Biochemistry Ideas

BIOCHEMISTRY RELATED ACTIVITIES FOR TEACHERS AND STEM AMBASSADORS

Taste and Smell

Taste and smell are closely related and work together when we eat. Here are a couple of ideas for easy taste/smell experiments that can be done anywhere...

- Blindfold a volunteer and ask them to hold their nose while tasting some crisps. Can they tell what flavour the crisps are?
- Blindfold a volunteer. As they taste a crisp, wave a different flavour crisp under their nose. Can they tell what flavour they are tasting?

Microbes

Microbes are used to produce a diverse range of foods such as bread, cheese, yoghurt, vinegar and even chocolate!

Microbes work by breaking down complex sugars into simple compounds and this process changes a product from one food to another. Examples are yeast in the bread making process and lactobacillus in making yoghurt.

The e-bug website: http://www.e-bug.eu/ has lots of ideas for activities for all ages exploring microbes and their uses.

We particularly like 'Yeast Races':

http://www.e-bug.eu/junior_pack.aspx?cc=wal_eng&ss=2&t=Useful%20Microbes

e-Bug

www.e-bug.eu

Operated by
Public Health England

BIOCHEMICAL SOCIETY

See Science
Gweld Gwyddoniaeth

CREST Award Activities

CREST Activities introduce young people to science project work and reward them with an Award http://www.crestawards.org/

There is an Award level for all ages and all abilities. The projects can be done at school, either as part of lessons or as STEM Club activities, or run in youth groups of all kinds. There are free downloadable project resources for every level. For more information on CREST, contact Llinos at llinos.misra@see-science.co.uk.

Here are some examples of biochemistry/food related projects:

SuperStar CREST Awards – suitable for 7 to 11 year olds and each activity takes about an hour to complete

Yummy Yogurt: http://www.crestawards.org/yummy-yoghurt/

Get, Set, Jellies: http://www.crestawards.org/franks-facinating-food-get-set-jellies/

Cheesy Challenge: http://www.crestawards.org/franks-facinating-food-cheesy-challenge/

Bronze CREST Awards – suitable for 11 to 14 year olds and require 10 hours work

What makes bread rise?: http://www.crestawards.org/what-makes-bread-rise/

A balanced diet – What's in food?: http://www.crestawards.org/whats-in-a-food/

Silver CREST Awards – suitable for 13 to 16 year olds and require 30 hours work

How healthy is your spread?: http://www.crestawards.org/how-healthy-is-your-spread/

Can you improve the shelf life of a fizzy drink?: http://www.crestawards.org/can-you-improve-the-shelf-life-of-a-fizzy-drink/

Gold CREST Awards – suitable for 16 to 19 year olds and require 70 hours work with input from a mentor who can be a STEM Ambassador

Everything looks brighter after a cup of tea: http://www.crestawards.org/everything-looks-brighter-after-a-cup-of-tea/

Are fruit juices healthier than fizzy drinks?: http://www.crestawards.org/are-fruit-juices-healthier-than-fizzy-drinks/

How much starch is in a potato?: http://www.crestawards.org/how-much-starch-is-in-a-potato/

What effect do additives have on bread?: http://www.crestawards.org/what-effect-do-additives-have-on-bread/