Chemical Food Fireworks

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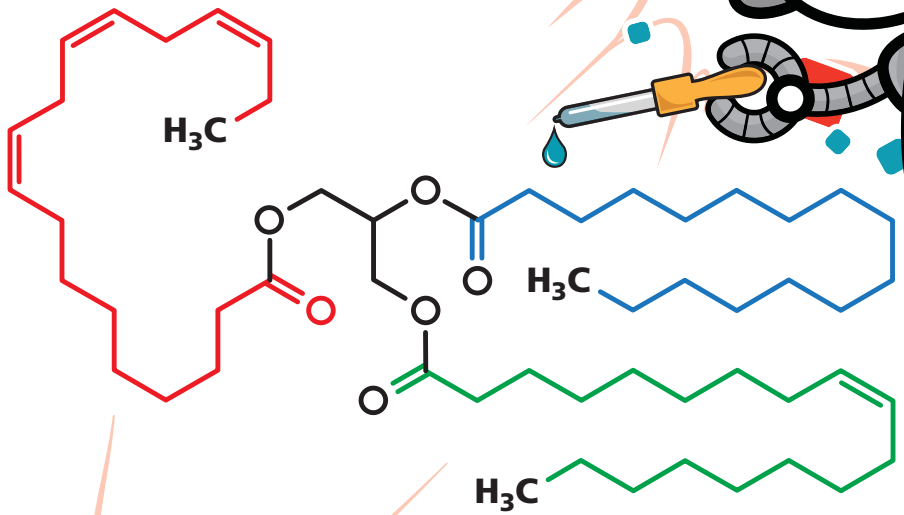
You will need:

- **Pipette**
- **Cotton wool bud**
- **Shallow dish**
- **Milk**
- **Washing up liquid**
- **Food colouring**

- Practice using the pipette with some water before you start your experiment.
- To use the pipette:
  - Squeeze the top to push air out of the tube. Then put then tip in the liquid you want to pick up.
  - Slowly release your grip the end to suck up the liquid.
  - To release the liquid, carefully squeeze the end to make it drop out.
- When ready to start pour some milk into the dish, enough to cover the bottom of the dish.
- Using the pipette add three drops of food dye into the centre of the milk.
- Dab the end of the cotton bud into the washing up liquid.
- Finally dip the cotton bud into the centre of the milk and watch!

How does it work?



Milk contains lots of proteins and fats. Washing up liquid is good at sticking to fat. When you add the cotton wool bud with washing up liquid on, it attracts the fat in the milk. As the washing up liquid dissolves in the milk, it moves around trying to find fats in the milk. We can see this happening because of the food colouring. It stops when all the washing up liquid has mixed into the milk.

Did you know?

The human body is made out of different types of fats and proteins. We are what we eat!

Washing up liquid is much better at sticking to fat than water, which is why we use washing up liquid to clean dirty/greasy plates as it sticks to the fat in the food to help it be washed away.