Run your own trial

New medicines and treatments go through detailed and careful testing before they can be used as standard treatments to help patients here in the UK. One of these tests is called a clinical trial, which is a study involving people who kindly volunteer to help with research.

Clinical trials in cancer test new treatments, ways to control symptoms and reduce side effects. Create your own tasting trial and discover how scientists carry out fair testing in clinical trials to make safe and effective treatments.

You’ll need

- A transparent drink such as sugar-free lemonade (apple juice or sparkling water could also be used)
- 2 containers to separate the drink
- 1 small bottle of food colouring
- Volunteers to take part in your trial
- Cups (2 cups per volunteer)
- Two sheets of paper labelled A and B
- Volunteer observation sheet (if you don’t have a printer, you can view the observation sheet on screen and write down the answers on a sheet of paper)
Task

Instructions

Step 1. Set up your trial:
- Pour an even amount of your chosen drink into the two containers.
- Put a few drops of food colouring into one container and mix.
- Label the containers ‘A’ and ‘B’.

Step 2. Identify your volunteers and ask them to take part in your trial:
- Explain to your volunteers that they will be asked to taste two liquids and will be asked a few questions afterwards.
- Using your observation sheet, ask your volunteers to sign as evidence of their consent to take part. This is a really important step in clinical trials and ensures that the volunteers understand what is involved.
- Ask your volunteers to drink liquid ‘A’ first.
- Ask each volunteer the questions on the observation sheet and make a note of answers.
- Ask your volunteers to drink liquid ‘B’ next.
- Ask the volunteers the remaining questions on the sheet and take notes.

Step 3. Conclude your trial:
You can now reveal that both liquids are the same! What were your findings? Are your participants surprised to discover the liquids are the same? Did they have different experiences of the trial?

If your participants thought the coloured lemonade was sweeter, they may have been affected by bias – the colour may have made them think it should be sweeter. Clinical trials are set up to avoid bias spoiling results.

Did your participants have a preference for either drink and why? Were there any differences in taste?

Alternative method
You could use flavoured and plain sparkling water as samples A and B. Mix up the samples so you don’t know what the flavours are! This is a great way to demonstrate randomised and double-blind clinical trials.

Need more participants for your trial?
Invite a friend to be your ‘co-lead’. Share this guide and ask them to recruit volunteers. You could organise a time to perform the trial over video call or ask your ‘co-lead’ to run the trial and share the findings with you.

Clinical trials can be run blind or double-blind to remove bias. In a blind trial the patient does not know which treatment they’re receiving, but their medical team does. In a double-blind trial neither the patient or their medical team know which treatment they’re receiving. Which one is this trial?
Our science

Cancer Research UK funds research into all types of cancer to bring forward the day when all cancers are cured. Medicines and treatments used to help people with cancer have to go through thorough testing. Researchers test possible new drugs in the laboratory to begin with. If they look promising, they are carefully tested in people – these are called clinical trials.

Clinical trials aim to find out if a new treatment or procedure is safe, has side effects, works better than the current treatment, or helps the patient to feel better. Clinical trials are a vital part of the research process. Cancer Research UK currently supports more than 200 clinical trials, and more than 9,000 patients volunteered to take part in a clinical trial last year.

If you’d like to read more about clinical trials, we’d recommend visiting the websites below:

Clinical trials information: cru.k.org/find-a-clinical-trial

Or hear from two supporters and a team running a clinical trial: you.tu.be/hoUK1qb4n00
Volunteer observation sheet

Title of trial: The ‘CLEAR’ Trial
(Coloured Liquid Extracts A Response)

Aim:
• To find out if colour affects the taster’s experience
• To learn more about how cancer clinical trials work

Volunteer name: ________________________________________________________________

Date of the trial: _______________________________________________________________

Signature of the volunteer: _____________________________________________________

Liquid A response
How does it taste? (e.g. sour, bitter, sweet, salty) ___________________________________________

How does it make you feel? _______________________________________________________

Do you have any side effects? (e.g. they pulled a funny face, burped or had a dry mouth)
_____________________________________________________________________________

Liquid B response
How does it taste? (e.g. sour, bitter, sweet, salty) ___________________________________________

How does it make you feel? _______________________________________________________

Do you have any side effects? (e.g. they pulled a funny face, burped or had a dry mouth)
_____________________________________________________________________________

Final questions:
Did you have a preference for either drink and why? _______________________________________

Did you notice any difference in taste? _______________________________________________

Conclusions report
Are your participants surprised to discover the liquids are the same? Did they have different experiences of the trial?

Cancer Research UK is a registered charity in England and Wales (1089464), Scotland (SC041666), the Isle of Man (1103) and Jersey (247).