

JAMES FLEMING **NUTRITION**

Food, Nutrition, and forming healthy habits

A 10-part series of activities that continue to explore the importance of healthy eating, and tips on how to form healthy habits in day to day life

What are the different nutrients?

In the last series you learnt about the importance of healthy eating and why we should eat a balanced diet. We discussed the role of different nutrients, how they help us and what food they can be found in.

Recap Activity 1

Can you remember some of the key information about each nutrient?

Draw a line to match the name of each nutrient to the description of how it helps us and see if you can think of at least one food source.

Carbohydrates

A source of energy to keep our brains, skin and cells healthy

Example food _____

Protein

Helps with lots of bodily functions, boosts our immune system and helps us grow.

Example food _____

Fat

Gives us energy to do daily activities

Example food _____

Vitamins and Minerals

Helps our muscles to grow and keeps our bones strong

Example food _____

We also learnt about hydration, the importance of keeping hydrated, and signs of dehydration.

Recap Activity 2

Answer the questions below

1. How much water should we drink every day?

2. Can you write down 3 signs of dehydration?

1. _____

2. _____

3. _____

3. What could happen to your urine if you are dehydrated?

Reflection

Did your diet change after completing the last series of activities?

Did you make a change to your portion sizes?

Did you think more about how much or what you were drinking?

Sugar

In the last series you learnt a little bit about sugar, and we explored how much sugar is in different popular drinks. In this activity we are going to think about sugar in a bit more detail.

There are two types of sugar:

- **Natural sugar** – this type of sugar is found in food naturally. It can be found in food such as fruit, cow's milk and natural yoghurt
- **Added sugar** – this is sugar that is added to products in order to improve the taste. Examples include fizzy drinks, fruit juices, cakes, biscuits, pastries, sweets, chocolate and ice cream.

We can have sugar in our diet in moderation. Remember there are guidelines about how much sugar we can have each day.

- Ages 4 to 6 – around 19g of sugar = 5 cubes 
- Ages 7 to 10 – around 24g of sugar = 6 cubes 
- Ages 11 and over – around 30g of sugar = 7 cubes 

Eating too much sugar can be bad for our health and can lead to

- tooth ache, fillings, or even tooth removal
- gaining fat/ weight
- increased risk of other health conditions, such as heart disease or type 2 diabetes

Activity: Have a look at the food below and decide if it contains **natural sugar** or **added sugar**. Circle the products containing natural sugar in blue, and products containing added sugar in purple.



orange juice



chocolate cake



Cow's milk



An orange



Fruit Pastels



Cookies



natural yogurt



A can of coke



Mixed berries

Question: How much sugar can you have in a day, based on your age? Why should you restrict how much sugar you have in your diet?

Salt

Another ingredient found in food is salt. Just like sugar, salt can be found naturally in some food, but a lot of the time it is added to food to change the taste. Salt is found in processed meats including sausages, bacon and ham, and there are also high levels of salt in pastries, pizza, crisps and salted nuts. Sauces such as ketchup, mustard and brown sauce also contain lots of sugar.

We can have salt in our diet in moderation. There are guidelines about how much salt we can have each day, based on our age.

- Ages 4 to 6 – around 3g of salt = 6 sachets
- Ages 7 to 10 – around 5g of salt = 10 sachets
- Ages 11 and over – around 6g of salt = 12 sachets

How does consuming too much salt affect my health?

Having high amounts of salt in your diet can cause an increase in blood pressure which can increase the risk of more serious conditions such as heart disease, kidney disease and type 2 diabetes.

What can I do to reduce my salt intake?

- Swap salt to herbs and spices
- If using salt, use a pinch of salt to add to cooking
- Reduce the amount of salty foods and snacks that you consume
- Use vegetables to make your own sauces instead of shop bought ones
- Swap highly salted snacks such as crisps to unsalted popcorn

Activity: look in your cupboard and find one snack that is high in salt, one snack that is low in salt and one that has a moderate amount of salt. Use the food label to help - look for where it says 'salt' and see if it is **red** (high in salt), **green** (low in salt) or **orange** (contains a moderate amount of salt)

This is a snack that is....

High in salt _____

Contains a **moderate** _____
amount of salt

Low in salt _____

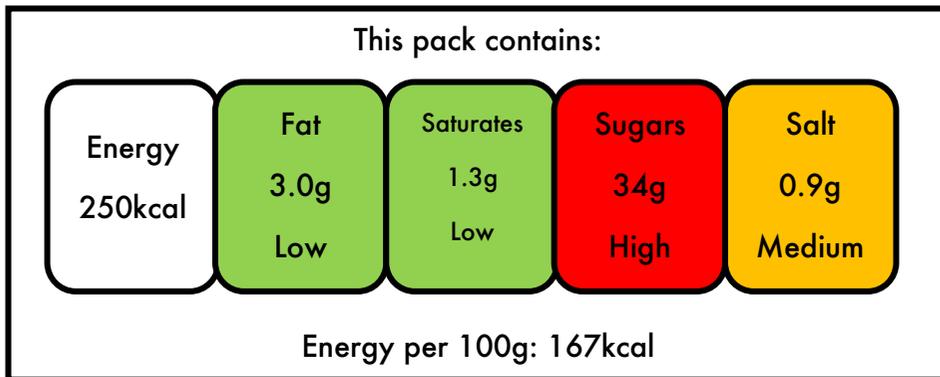
Reflection: Out of these three snacks, what do you eat most? Is it the best choice for you?

Question: How much salt can you have in a day, based on your age? Why should you restrict how much salt you have in your diet?

What is in your food?

Now that we know the name and role of the different nutrients and ingredients that are found in food, we can think about them in the products that we buy and eat.

Food labels display the amount of fat, saturated fat, sugar, salt and calories (look for kcal, not kJ) within a product. Each ingredient is coloured differently based on how much that product contains.



If something is **low** in an ingredient it is highlighted in **green**

If a product is **high** in an ingredient it is highlighted in **red**

If there is a **moderate amount** of the ingredient it is highlighted **orange**.

Remember, we are allowed to eat all different types of food in moderation. We should try to choose foods where the ingredients are highlighted green as much as possible and products where the ingredients are highlighted red less often.

Activity: Have a look at the packaging of some food at home or in the supermarket and add the details below

Product name:

Energy	Fat	Saturates	Sugars	Salt
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Product name:

Energy	Fat	Saturates	Sugars	Salt
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Product name:

Energy	Fat	Saturates	Sugars	Salt
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Reflection

Which product was the healthiest choice with the most amount of green?

Did any of the products surprise you? Maybe one product was better than you expected, or was there a product that you thought was good for you but had more red/ orange on the food label?

How big are your meals?

Why are portion sizes important?

You will have learnt a lot by now about the importance of eating the different nutrients and food groups as part of a balanced diet. It is also important for us to be aware of how much we are eating.

Eating too little won't give you enough energy for your daily activities – going to school and playing sport for example but eating too much may cause an unintentional increase in weight.

So how much should we consume and how can we measure it?

Using hand sizes are a simple guide, you may need to increase these sizes if having a really active day with lots of exercise.

Carbohydrate



We should aim for a cupped hand of carbohydrate. This includes dried rice, pasta, oats and breakfast cereal

Fruit and Veg



We should aim for a fist sized serving of vegetables. This could be anything from broccoli, carrots to salad

Protein and Dairy

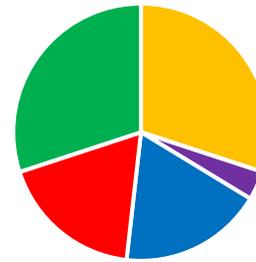


We should aim for a palm full of protein. This includes a palm sized piece of meat such as beef, chicken, fish such as salmon and cod.

Spreads and Oils



We should aim for a thumb sized portion of fat. This could be oils for cooking, nuts, seeds as well as various types of nut butters



In the previous series, you learnt about the eat well guide. The Eatwell guide is a visual representation of all the different foods we should include as part of a balanced diet.

How much we should we should have of these different food groups throughout the day is listed below:

Starchy Carbohydrates – we should aim for 3 - 4 portions

A portion of carbohydrate includes 65-75g dried pasta or rice, 40g dried oats, 200g potato

Fruit and Vegetables – we should aim for 5 or more

A portion of fruit and vegetables includes a piece of fresh fruit such as a banana or apple, 3 tablespoons of vegetables such as peas and carrots, 1 small glass fruit juice

Protein foods – we should aim for 2 - 3 portions

A portion of protein includes 120g of meat or fish such as chicken or salmon, 1 can of tuna, palmful of nuts or seeds

Dairy products – we should aim for 2 – 3 portions

A portion of dairy includes 120g of yoghurt (about 4 tablespoons), 30g cheese or 200ml milk

Oils and spreads – we should consume these in small amounts

A portion would be 1 teaspoon of oil or butter

Task: Record what you eat and drink in a day and make a note of how many portions of starchy carbohydrates, fruit and vegetables, protein and dairy products you have. Do you eat the recommended portions for each food group?

Why is breakfast so important?

Breakfast means 'breaking of the fast'. Having breakfast each morning is very important as it gives us energy for our day to day activity, helps us focus at school and play well during exercise or in a competition.

As the first meal of the day, this is an opportunity to refuel your body after being asleep for a period of time.

Skipping breakfast can make you feel tired, restless, irritable and you will find it hard to concentrate such as during a lesson at school.

Make sure you give yourself sometime in the morning to have something to eat and drink

A healthy breakfast should include:

- Some carbohydrates that are high in fibre as well as some protein to help us grow and develop
- At least 1 portion of fruit or vegetables
- An unsweetened drink to help us rehydrate

Breakfast ideas could include:

- Eggs (boiled, poached, as an omelette or scrambled) on some toast
- Porridge with semi skimmed milk
- Yoghurt with mixed fruit
- On the go options could include homemade oat bars, fruit smoothie and oats
- Snacks such as oat bars, fruit or yoghurt are great options as they can be eaten on the go and don't require any preparation

Questions:

Question 1 – Why is breakfast important?

Question 2 – What should we include in a healthy breakfast?

Question 3 – List 3 breakfast foods that we could swap out for healthier options

	→	
	→	
	→	

Reflection: What do you have for breakfast? Is there anything you could change to add to make it healthier?

Takeaway and Eating out

Takeaways can be a cheap and convenient option for dinner however they are not always healthy. Some takeaways can contain huge amounts of fat, salt, sugar as well as calories.

What can I do to minimise the impact of a takeaway?

- If having chips, the thicker the chips, the less fat they absorb, consider ordering small portions as well
- For meals such as pizza, try to choose those with vegetables or even better ask for more vegetables to be added
- For pasta options, try and choose those with vegetable-based sauces instead of creamy sauces as they have substantially less calories and fat
- Try to avoid anything marked as “crispy” as this will mean the food has been deep fried
- Look at how the food has been cooked and prepared, deep fried options will contain a lot more calories and fat compared to meals that have been grilled or poached.
- Be aware of sauces and condiments – they contain high amounts of salt, fat and sugar
- Avoid deep pan pizza or cheese crusts pizzas

Drinks

- Some fizzy drinks and fruit juices can contain high amounts of energy and sugar
- Switch to cans as opposed to bottle
- Switch to diet and zero sugar drinks instead

ACTIVITY: Below are a series of common takeaway meals. For each one see if you can come up with 3 changes that you could make to them to make them a bit healthier



McDonalds Large Big Mac and Coke



Dominos Large Pepperoni Pizza



Chicken Tikka Masala with poppadum's and rice

Question: What is your favourite takeaway? What could you do to improve it?

Staying active on a regular basis

It is really important to make sure we are active and doing plenty of exercise each day. Doing this on a regular basis is very beneficial for us as it helps:

- Improve our behaviour, confidence and social skills
- Improves our performance at school
- Improves our coordination
- Helps us maintain strong bones and muscles
- Improves our health and fitness
- Improves our sleep
- Makes us feel good

We should aim to complete 60 minutes of exercise everyday

What counts towards exercise?

- This could be anything from PE lessons at school
- Playing sport – Football, rugby, netball, hockey, swimming or golf to name a few
- Try a new sport – Find out what is going on in your local area and what clubs are available
- Reduce the sedentary time (time sat down) by limiting the amount of time you play on your game console
- Find something you enjoy doing, that way you will keep doing it

ACTIVITY – How much exercise do you do a week?

Use the table below to record what you do and how long for during the week

Day	Activity	How long for?
Monday		
Tuesday		
Wednesday		
Thursday		
Friday		
Saturday		
Sunday		

Question: How much exercise do you do a week? What is your favourite sport or exercise?

Are you getting enough sleep each night?

Why do I need to sleep?

Sleep is really important for a number of reasons:

- It helps the body recover from the physical and psychological demands of the day
- It helps improve our concentration levels which is really important for performance in competition as well as at school
- It helps us maintain a strong immune system so that we can fight off any infection and viruses
- It helps reduce our stress levels

How much sleep do I need a night?

Age (years)	Hours of sleep per night
3-6 years old	10-12 hours
7-12 years old	10-11 hours
12-18 years old	8-9 hours
18-65 years old	7-9 hours

How can I improve my sleep?

- Limit distractions in your bedroom such as tv, tablets and computers. Try to avoid using them before bedtime
- Find an activity you enjoy that helps you relax – some examples include reading, listening to music or drawing
- Avoid late night snacks
- Avoid caffeine before bed, it is found in coffee as well as other drinks including fizzy drinks and energy drinks

ACTIVITY – How well do you sleep?

Use the table below to record how well you sleep over a week

Day	What time did I go to bed?	What time did I wake up?	What time did I get up?	What was the reason for not sleeping (Stress/Noise, thoughts...)?
Monday				
Tuesday				
Wednesday				
Thursday				
Friday				
Saturday				
Sunday				

Question: Do you get a good night sleep? What time do you go bed and wake up?

Meal planning and shopping

Meal planning

Meal planning is a very effective tool that we can use to plan our meals for the week or next few days ahead. By planning our meals, we can ensure:

- We are consuming a nutritionally balanced diet each day
- We are eating suitable meals for breakfast, lunch and dinner as well as snacks in between

Meal planning considerations:

- Reduce food wastage by using ingredients you already have
- How long do you have to cook a meal – does it need to be quick?
- Who are you eating this meal with – e.g. friends or family?
- The people you are eating with will affect how much you need to cook

Going to the shops

When you go to the shops it is really important to take a shopping list with you. A shopping list can help you avoid buying additional items that you don't need. You may like to break your shopping list into sections. (An example is below)

Shopping tips:

- Buy fruit and veg based on what is in season. More info [here](#)
- Tinned and frozen foods can be just as nutritious as fresh ones as they are harvested and frozen within hours of being picked.
- If you are buying fresh products such as meat, fish or vegetables, look above, below and behind the products you can see at eye level as you will find cheaper, better quality products with a longer use by date
- Save money switching from the expensive branded products to supermarket or value products – they taste just as good and much cheaper

ACTIVITY – There are 3 parts to this activity

Part 1: For the first part you are going to plan a meal to have over the next week or two. To make it easy and for time purposes, focus on a dinner to have at the weekend. The choice of meal is entirely up to you – it could be your favourite meal that your parents cook regularly, a homemade version of your favourite takeaway or maybe a meal that you have always wanted to try.

Once you have decided your meal, your next task is to find out the recipe and list of ingredients. Once you have your ingredients, create a shopping list to take to the shops with you. You can split the ingredients into a number of categories, an example shopping list is shown.

Example shopping list		
Fresh produce	Meat	Frozen Food
e.g. fruit or veg	e.g. chicken	e.g. frozen peas
Dairy	Store cupboard	Drinks
e.g. milk	e.g. rice/pasta	e.g. water

Part 2: The second part of this task is to go to the supermarket and purchase the ingredients for your meal. Use what you have learnt during these activities to buy your ingredients – compare products to see which one is cheaper, which has a longer use by date, which has less salt or sugar

Part 3: Cook your meal – you may need help from your parents or guardians with certain parts of your meal such as when using knives or getting hot food out of the oven. Have the instructions in front of you and follow what it says at each stage. Your parents may need to keep an eye on you while cooking.

Optional task for parents: Money task. This is an optional task designed to help young athletes understand the importance of money and budgeting. Set a budget for this meal by giving yourself or your child £10 to buy all of the ingredients. A good challenge is to say whatever change you have left after you have bought your ingredients you can spend on yourself.

Reflection:

How did you find planning and shopping for your meal?

Did you enjoy it? Could you cook a meal for your family more often?

Are you going to make any changes based on what you have learnt in this series?

Answers to Activities

Carbohydrates

Protein

Fat

Vitamins and Minerals

A source of energy to keep our brains, skin and cells healthy

Example food _____

Helps with lots of bodily functions, boosts our immune system and helps us grow.

Example food _____

Gives us energy to do daily activities

Example food _____

Helps our muscles to grow and keeps our bones strong

Example food _____

Example food: Nuts, avocado, salmon, eggs, olive oil

Example food: A variety of fruit and vegetables

Example food: rice, pasta, potato, oats, bread.

Example food: Chicken, fish, eggs, steak, lentils, pulses

Activity: Have a look at the food below and decide if it contains natural sugar or added sugar. Circle the products containing natural sugar in blue, and products containing added sugar in purple.

 orange juice	 chocolate cake	 Cow's milk
 An orange	 Fruit Pastels	 Cookies
 natural yogurt	 A can of coke	 Mixed berries

ACTIVITY: Below are a series of common takeaway meals. For each one see if you can come up with 3 changes that you could make to them to make them a bit healthier



McDonald's Large Big Mac and Coke



Dominos Large Pepperoni Pizza



Chicken Tikka Masala with poppadum's and rice

McDonald's Large Big Mac and Coke

- Swap to a medium meal: a smaller drink, smaller bag of chips
- Swap the coke for something with less sugar – coke zero or water
- Swap the chips for a salad
- Remove the cheese from the burger and ask for additional salad
- Don't add additional salt to the meal
- Avoid sauces as they contain high amounts of salt and sugar

Dominos Large Pepperoni Pizza

- Swap from a large pizza to medium size
- Swap the pepperoni for something with more vegetables or chicken instead
- Swap from thick crust to thin crust versions
- You may even switch to the chicken kickers as these have less fat and calories

Chicken Tika Masala with poppadum's and rice

- Choose plain rice instead of flavoured rice such as mushroom
- Instead of having 3 poppadum's maybe have 1
- Swap to dishes with a tomato based sauce such as jalfrezi or madras as the masala uses high amounts of cream
- Swap from a masala or sauce based dsbh to tandoori – lots of flavour but less calories and fat