



WEEK 13: NUTRITION



Science in the News



These are dumplings made from lab grown shrimp meat by a company called ShioK Meats. They will be available at the end of 2020, however a single dumpling will cost a huge \$300! Photo credit: Sharas Clickz/ShioK meats via New Scientist.

Parents:

For primary learners, work through our full 'nutrition' lesson plan with your child. It is based around the national curriculum learning objectives found in the year 3 'Living things and their habitats' topic. Download here - [Science Creates Outreach](#)

For secondary learners, the contents can be discussed in more depth using the [original online article](#).

SCIENTISTS HAVE GROWN MEAT IN THE LAB, READY FOR YOU TO EAT!

Do you know how the meat you eat for dinner gets onto your plate? Well, it definitely wasn't grown by a scientist in a lab... but this could be the case very soon. A company in Singapore have figured out how to make clean, environmentally and animal friendly meat grown from just a few tiny cells. At the moment they are making seafood such as shrimp and crab, but soon other meats like sausages, burgers and steaks might also be available. By the end of 2020, you might be able to eat shrimp meat that is completely grown by scientists! The meat should taste the same as it normally would but it is healthier, better for the environment and kinder to animals. However, it is currently very expensive to make so it will be a few years before it's on your plate at home.



Try it at home - How much fat is in your food?

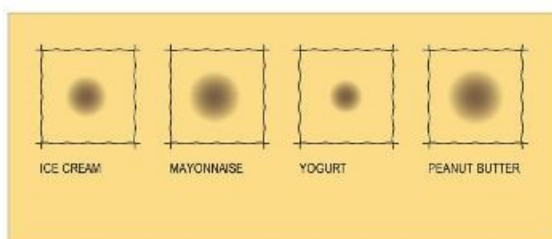
What do you need?

- Food items (a mixture of solids and liquids)
- Cutting board and knife (always ask an adult)
- Brown paper bag or white or brown paper
- Pencil
- Marker pen
- Timer
- Ruler

Why does this work?

Fats do not evaporate like water does, so any fats which leak from the foods will remain on the paper bag.

If you want to learn more about the science behind this, check out our lesson on our website - [Science Creates Outreach](#)



Instructions:

1. First, ask an adult for supervision as you slice up the food items into similar sized pieces.

2. Next, divide your brown paper bag into squares and label each square with a different food.

3. Then, place each food item in the correct square and start the timer. If the food is a liquid, drop a small amount into the square, making sure each liquid makes roughly the same sized drop.

4. After that, let the food sit on the paper bag for 5-10 mins.

5. Once the time is up, take the foods off the paper bags and leave the paper untouched for around half an hour.

6. Finally, measure the diameter of the circles created by the fats and note the measurements down. You can also note the colour of the stains on the paper bag.

Top tip - try comparing normal and full fat versions of foods to see how different they really are!



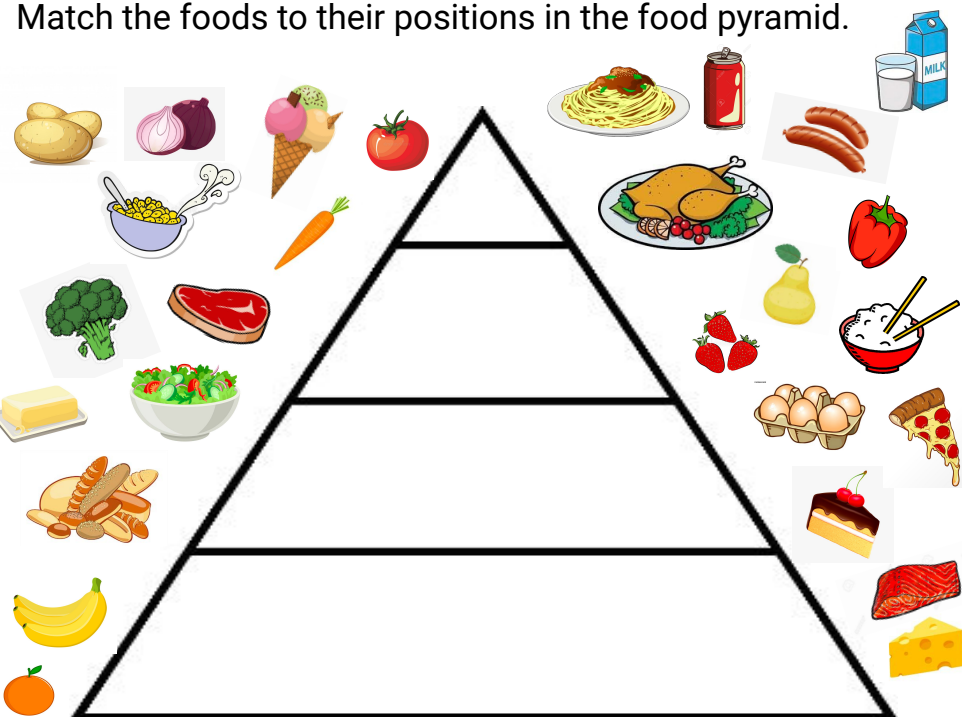
GOOD FATS vs. BAD FATS

See our lesson plan for what these measurements mean.



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Match the foods to their positions in the food pyramid.



Using these four categories, can you also label and colour each section of the pyramid?

Carbohydrates

Fruits and vegetables

Proteins

Fats

Read, Watch, Ask



Have a read of our [lesson](#) to learn more about nutrition.



What makes up a balanced diet? Watch [here](#) to find out.



Got any questions about today's topic? Email us at info@sciencecreates-outreach.co.uk and we'll answer them!



Did you know?

Around 8% of children and 2% of adults have an allergy to some foods. This is when the body thinks something inside the food is harmful and attacks it, causing a rash, a tickly throat, or itching. Common food allergies include reactions to peanuts, gluten, shellfish and some fruits.

Be Inspired...

In this section we interview inspirational members of the Science Creates science community so that you can learn more about different jobs, what they involve and how you can do the same! This week we interviewed Harriet from a company called Zentraxa.

What does Zentraxa do?

Zentraxa is designing new materials with new properties. One I'm currently really excited about is a glue for plasters that can unstick so it doesn't hurt when you take it off.

What is your job title and what do you do?

My job title is Chief Operations Officer. This means I keep the company running smoothly. I get involved in a lot of different areas from helping to plan lab work, to sorting out legal contracts and making sure everyone gets paid. No two days in my job are the same.

Do you like your job? Why?

I really enjoy my job. I like the variety of what I do and that I get to work in a team with loads of really smart and interesting people.

How did you get your job?

I did science subjects at school and had to get good grades to go to university where I studied chemistry for 4 years. When I finished I decided I wanted to be a research scientist so I did a PhD course (another 4 years at university) when I finished I worked as a research scientist before moving to my current job.

Have you always wanted to be a scientist?

I've always enjoyed problem solving and can be a bit stubborn. To be a good scientist you need to be curious and determined. I didn't really know I wanted to be a scientist until I spent the year working at a company in their research labs. That got me hooked on the thrill of discovering new things and advancing our knowledge.



ZENTRAXA

