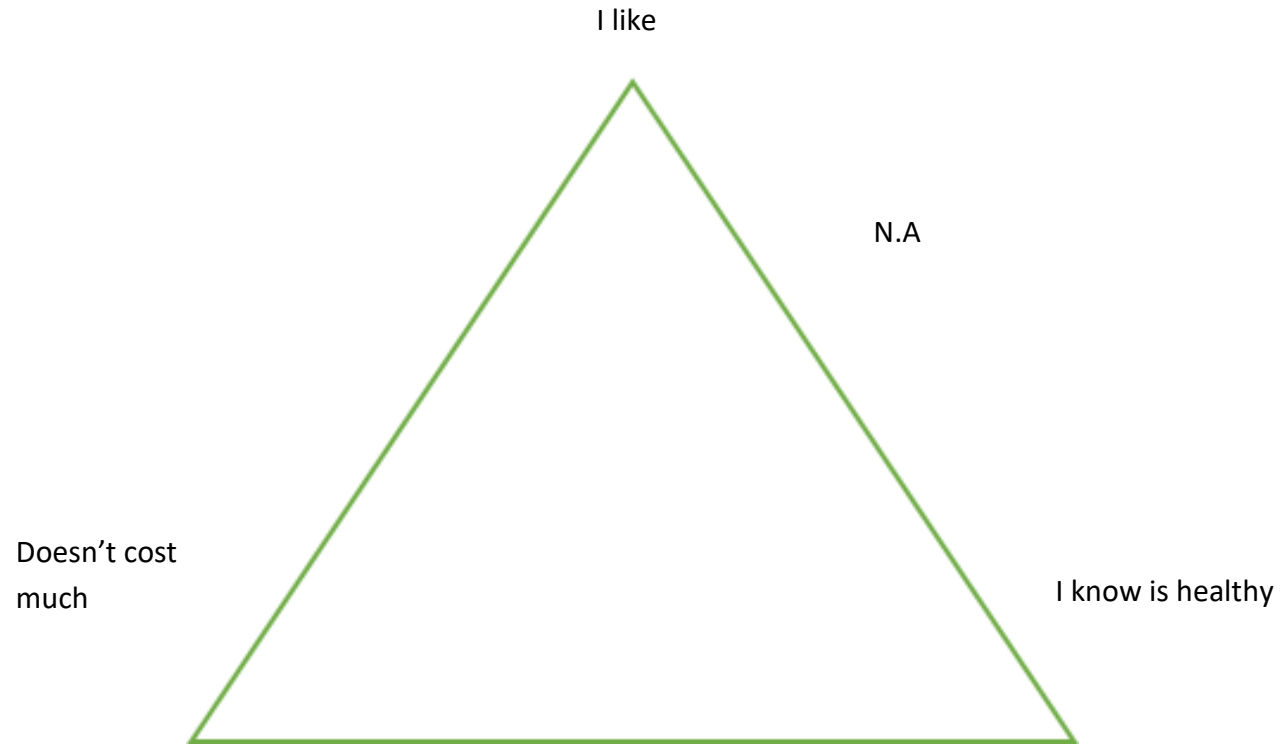
Data gathering on what influences food choices

Preparation

Put up around the room three large sheets of paper with these statements:

- Think about the last time you had something to eat, Did you eat because:
  - ⇒ The food looked yummy
  - ⇒ You were hungry
  - ⇒ You thought if you didn't eat now you would be hungry later
- I would probably eat healthy food more often if:
  - ⇒ My friends ate it too
  - ⇒ It was easy to find
  - ⇒ It didn't cost too much
- When I buy my lunch I usually buy food that:
  - ⇒ Doesn't cost much
  - ⇒ I like
  - ⇒ I know is healthy

Each piece of paper will look like this:



Instructions

Give each student some sticky spots.

Say to students:

Read each statement and decide where to put a spot so that it shows how you make decisions. For instance if when you buy lunch you usually choose something that you like and you know is healthy put your spot on the triangle between those two points. If you consider all 3 reasons equally you would put your spot in the middle of the triangle. If you never buy lunch this statement is not applicable to you. Write why this statement is not applicable on a sticky note and put the note under N.A.

When the students have made their choices have a discussion around what the data show.

Ask the students for any patterns they can see. Are there any outliers?

Also ask how robust they think the data are. Did where the students place stickers really reflect their decision making or were they influenced by what other students had done?

What else could be wrong with these data? (Eg Students might not have understood the instructions)

How else might these data have been gathered? What would be the pros and cons of other methods?

Can the students think of other factors that affect their food choices?

Thinking underpinning this activity

This activity gives a very quick visual display of some factors that influence food choices. If it is followed by a discussion about the data it provides an opportunity for students to practise critiquing data (an important science capability).

When trying to understand complex systems it is important to pay attention to outliers and unexpected results – not just the obvious patterns.