

# High Performance Fuel

- Year 3 – Health and Physical Education, English
- Year 4 – Health and Physical Education, English
- Year 5 – Health and Physical Education, English
- Year 6 – Health and Physical Education, English

**(HPE; Yr 3&4, ACPPS036)**

Identify and practise strategies to promote health, safety and wellbeing

**(HPE; Yr 5&6, ACPPS054)**

Plan and practise strategies to promote health, safety and wellbeing

**(English; Yr 3)**

Plan, draft and publish imaginative, informative and persuasive texts demonstrating increasing control over text structures and language features and selecting print, and multimodal elements appropriate to the audience and purpose

**(English; Yr 4, ACELY1694)**

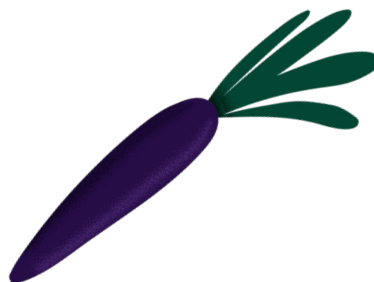
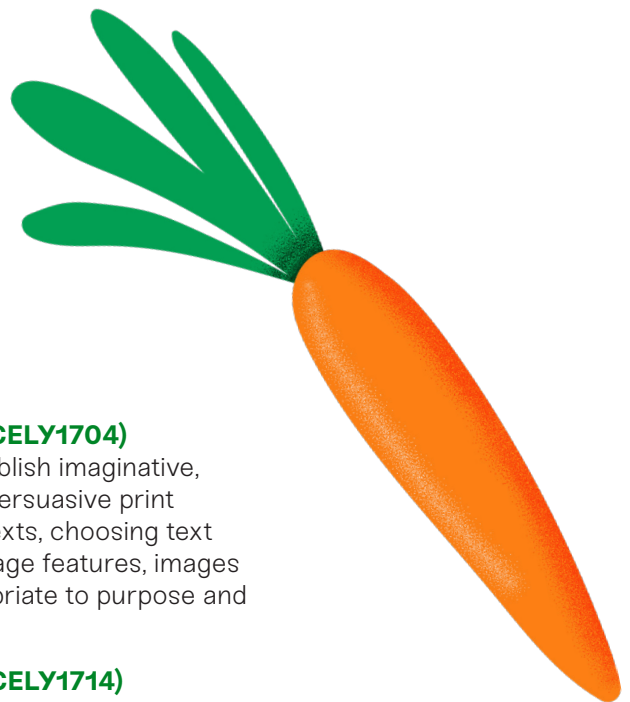
Plan, draft and publish imaginative, informative and persuasive texts containing key information and supporting details for a widening range of audiences, demonstrating increasing control over text structures and language features

**(English; Yr 5, ACELY1704)**

Plan, draft and publish imaginative, informative and persuasive print and multimodal texts, choosing text structures, language features, images and sound appropriate to purpose and audience

**(English; Yr 6, ACELY1714)**

Plan, draft and publish imaginative, informative and persuasive texts, choosing and experimenting with text structures, language features, images and digital resources appropriate to purpose and audience



# High Performance Fuel

**What does it take to fuel an elite athlete?**

What you eat affects how you feel, right? Absolutely! For elite athletes, a dietary balance that helps energize their bodies and minds can mean the difference between going for gold and going home.

**Equipment:**

Butcher's paper

**Duration:**

45 minutes

**Location:**

The classroom

Marker pens to write headings – see **'Table Talk'** section

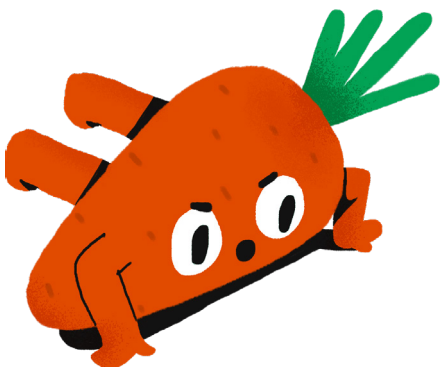
**Notes:**

## Lexicon

<b>elated</b>	Happy; a sense of elevated mood and higher awareness.
<b>endorphins</b>	Natural substance produced in your body that makes you feel good. They're stimulated during exercise and when you do stuff you enjoy – like joking around with friends or biting into something brain-meltingly tasty!
<b>oxygenate</b>	To bring oxygen – as the blood does to muscles.

## Jump around, Jump! Jump!

- Get up! Get the whole class on their feet doing jumping-jacks, running on the spot, or participating in any other one-minute energy blast you can think of. Go until everyone starts to puff. If you've got the time, start this activity outside the classroom door, before students even walk in!
- Ask: how did that feel? Do you have more energy before or after the action, or less? Take a vote.
- ❓ **Discuss:** what do your muscles feel like? Happy and relaxed or a little bit wobbly? Both answers are okay. When we move our bodies for a burst like that, we use up the short-term energy that's available for muscles when they need it.
- Explore: what else happens? What would happen if we kept going for 10 minutes? What about an hour?
  - ◇ Our heart pumps more blood (to carry more oxygen).
  - ◇ Our lungs work harder to bring the oxygen in.
  - ◇ Our bodies use up energy stored elsewhere (not in our muscles).
- ❓ What happens to your mood when you get a good wriggle on? Talk about how endorphins are produced by your body and circulate through your bloodstream when you exercise – they can make you feel happy, elated!



## Chomping like a Champion

👁 Watch **The One with the Sports**



**Discuss students' understanding of how eating and drinking can affect how your body feels and works.**

- ❓ Morgan's mum tells her, 'you're going to run fast if you eat well'. Do students agree with her?
- ❓ Make a class list of the foods Morgan says she eats before a race (what about water?) How much water does she drink when she trains?
- ❓ Are any of the foods Morgan eats unfamiliar to students?
- ❓ Does she make different choices on different days? Why might this be?
- ❓ What's Morgan's favourite vegetable? Do you like it? Have you tried her special snack version?
- ❓ What's Morgan's super-special speedy food she eats before a race? (Medjool dates with peanut butter.)
- ❓ What does Morgan eat after a race to recover? (A smoothie or a muesli bar. Nuts during training.)

**Have a look at the list and divide up some of the foods into groups. Here are a few examples:**

- ◇ Peanut butter: protein, fats
- ◇ Tofu: protein
- ◇ Smoothies: carbohydrates, protein, water
- ◇ Muesli bars: carbohydrates, fats
- Morgan eats a plant-based diet so it may be worth pointing out that she gets a balanced diet by finding plant-based sources of protein such as hummus (beans and legumes), mushrooms (some protein), tofu, peanuts (also legumes) and soy milk.

## Super Humans

? What does it mean to be Super Human?

- Think-Pair-Share: ask pairs of students think silently first, then discuss and answer one of these questions based on what Morgan told them in her interview.
- What do we do to achieve the following:
  - ◇ Develop, maintain and repair muscle? (Eat protein and a balanced diet, sleep.)
  - ◇ Be mentally alert? (Eat a balanced diet, drink plenty of water, sleep.)
  - ◇ Be ready for long-term endurance exercise? (Have slow-release carbohydrates, fats, protein – and a top up of protein like a snack of nuts if possible.)
  - ◇ Go for it with short-term energy bursts like a quick burst of speed, or a jump? (Consume carbohydrates.)
- On the butcher's paper write (or have pre-written) the following headings (one per piece) then distribute one to each table.
  - ◇ Rescue and emergency
  - ◇ Law enforcement
  - ◇ Military (all three branches)
  - ◇ Dance, acrobatics and entertainment
  - ◇ Circus arts and acrobatics
  - ◇ Professional sport, including coaching and training
  - ◇ Space exploration/space science
  - ◇ Underwater exploration/salvage/professional diving.
- Explain to students that lots of people like Morgan have jobs that require them to be in excellent physical condition.
- Ask students to suggest ideas about the kinds of jobs people do that relate to the heading on their paper. Get them to write down their ideas.
- Do the first one together if you need to get the class started.
- Students might be inspired by stories, news items, people they know or any other source. This is a brainstorm – no ideas are wrong! (They may come up with more categories, too – such as wilderness education, large animal management, and environmental protection.)

### Example: Rescue and Emergency

- ◇ SES emergency crews – clearing fallen trees
  - ◇ Paramedics rescuing people from car accidents
  - ◇ Climbing experts rescuing people from cliffs and mountains
  - ◇ Fire fighters – bush and city
  - ◇ Fire bomber aircraft pilots
  - ◇ Ambulance crew – medic, driver, dispatch
  - ◇ Ocean search and rescue – diver, boat captain, radar operator
  - ◇ Helicopter pilot, Royal Flying Doctor Service
- After each group has added ideas to their table page, either share them or have students move tables. When they get to a new table students read what is there and add more ideas.



## A Day in the Life

- Put up the pages around the room. Students choose one of the careers on the list and write an informative or narrative text about a person in the job. Examples include:
  - ◇ A day in the life of [...].
  - ◇ How [...] trained to become the world's best rock climber.
  - ◇ The training schedule for [...].
  - ◇ A story about [...] and the cliff-top rescue/helicopter rescue/underwater treasure salvage.
- This might inspire an interesting conversation around gender roles and stereotyping in jobs. Here's a great video out of the UK you might like to show if your class seems to be going that way:
  - ◇ Inspiring the Future - Redraw the Balance: <https://youtu.be/qv8VZVP5csA>

### Resources

- ◇ Australian Dietary Guidelines 1-5 (text): <https://www.eatforhealth.gov.au/guidelines/australian-dietary-guidelines-1-5>
- ◇ Australian Dietary Guidelines – Healthy Eating for Children (PDF download printable brochure): [https://www.nhmrc.gov.au/\\_files\\_nhmrc/file/publications/n55f\\_children\\_brochure\\_print.pdf](https://www.nhmrc.gov.au/_files_nhmrc/file/publications/n55f_children_brochure_print.pdf)
- ◇ Australian Dietary Guidelines – list of all downloadable brochures and posters: <https://www.nhmrc.gov.au/guidelines-publications/n55>