

# STUDENT WORKSHEETS



## WORKSHEET 1: HEALTHY EATING PLAN

Name: \_\_\_\_\_

Using *Appendix 2: Australian Guide to Healthy Eating*, create a weekly lunch menu, suitable to bring to school. It must incorporate carrots in various forms throughout the week.

For each day complete the table with:

1. Lunch you've chosen.
2. Ingredients.
3. Food groups your ingredients fit into.
4. Where you can source ingredients from.

	Lunch	Ingredients	Food Groups	Source
<b>Sample</b>	Pesto Pasta Salad	Whole-wheat pasta Cherry tomatoes, halved Lightly cooked broccoli Shredded carrots Pesto	<ul style="list-style-type: none"> <li>• Grains</li> <li>• Vegetables and legumes/beans</li> <li>• Fats, Oils, Nuts and Seeds</li> </ul>	<p>Sourcing considerations: Local and seasonal produce Organic Minimal processing - less processed foods often have a lower environmental impact. Packaging and waste Reduction - minimal packaging Use of the whole ingredient - can be used entirely helps reduce food waste. Local produce from farmers market or supermarket or home vegetable garden.</p>
<b>Monday</b>				



**WORKSHEET 1: HEALTHY EATING PLAN**

	Lunch	Ingredients	Food Groups	Sustainability
Tuesday				
Wednesday				
Thursday				
Friday				





**WORKSHEET 2: MENU SHARING AND COMPARING**

4. What properties of carrots make them suitable for each of the meals you have designed?

Blank space for student response to question 4.

5. Which unique idea/s do you like?

Blank space for student response to question 5.

6. What will you share with the class?

Blank space for student response to question 6.

## APPENDIX 1: CARROT FACT SHEET



# Carrot Fact Sheet

### FUN FACTS

Carrots originated as purple, yellow, white and black varieties.

Orange carrots were developed relatively recently (17th century) in the Netherlands.

Different coloured carrots still exist in various parts of the world today.

### PRODUCTION

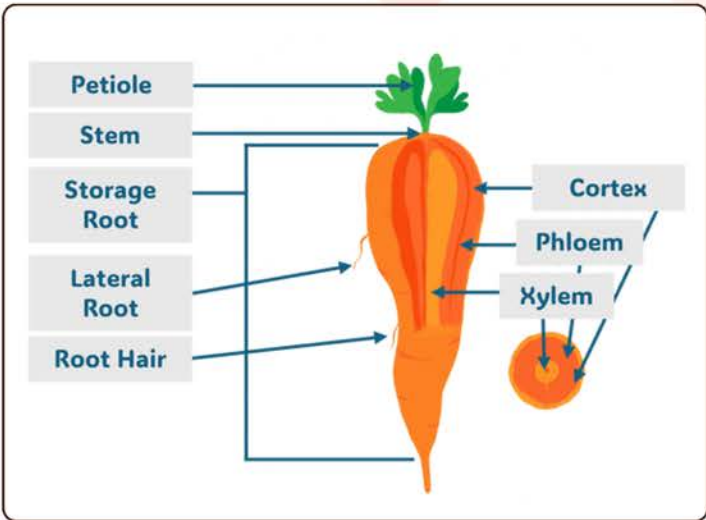
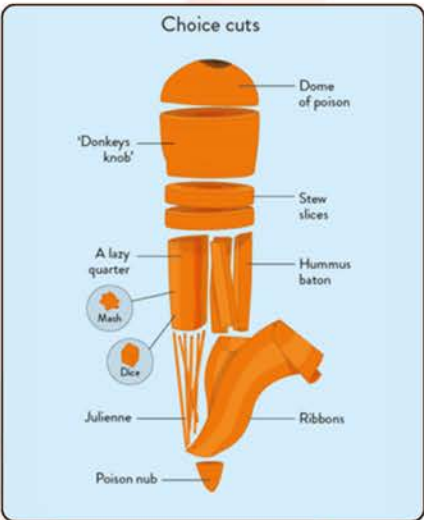
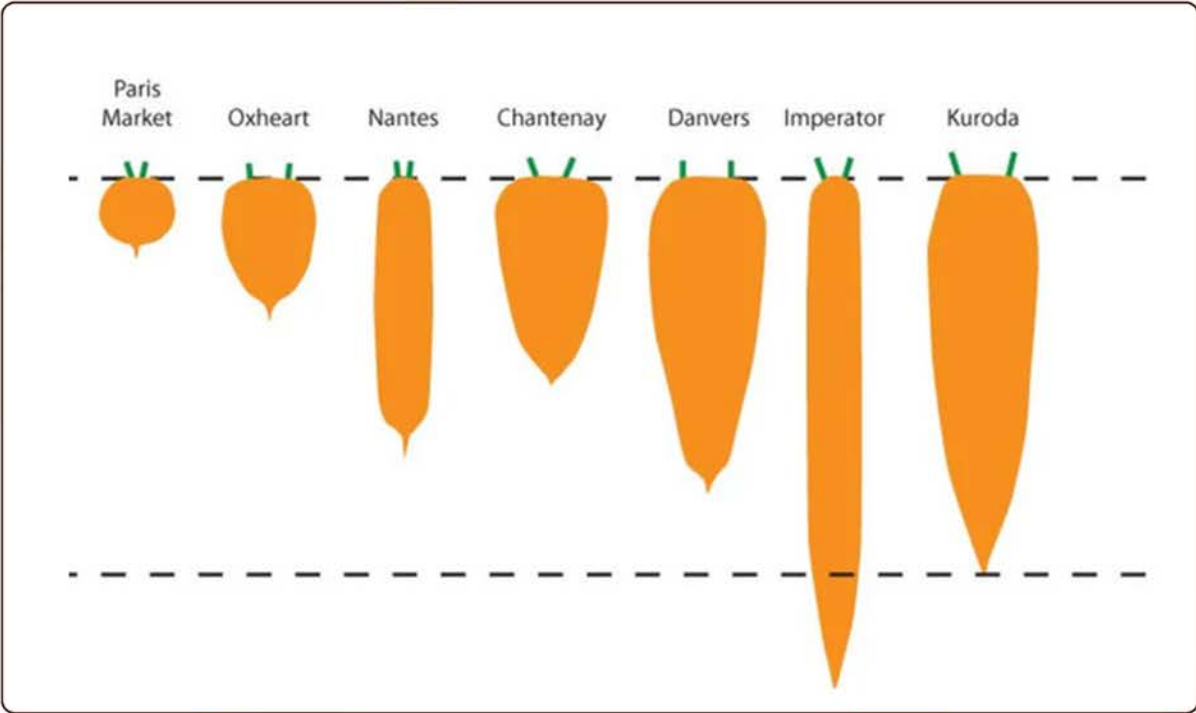
Victoria and Western Australia are the leading carrot producers, collectively accounting for more than half of Australia's carrot output. Following closely are Tasmania, Queensland, and South Australia, contributing significantly to the nation's carrot production.

### TIMELINE

- **5000 years ago:** Wild carrots cultivated in Afghanistan region (purple, black, white).
- **2000 BC:** Purple carrots depicted in Egyptian temple drawings.
- **900-1000 AD:** Purple and yellow carrots spread from Afghanistan to eastern Mediterranean.
- **1300s:** Purple and yellow carrots appear in western Europe and China.
- **1600s:** Yellow carrots introduced in Japan.
- **1700s:** White carrots reported in Europe; orange carrots first appear in Netherlands.
- **Today:** Orange carrots are predominant worldwide, but various colourful varieties persist regionally.



## COMMON SHAPES OF CARROT CULTIVARS





## VARIETIES

Most of the carrot varieties grown in Australia belong to one of the following four variety groups distinguished by shape. However, new varieties, such as Mojo, are the result of combining characteristics from several variety groups via conventional plant breeding.

## IN AUSTRALIA



The four major variety groups represented in Australia are:

- 1. Nantes** varieties are blunt-ended straight to slightly tapered roots. Nantes varieties are generally sweet flavoured because of low terpenoid contents.
- 2. Imperator** varieties, such as Red Hot and Cellobunch, produce pointed roots up to 350 mm long.
- 3. Autumn King** varieties have wide-shouldered highly tapered pointed roots averaging 300 mm in length. The main representative of this group grown in Australia is Western Red.
- 4. Chantenay** varieties such as Royal Chantenay are wide-shouldered and highly tapered with good internal colour.



## NUTRITION

Nutritional Information  
(per medium carrot, approx 61g)

Nutrient - Amount - % RDI =  
Recommended Daily Intake

- Kilojoules - 104 - 0.2%RDI
- Carbohydrates - 5.8g - 2.4%RDI
- Sugars - 2.9g - na
- Fibre - 1.7g - 5.6%RDI
- Protein - 0.5g - 1.1%RDI
- Vitamin A - 509mcg - 57%RDI
- Vitamin K1 - 8.1mcg - 17.1%RDI
- Potassium - 195mg - 4.9%RDI
- Vitamin C - 3.6mg - 8.0%RDI
- Folate - 11.6mcg - 3%RDI
- Beta-Carotene - 5,050mcg - na

## Health Benefits of Carrots

**Rich in Nutrients:** Carrots are an excellent source of vitamins A (from beta-carotene), K1 and B6, as well as potassium and antioxidants.

**Eye Health:** The high beta-carotene content supports good vision and immune function.

**Digestive Health:** The fibre content promotes healthy digestion and regular bowel movements.

**Low Glycemic Index:** Carrots have a low glycemic index, making them suitable for blood sugar control.

**Heart Health:** Antioxidants in carrots may help lower cholesterol levels and reduce the risk of heart disease.

# APPENDIX 2: AUSTRALIAN GUIDE TO HEALTHY EATING



Australian Government  
National Health and Medical Research Council  
Department of Health and Ageing

[www.eatforhealth.gov.au](http://www.eatforhealth.gov.au)

## Australian Guide to Healthy Eating

Enjoy a wide variety of nutritious foods from these five food groups every day.  
Drink plenty of water.



**Use small amounts**



**Only sometimes and in small amounts**



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## APPENDIX 3: CARROT NUTRITIONAL VALUE

### CARROT NUTRITIONAL VALUE



per 100g

<b>FAT</b>	0.24g	<b>CARBOHYDRATES</b>	
<b>PROTEIN</b>	0.93g	sugar	4.7g
<b>VITAMINS</b>		dietary fibre	2.8g
vitamin A	835	<b>MINERALS</b>	
vitamin B1	0.066mg	potassium	320mg
vitamin B2	0.058mg	sodium	69mg
vitamin B3	0.983mg	calcium	33mg
vitamin B5	0.273mg	phosphorus	35mg
vitamin B6	0.138mg	magnesium	12mg
vitamin B9	19	iron	18mg
vitamin C	5.9mg	zinc	0.24mg
vitamin E	0.66mg	maganese	0.143mg
vitamin K	13.2	<b>ENERGY</b>	171kj

## APPENDIX 4: PRIME GROWING REGIONS



## APPENDIX 5: FRESH CARROTS PRODUCTION

# Fresh Carrots Production

### MAJOR PRODUCTION AREAS



Source: AUSVEG

Carrot production occurs primarily in the southern states of Australia, with a large volume of carrots grown for the export market in Western Australia.

#### CONSUMER METRICS:



## 92%

92% of Australian households purchased carrots, buying an average of **948g** per shopping trip.

#### PER CAPITA CONSUMPTION:

## 7.4kg



in 2022/23 based on the volume supplied.

#### PRODUCTION WINDOW:



## Year-round

(Hort Innovation, 2023)