**Activity: Consumer research on future apples**

In this activity, students conduct focus group research to generate consumer feedback on a proposed future apple variety. They use their findings to inform and strengthen their proposal for a future apple variety. The activity forms part of the unit plan [Developing future apple varieties](https://www.sciencelearn.org.nz/resources/882-developing-future-apple-varieties-unit-plan).

By the end of this activity, students should be able to:

* conduct focus group research using legal and ethical practices
* generate qualitative data using a focus group approach
* interpret data and use findings to inform, confirm and challenge ideas and predictions for a possible future product and modify ideas accordingly
* use qualitative data to support and justify a proposal for a future product
* discuss a range of perspectives on the impact of possible future innovations.

**Introduction**

Consumer scientists work collaboratively with plant breeders in the development of new fruit varieties. They can provide important insights for breeders into the type of consumer who would be interested in a particular variety and the attributes that are important to them. Consumer scientists often use focus group research to gauge consumer response to a new fruit variety.

Students could do this as a homework activity and organise focus group participants from within their wider family and/or local community. Alternatively, focus group participants could be organised using the school community, including teachers and students to ensure a varied demographic.

In preparing students for this activity it’s important to discuss or provide some guidelines for conducting human research such as:

* highlighting their legal and ethical responsibility under the Privacy Act to gain informed consent and to ensure anonymity and confidentiality is upheld.
* selecting participants likely to represent a wide range of views (i.e. a range of demographics)
* explaining to participants the purpose of the research and what the findings will be used for
* discussing question types – clarity, relevance, open and closed questions, leading questions.

Detailed guidelines can be obtained through an internet search and simplified for student use.

Get article: [Consumer and sensory science in plant breeding](https://www.sciencelearn.org.nz/resources/851-consumer-and-sensory-science-in-plant-breeding)

Get video clip: [Consumer science and plant breeding](https://www.sciencelearn.org.nz/videos/438-consumer-science-and-plant-breeding)

**What you need**

* A group of 6–10 people of varied ages and backgrounds
* A coloured image, name and description of the proposed apple variety
* A series of questions to generate discussion and feedback
* A digital recorder or paper to record key ideas

**What to do**

1. Show the video clip [Consumer science and plant breeding](https://www.sciencelearn.org.nz/videos/438-consumer-science-and-plant-breeding).
2. Discuss the value of consumer research in new product development and ways that it might contribute to developing a new apple variety.
3. Discuss things to think about in selecting people to include in a focus group and how this can impact on the usefulness and validity of information you gain, for example, do you want a range of ages, gender and backgrounds?
4. What types of information might be helpful for breeders in deciding on the potential for a new variety to be successful in the market?
5. Prepare students for selecting and inviting participants and appropriate and ethical practice in conducting the research and reporting the findings.
6. You could discuss and create a class list of questions to use with the focus group. Questions could include:

* After seeing the image, what do you think the apple would taste like?
* Would you buy an apple like that?
* How much would you pay for it?
* When would you use it (every day, occasionally, as a packed lunch item, as a snack, as a one-off luxury, as a whole fruit, in a dessert)?
* Who would it appeal to (children, young adults, elderly)?
* What do you think of the name of the apple? Does it reflect the image and description of the apple and your perception of the target market?

1. Students prepare an image of the apple and describe the key distinguishing attributes of the apple.
2. Students decide how they will record the information from the focus group. They could use a digital recorder and transcribe the key ideas or have members of their group record ideas directly. Discuss the advantages and disadvantages of each approach.
3. Using the key ideas from their research, students modify their new apple concept where necessary and use the data to justify and strengthen their proposal.

**Useful links**

**Information privacy principles**

Learn more about the information privacy principles specified in the New Zealand Privacy Act.

<http://www.legislation.govt.nz/act/public/1993/0028/latest/DLM297038.html#DLM297038>