**ACTIVITY: Sorting food into groups**

**Activity idea**

In this activity, students explore ways of grouping foods using a silent card shuffle.

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

* experience devising and revising their own food categorisation systems
* consider the relationship between food and energy.

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[Food cards](#3znysh7)

**Background information for teachers**

One of the main reasons for eating is that it gives our bodies energy, but not everyone needs energy in the same amount. To balance the foods we eat with the energy requirements of our lifestyles, we need to know more about what we are eating. The article [Guiding food choices](https://www.sciencelearn.org.nz/resources/2477-guiding-food-choices) explores this concept along with systems like the Health Star Rating system, designed to help us choose healthier options in similar products.

This activity is designed to encourage students to think about foods and group them according to their own categorisation system. Students then do online research regarding food energy and healthy food recommendations and revise their grouping systems in light of the new knowledge.

**Teacher instructions**

1. Cut up a set of [food cards](#3znysh7) for each group and put them in an envelope.
2. Divide the class into groups of 3–4 students. Give each group a set of cards in an envelope. On a command, the groups tip out their cards and proceed to group them, without speaking, in a limited timeframe (4–5 minutes should be long enough). Communication must be in a way that doesn’t involve speaking.
3. Give the groups 2–3 minutes to discuss their food groups and to make any changes.
4. Ask the students to walk around and compare other students’ food groups with their own.
5. Give the groups another 2–3 minutes to make any last-minute changes to their food groups if they want to.
6. Ask the groups to present their food groups to the class, explaining why they grouped them as they did.
7. A class discussion could follow about how and why foods are grouped.
8. Ask the students to consider the relationship between food and energy, using the example of John and Hamish from the [Guiding food choices](https://www.sciencelearn.org.nz/resources/2477-guiding-food-choices) article.
9. Ask the students to do online research, using these websites:

* For younger students, use websites such as [HealthEd](https://healthed.govt.nz/collections/all/products/healthy-eating-for-young-people) – healthy eating for young people and/or [HealthEd](https://healthed.govt.nz/products/eating-for-healthy-children-aged-2-to-12-nga-kai-totika-mo-te-hunga-kohungahunga) – eating for healthy children aged 2 to 12, and [Eat for health](https://www.eatforhealth.gov.au/nutrition-calculators/daily-energy-requirements-calculator) (daily energy requirements calculator). Give students the opportunity to regroup the cards as everyday or occasional foods.
* Older students can use Hub resources to learn about [Energy requirements](https://www.sciencelearn.org.nz/resources/1835-energy-requirements-of-the-body) and food groups. Give students the opportunity to group the cards in any of the following ways:
  + Group into [macronutrient](https://www.sciencelearn.org.nz/resources/534-macronutrients) food groups: [protein](https://www.sciencelearn.org.nz/resources/561-proteins), fat or [carbohydrate](https://www.sciencelearn.org.nz/resources/559-carbohydrates).
  + Group according to energy density: very low, low, medium, high or very high. See the [BBC Energy and nutrients](https://www.bbc.co.uk/bitesize/guides/zqj66yc/revision/4) webpage about energy values of different nutrients.
  + Group according to energy release: slow (sustain), medium (restore) or fast (rapid).

1. Discuss changes the students made to their categorisation systems.

