

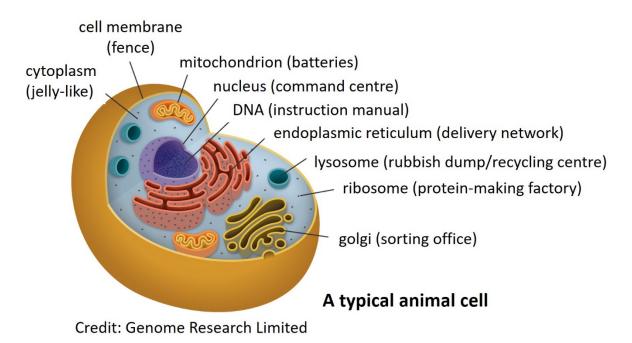


Edible cells by Dr Tansy Hammarton

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Cell components

1. A cartoon of a typical animal cell



You will need:

- A small container eg food tub, yoghurt pot or sandwich bag (the cell membrane/wall)
- Jelly (cytoplasm; cubes or powder, but not ready-set jelly; any colour is ok, although yellow makes it easier to see the other components of the cell)
- A range of sweets to represent the different components of the cell see suggestions below, but you can substitute as you wish:
 - o fried eggs (nucleus)
 - strawberry lances/spaghetti/shoelaces (endoplasmic reticulum and/or flagella)
 - o skittles (lysosomes or (if you separate out the green ones), chloroplasts)
 - dolly mixture (Golgi)
 - o hundreds and thousands/sprinkles (ribosomes)
 - o jelly beans or raisins (mitochondria)





Method:

- Wash your hands
- Melt the jelly as directed on the packet, being careful not to scald yourself please ask an adult to help with this. You may want to make the jelly up at double strength (ie add only half the amount of boiling water recommended) as it will set more quickly. Set aside to cool for a bit.
- While the jelly is cooling to a safe temperature to pour, decide what type of cell you want to make & put the sweets you have chosen to represent the compartments of your cell into your container.
- Remember, cells have one nucleus (two if you're making a Giardia parasite), some mitochondria, some endoplasmic reticulum & Golgi, some ribosomes & some lysosomes. If you are making a plant cell, add some chloroplasts as well.
- Then pour melted jelly over the top to cover the sweets & allow to set
- Take a photo & then eat your cell!

Variations:

- Biscuit version (jelly-free): use a biscuit or cracker as your base (or cell membrane), then spread with honey/jam/lemon curd etc (cytoplasm) and arrange your sweets on top
- Healthier version: use fruit (dried or fresh) instead of sweets, or you could make an open cell sandwich
- Crafty version: use coloured paper/card or playdough etc to model your cell

Heres some examples to inspire you!

2. Photos of various edible cells



We would love to see what you've made! Please share your cells with us on twitter @GlasgowSciFest and @Hammarton_Lab #GlaSciFest #ScienceOnTheSofa