their food. You will be teaching them about their palate and how important it is to taste all the different ingredients in the food and not just the hotness of the chilli. It overpowers other flavours and can leave your mouth hot. If they respect the food and learn to love what they cook, "a love of cooking" they won't want to spoil their food.
- Cutting-When using a sharp knife teach the children the bridge and claw techniques. For key stage 3 use a small bladed cook's knife. When cutting something in half make a bridge shape with the other hand the knife it is not in. Teach the children to put the knife through the bridge to keep the blade away from their fingers and use a sawing movement to cut through. If continually cutting find the flat side as it will prevent the food rolling around. If cutting food into pieces use a claw technique, shape the hand that does not have the knife into an animal's claw and rest on the food. The fingers and thumb are tucked underneath so they cannot be cut and keep moving their hand back when the knife gets close to the hand. Before using the knife they can practice with their index fingers.
- Using the hob. When using the hob make sure they are aware of the open fire, if you are using gas. In schools you might have electric or induction hobs.
 When you demonstrate you will continually making them aware of the heat and the danger of getting burnt. Also when you shake the saucepan to encourage the popcorn to pop use a t-towel to hold the lid and make sure the handle is not hot.
- Hot oil. You need to take the oil to quite a hot temperature before you add the
 popcorn and you need to place the lid on quickly before it starts to pop. Make
 the students aware that the fat could spit at them and burn.

Healthy eating messages

• Fish. Fish is very important in the diet. It is a good source of protein which is vital for growth and repair. Also provides omega 3 fatty acids which are essential for body and brain function. It can also reduce the risk of major diseases. Oily fish is high in Omega 3 fatty acids, fish like sardines, mackerel, pilchards and salmon. It is often good and try and make recipes that the fish is combined with other ingredients to start with so the students get used to the taste and texture. Like smoked mackerel pate or mackerel fish cakes. You can add other flavours to mask the flavour of the fish if the taste is really not



liked. Don't forget that you can my fresh sardines and tinned. You could do a study on the different nutritional used in this recipe or just for taste and texture.

- Tomatoes, Are rich in lycopene, which relates to the colour, the redness, and it said to be an antioxidant. It can help in the fight against cancer. Packed with Vitamins and Minerals.
- Pasta. It is a wonderful part of the carbohydrate family and provides that much needed energy to students. It is a slow release burner, which means it does not give an instant boost in energy but it will slowly release throughout the day when the students need it. It can be combined with so many healthy ingredients like seasonal vegetables, herbs and of course fish and meat and it probably a weekly staple in most homes.
- I recommend you make or buy some flash cards of sardines, garlic, chillies, tomatoes, wheat, lemons and fresh herbs growing.
- Increase the amount of fruit and vegetables.
- Fresh herbs are said to be anti-inflammatory and anti-oxidant. Anti-oxidants are meant to prevent diseases like cancer.
- If you are using salt teach the students the different types, see notes below.
 But also talk about the link to increasing blood pressure which can then lead
 on to heart disease and strokes. Also talk about the hidden salt in food, so
 which food and drinks (they will be shocked to learn) bread, cereals etc.
 Young people shouldn't have more than 6g a day, children over 11 years old.
 Tell them which foods are high in salt and give them a challenge to reduce
 their intake.

Skills

- Weighing and measuring and making does not have to be done in all one lesson. Using balance scales or electric scales. The ingredients could be weighed and measured the day before at home. Weighing and measuring one day and the cooking the other.
- Knife skills, see above for details. Chopping the garlic and chilli. Progression of knife skills is important.
 - Why not substitute the tinned sardines for fresh. You can teach them how to fillet a whole fish using a filleting knife. These are extremely sharp and have to be handled with care. Once they have filleted it they will need to skin it and pin bone it. The best way to remove the skin from a fish is to start at the tail end and cut though the fish until you get to the skin hold the little piece of fish skin with you hand wrapped in a t towel and make the knife along the fish removing the skin until it's all removed. This will take practice but a wonderful skill to have. Once they have learnt they can tackle it and then they could choose what method they would prefer to cook the fish. They could do an



experiment trying the different methods and what works well in the dish.

- Opening a tin. Try and get the tin openers that take the top off clean, without any sharp edges. Teach the students to keep their hands away from the sharp edges. It is a skill to open a can as it will increase their fine motor skills which in help in all areas of cooking especially when peeling!
- Frying. When using the hob teach them to point the handle to the side away
 from the other hobs to prevent the handle getting hot. Also to stand a good
 and safe distance from the hob in case any oil splashes. When they put the
 ingredients in the pan to stand back as well. While stirring hold the handle
 steady and stir slowly.
- Cooking pasta. In this country many people over cook pasta. It is important to follow the cooking guidelines on the packaging as all different shapes have different cooking times. If you are adding pasta to a sauce before serving, which is the traditionally way to finish the dish, then under cook the pasta by 1-2 minutes as it will continue to cook while in the sauce. Always boil the water first with a pinch of salt before putting the past in the water and use a timer so you have the time bang on! It is s skill to cook pasta and not to under or over cook it. You could do some taste test and presentation test with this recipe. Cook different shapes at different times and see which work best with the sauce. You might find you like an alternative shape and use that instead. The reason for the different shapes is to catch or hold the sauce differently, get the students to research these.
- Seasoning. We have be taught for many years the dangers of salt. What does it mean and what do we use to season our foods. It's not only salt and pepper that is used but vinegar, lemon juice etc. These are often added at the end of cooking to season a dish. The amount of salt that we should be eaten is a great topic to pick up on. The originals of using salt, hot it was used and still is used in preservation techniques. There are two types of salt that are commonly used. Fine salt, which has been highly processed and is used in cooking where to salt needs to blend or mix into something, like when making pasta. Also there is a sea salt. This is a natural sea salt that comes straight from the sea bed, it is courser, bigger flakes, and when used needs to be ground in your fingers. I recommend you teach the students to stick to sea salt rather than the fine salt, although fine salt is cheaper you will use more than if you purchase sea salt. Too more salt is bad for your heart.
- Chopping herbs. The best way to chop herbs is to place them in a plastic jug
 and put the herbs in the bottom of the jug. Ask the children to hold the handle
 of the jug and using scissors cut up the herbs. This way their hands will not
 get cut. As their knives skills increase can you teach them how to hold the
 herbs together and cut using a larger kitchen knives.



- Presentation and decoration. It's a good idea to get them to draw how they will present the dish. Will they garnish with whole herb leaves or chop them up?
- Composting. It's important to understand why we compost and what can be Composted. You can compost peelings and citrus fruits like lemons. You can link this into food waste and the dangers of too much food waste and the juxtaposition of the increased number of people accessing food banks. Should we look at the French's policy on food waste from the supermarket? Do we need to look at alternative proteins like insects? Or are there new and innovative techniques to growing or cooking food we do not know about yet?

Ingredients/cultural diversity/sustainability

- Sardines. Fish is caught and eaten all around the world due to the large amount of water we live around. Why if we are an island surrounded by fish do we not eat a lot? The fear of fish, smell, taste, texture etc. Is a sardine sustainable as an ingredients in this country?
- The best way to tackle the fear is to start the students off with something they like, enjoy and eat regularly and is very much part of the British culture. Why is fish and chips part of our culture where did it start? Buy from your local fish and chip shop 2 pieces of battered fish. It could be cod or haddock, as this will give you a great opportunity to discuss the sustainably of cod in particular and why is it that we are told on occasions not to eat cod? Is it to do with the number of fish in the water, the depilation of stock, or is it a political game to some countries. As there are invisible lines where certain countries are not allowed to fish. Once you have the two pieces of fish, cut up one of the battered fishes and allow the children to taste it. Ask what it tastes like, can you taste the fish or is the mouth quality of the fish all about the crispness of the batter. Then remove the batter from the other fish and hand around "the naked fish". Show the students its beautiful form and its fillets and where the bones would have been before being pin boned. Ask them to taste this one and compare, taste, texture etc. This exercise will get the children to see there is a fish underneath the batter and it's not scary, and how it can taste just as nice without the batter around it. The more you expose the students to different fishes and cook them in different ways, roasting, grilling, frying, steaming, cooked in the microwave, they may discover a fish and a method that they like.



Provenance

Herbs; we can grow lots of herbs in this country very successfully. Thyme, rosemary, sage, parsley etc. If you don't have growing facilities in school you could still grow herbs in your classroom in a window box. It will teach the children about looking after plants, water, sun food etc. Then the children can pick and use them whenever they are cooking. Also this will encourage creativity in recipes.

Links to the key stage 3 National Curriculum

Cooking and nutrition

- As part of their work with food, pupils should be taught how to cook and apply
 the principles of nutrition and healthy eating. Instilling a love of cooking in
 pupils will also open a door to one of the great expressions of human
 creativity. Learning how to cook is a crucial life skill that enables pupils to feed
 themselves and others affordably and well, now and in later life.
- Teaching the children a love of food can be taught but it also comes from deep inside. Encouraging creatively in cooking helps instil a love of food. Create a "creativity" tray within the classroom where you have a selection of dried and fresh herbs and spices and any other store cupboard ingredients. This is there every practical food lesson and encouraged to use it. If you have a fear of cooking and eating fish try and not let the children see this. They will take your lead on foods that they are not sure about. Their love of fish will start with you.



- Passionate teaching leads to passionate students, they will take your lead on how you feel about cooking and eating. Remember if you have dislikes and voice them they might take them on.
- Educating them that cooking is a life skill and will be able to take control of their own diets when they have the skills to cook for life and look after their families. Fish is vital for a healthy body and mind and should be eaten once or twice a week, so teaching them how to cook and prepare tinned, fresh and frozen fish is very important. So they feel confidant to do it at home and for their families when they get older.
- The art of eating on a budget is just that! It is difficult to eat healthy on a budget but you can teach the children how to do this well. Encourage the use of frozen and fish. Remember to only use tinned fish in water or brine. Remember the brine is a salt solution so this could be discussed when discussing seasoning the dish. Teach them to combine frozen, tinned and fish in order to stick to a budget and also benefit nutritional. Remember frozen can be just as good if not better than some fresh produce.

Pupils should be taught to:

- Understand and apply the principles of nutrition and health.
- In everything you teach you will be talking about nutrition and health and always linking it to a healthy lifestyle in conjunction with exercise.
- Cook a repertoire of predominantly savoury dishes so that they are able to feed themselves and others a healthy and varied diet become competent in a range of cooking techniques [for example, selecting and preparing ingredients; using utensils and electrical equipment; applying heat in different ways; using awareness of taste, texture and smell to decide how to season dishes and combine ingredients; adapting and using their own recipes.
- Stick to savoury dishes and sweet on occasions. This is really important, we are trying to teach the children how to look after themselves so savoury dishes are imperative. If you are cooking something sweet try and include fruit or vegetables into the recipe, which will increase the nutritional content in the recipe. Talk to the children about no foods are forbidden just all in moderation and it's about healthy choices. There are times for unhealthy foods and times to think about what you are eating. Use fizzy drinks as an example as these are used by teenagers nationwide. They are high in sugar and often colouring and preservatives. They are very damaging to their health. They can increase blood sugar levels and give massive highs and lows. They also can contribute to weight gain. If consumed in large amounts for a sustainable period of time along with other sugary foods they could cause diabetes. Also an increase in weight gain can cause heart disease in later life. You could buy a similar products from different supermarkets and compare the nutritional content and price. You can buy computer software that will work out the nutritional content



- of this pasta dish. It will show the nutritional and cost benefit of making your own food from scratch.
- Different cooking techniques. There are many cooking techniques to be taught and new ones come along very quickly. Sous vide cooking, using chemicals in cooking etc. One good way of cooking fish is in a baking parchment or tin foil bag. It keeps all the juices in and creates its own sauce, gently steams the fish and keeps in all the flavour. There is theatre when you bring it to the table and open the bag. A puff of aromatic steam will rise and make all your senses go crazy! See below.
- Using all our senses. While you are demonstrating and teaching you will be using all your senses, teach this to your children. What things smell like before cooking, while cooking and once cooked? Taste the food at all stages, taste, taste and more taste. It is important for you and them to continually taste while cooking at once finished. You're checking for flavour profile of the dish, sweet, salty, sharp etc. What does the dish need more of something, else of smoothing else etc. Get the children in the habit of using teaspoons to taste and NOT DOUBLE DIPPING! Texture of a dish how most incredible plates of food have something soft on the plate o sauce or puree, a crunch and a dusting or sprinkle of something as an equation they can create from this. Texture is very important when we eat the crunch of something or the softness can influence how we feel about a dish.
- Adapting and creating recipes. Encourage the children to work from recipes that exist until they are confident to adapt. Guide them on this task as they can be tempted to move towards sweet cooking, or taking a savoury recipe and including sweet ingredients. Encourage a culture in the classroom of classic dishes and cultural dishes that you don't adapt! Teach them it's about the ingredients and how they choose to cook them. Make small changes and maybe substitute 1 or 2 ingredients first and then go from there. Use reputable recipes not just a recipe off a website. Website can be good for some recipes but have a wide range of cooking books old and new in the classroom and encourage them to read these. Be wary of recipes that are measured in cups as you don't know if they are American or Australia. If you try and convert the measurements they don't always work, they could be setting themselves up for a hard task. Also this will help in their presentation ideas to look at the food styling of certain dishes like theirs. Once they have adapted the recipe make notes and amend and keep all original work sheets. Explain how it has changed the dish and for what reason, what was the changes that we made that effect the dishes flavour, texture, smell and presentation.
- Preparing ingredients. Teach the students good knife skills. The bridge and claw position. Progress onto rolling or rocking the knife keeping the knife on the board when cutting. Rocking backwards and forwards in a smooth motion. Increasing their knife skills by introducing filleting fish into their skill set. Get



them in the habit to prepare all ingredients before starting cooking. Also get out and prepare all the equipment. Get the washing up area ready with j cloth and t- towel. It is important to teach them how to work clean and tidy to prevent food positioning through cross-contamination. Make sure they have an order of work, a schedule of work what they will do and at what time. Encourage timers as if they go into the catering industry they are used then.

- Using utensils and electrical equipment. Teach the correct tool for the correct job. Encourage the use of their hands as they are the best tool for a job sometimes. Safety of using electrical equipment should be taught dry hands and always turn off. Never place you hand inside a blender and be careful of open blades when washing up. Never place knives in a washing up bowl as someone else could come along and not know they are in there and cut their hand.
- Appling heat in different ways. Why does the oil get hot and why does it fry the ingredients, and release flavour into the oil? Why does the starch from the pasta release into the water, why is the water good to use to create a sauce?
- Understand the source, seasonality and characteristics of a broad range of ingredients. If you want to expand the recipe ask the students to choose some seasonal ingredients to add to the dish. Talk about how you could adapt the dish to all seasons. For example add courgettes, peas and broad beans in spring. Grated carrot and kale in the winter.
- Selecting. It's important to understand seasonality to understand the selection process, especially when it comes to fresh fruit and vegetables. Aldo games seasons and fishing seasons. They are at their best in season and cheaper. Try and buy British for the economy and keeping people in work. Look for the best quality and what you can afford on your budget. Go to markets and talk to the market staff. Perfect looking is not always better tasting. Think about locality and where the produce in coming from. The implications of air miles and food traveling. How is this good and bad for the economy? Get friendly with your local butcher, fish monger, and grocery and ask what is good at that time. Ask if they know if it is sustainable and ethical and can guarantee quality from a reputable farmer. Why do most of the sardines come from that we eat in this county?
 - Is choosing fresh fish teach the children in how they can tell it is fresh. Take them to a good fish market/fish mongers/supermarket that has a fish counter. The eyes have to be prominent and shiny, if they have sunken in the head and cloudy it is old. Fresh fish smells of the sea not of fish! Check behind the gills, it should be bright red if it is brown or grey it is old. The skin shinny and the flesh firm. If the coat is dull and the fish is soft to touch it is old.
- Range of ingredients. Saying what I said before embrace the cultures around you can cook a variety of dishes from around the world. Introduce the students to ingredients and foods they may have never seen before. But don't



waste it cook it and ask them to taste it. You could cook their favourite Chinese dish from scratch. How do Chinese people cook their fish? How do the West Indian community cook their fish? If you have students from around the world encourage them to talk and share their experiences with these ingredients. Also when something is in season like asparagus or Jersey Royals let the children enjoy them at their best, taste testing.

Skills the children will be taught through making this recipe.

- Weighing and measuring.
- Knife skills.
- Chopping herbs.
- Opening a tin.
- Frying/Sautéing.
- Cooking pasta.
- Seasoning.
- Presentation and decoration
- Composting

Progression of skills/how the recipe could change-

1. Adding different ingredients. Maybe thinking how you could make a seasonal one. Filleting their own whole fresh fish. Different cooking method you can cook sardines. Grill, fry, bake, steam etc.

The recipe

Pasta with sardines, chilli and lemon

If you have everything ready you should be able to make this in the time it takes to cook the spaghetti

Serves 2

240g tin sardines in oil
1 garlic clove, minced
½ chilli, finely chopped - or ½ tsp chilli flakes (optional)
2 tbsp raisins - soaked in hot water for 5 minutes and drained
1 tsp crushed fennel seeds
200g spaghetti, cooked al dente
Ground black pepper
A squeeze of lemon juice
A Handful of fried or baked breadcrumbs



- 1. Open the sardines then drizzle some of the oil into pan. When it is heated, add loads of garlic and chilli, then cook for a couple of minutes, until fragrant.
- 2. Add the raisins and fennel, warm through, then add the sardines to warm.
- 3. Add the cooked spaghetti, mix well, then season with black pepper and lemon juice.
- 4. Put into a bowl If you think it needs it, add a little of the remaining olive oil just before eating and top with the breadcrumbs.