

A Question of Taste

Overview

A Question of Taste is a school workshop, established in 2009, where post-16 biology students investigate how humans and chimpanzees evolved to taste a particular chemical. Students analyse their own DNA while learning more about evolutionary theory and how genetics helps us to better understand our origins as a species.

The full-day school workshop can take up to 25 students.. It is usually led by PhD students studying at [The University of Manchester](#) and fully supported by the Public Programmes Team.

Aims

- Improve student understanding of how genetics is used practically in investigating evolutionary hypotheses
- Reinforce and expand upon the genetic components of the A-Level Biology specification
- Give students the opportunity to use technology not regularly available to them
- Inspire students to pursue genetics in further education



What we did

The hands-on workshops uses polymerase chain reaction (PCR) to investigate human evolution and answer questions including around why humans and chimpanzees have evolved different responses to taste. Importantly, it provides students with the opportunity to use scientific equipment and techniques that are within the curriculum, but that most schools don't have access to.

The one-day sessions are aimed at helping students to better understand areas of biology including the genetic

code; classifying organisms; variation, adaption and evolution, and gives practical experience of isolating DNA, use of restriction enzymes and gel electrophoresis.

Students work with their own DNA to classify themselves into one of three common genotypes and then compare their DNA sequence with that of a chimpanzee, helping them to understand convergent evolution between the two species.

Key findings

In the period 2012-2016, 99% of students felt that attending the workshop successfully allowed them to develop their practical skills

100% of teachers would bring a group of students again

What the teachers tell us...

Takes students on a journey from phenotype to genotype, allowing independent investigation

Helps to consolidate, motivate and inspire

Content extremely related to A2 and BTEC units

Impact

Since 2009 more than 10,500 students from schools and colleges across the North West have taken part in the Question of Taste workshop.

In the 2015/16 academic year more than 670 pupils from 25 schools attended.

Legacy

A resource website Genomics for Schools was set up to host resources for post-15 biology students and teachers on the subject of genetics <http://www.genomicsforschools.org/>