

## Food Knowledge and Skills and Evidence-based Research

### Key Knowledge and Key Skills

#### Key Knowledge 4.1.1

Contexts for gaining food knowledge and skills.

#### Key Skills 4.1.2

The principles of evidence-based research used in the development of the Australian Dietary Guidelines and Australian Guide to Healthy Eating and their application in response to contemporary food fads, trends and diets.

#### Key Skills 4.1.3

Analyse the nutritional efficacy of contemporary food fads, trends and diets.

#### Key Skills 4.1.6

Demonstrate understanding of the healthy eating recommendations of the Australian Guide to Healthy Eating by applying them to food selection, planning and preparation.

*VCE Food Studies Study Design p. 25 and 26, Please note: Extracts from the VCE Food Studies Study Design (2023-2027) reproduced by permission; © VCAA. VCE is a registered trademark of the VCAA. The VCAA does not endorse or make any warranties regarding this study resource. Current VCE Study Designs and related content can be accessed directly at [www.vcaa.vic.edu.au](http://www.vcaa.vic.edu.au). Readers are also advised to check for updates and amendments to VCE Study Designs on the VCAA website and via the VCAA Bulletin and the VCAA Notices to Schools.*

## Terms and Definitions

**Context** refers to the circumstances surrounding or forming an event or situation.

**Food knowledge** can be described as individuals understanding what foods they should eat, why they eat particular foods, and keeping food safe.

**Food skills** can vary between individuals. It generally refers to a person's ability to cook basic meals such as stir-fries to meet their nutritional needs. Still, it may extend to the ability to grow, plan, select, budget, and safely prepare foods from scratch. It could also include the ability of someone to try and accept new foods.

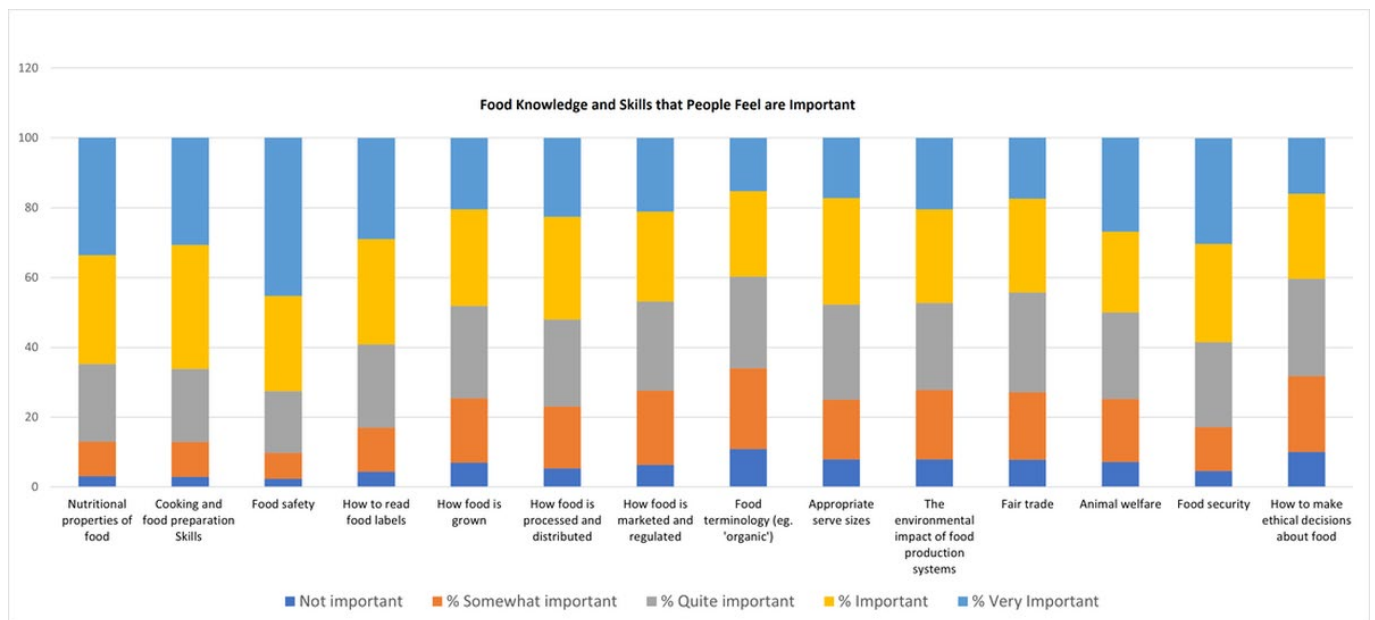
**Nutritional efficacy** refers to the ability of the food fad, trend, or diet to provide nutritional benefit or effect.

## Contexts for Gaining Food Knowledge and Skills

### Food Knowledge and Skills

Food knowledge and skill development are essential in today's modern world. Individuals' food knowledge and skills level can have far-reaching implications throughout their lives and those of others around them. Food knowledge equips individuals with the ability to make informed food choices on what to eat, how to eat it, and where to source food from. Individuals with food knowledge and skills understand the positive and negative impact particular foods have on their emotional, mental, physical, and social wellbeing. People who develop their food knowledge and skills understand the importance of safe food practices and the complexity of various environmental and ethical implications of their food choices on the world around them.

The Physical Activity and Research Centre at Deakin University conducted a study in 2011, which found that many people felt food knowledge was essential. The results of the survey are provided below.



(Worsley, 2011)

The results of the survey indicated that people felt the following food knowledge and skills were particularly important:

- cooking and food preparation skills;
- food safety;
- how to read food labels; and
- nutritional properties of food.

Other food knowledge and skills that were identified in the survey related to:

- animal welfare;
- appropriate serving sizes;
- ethical decision-making;
- how food is grown, processed, distributed, marketed, and regulated;
- the environmental impact of food production systems.

It would be interesting to find out what the results would be like now, considering that the role of ethics and the environment in the food system is more prominent in today's society than ever before.

## Context

A context refers to the circumstances surrounding or forming an event or situation. Nowadays, people gain food knowledge and skills in various contexts. In their early years, preschool education, school communities, family, and friends significantly influence a child's food knowledge and skill development. As they age, individuals tend to gain more knowledge and skills from internet sources, apps, news reportage, and the media.

The images below list various contexts where people may gain food knowledge and skills.



*School*



*Family*



*Friends*



*Health care centres*



*Websites and blogs*



*Apps*



*News reportage*



*Instagram*

### Gaining Food Knowledge and Skills: Community and Not-for-Profit Organisations

Some not-for-profit organisations aim to enhance individuals' food knowledge and skills. Nutrition Australia is a non-government, not-for-profit organisation. They provide nutrition-related resources and services to the public. They also deliver and support a range of health programs.

**Click on** the links below to find out more about the projects and campaigns that Nutrition Australia support.

<https://www.healthylife.com.au/>

<https://projectdinnertime.org/>

<https://www.vickidseatwell.health.vic.gov.au/>

<https://www.vegkit.com.au/>

### Gaining Food Knowledge and Skills: Educational Institutions

Food education occurs in preschools, and primary and secondary schools, though in different ways and to different degrees. Schools are ideal environments for providing reliable food education. Food education helps students lead healthy lives. Food education also increases children's awareness of the food system and associated environmental and ethical issues. In 2001, Stephanie Alexander, an Australian cook, food writer, and restaurant owner, began working on a Kitchen Garden Program at Collingwood College in inner city Melbourne. Stephanie was passionate about providing city children with positive food experiences like hers. She also wanted city-dwelling children to experience growing, harvesting, preparing, and eating fresh seasonal food. Stephanie believed that this would help children foster good food habits for life. The program at the College gained a lot of media attention and support from the public. As a result, in 2004, Stephanie established the not-for-profit organisation, The Stephanie Alexander Kitchen Garden Program. This program offers extensive support and advice to schools, mainly primary schools, in developing thriving kitchen garden programs. Various school resources are available, including curriculum documentation and a video demonstrating food preparation and cooking skills. The Stephanie Alexander Kitchen Garden program was introduced to secondary schools in 2020.

### Gaining Food Knowledge and Skills: Local Government

Local governments have a unique opportunity to create and deliver projects that improve the knowledge and skills of people in their local areas. My Smart Garden program is managed by various local councils in Melbourne. It aims to improve people's understanding of how to create sustainable gardens in our changing environment. The program began in 2011 and has evolved into a network of over 4000 household gardens in Melbourne, where

people not only establish habitats for animals but grow food sustainably. The My Smart Garden program provides skill-based resources and workshops where people learn various skills, including how to grow and harvest food in their home gardens.

**Watch** this video about how the Stephanie Alexander program has impacted students' food knowledge and skills:  
[https://youtu.be/sbZ7-gfB\\_Ks](https://youtu.be/sbZ7-gfB_Ks)

**Watch** this video about a couple who attended a My Smart Garden program workshop:  
[https://youtu.be/dINpf3O\\_MsE](https://youtu.be/dINpf3O_MsE)

### **Gaining Food Knowledge and Skills: State and Federal Governments**

The federal and state governments have introduced various policies and support programs that develop people's food knowledge and skills.

The Vic Kids Eat Well program focuses on supporting community centres, outside school hours programs, schools, and sporting clubs to provide healthy drinks and foods. The Victorian Government supports the Vic Kids Eat Well program in conjunction with the Victorian Cancer Council and Nutrition Australia.

The Live Lighter is a campaign funded by the state governments. It began in Western Australia in 2011 and has been adopted by the Australian Capital Territory, Northern Territory, Tasmania, and Victorian governments. These campaigns included topics relating to sugary drinks and cancer, eating too much fat and ordering takeaway food regularly. The Live Lighter campaign initially launched a series of television ads about the impact of fat and sugar on the body. Over the years, they began other campaigns which focused on eating a wide variety of fruits and vegetables, exercise, junk food and sugary drinks, and sustainability.

As part of their campaign, Live Lighter has developed several resources, including the following:

[Click here](#) to view fact sheets about healthy cooking, healthy eating, and shopping for healthy food.

[Click here](#) to view junk food, sugary drinks, and physical activity calculators.

[Click here](#) to view recipes for people to make at home.

[Click here](#) to download free meal plans, which enable people to mix and match recipes to suit their preferences.

## **The Principles of Evidence-Based Research and Food Fads, Trends, and Diets**

### **Contemporary Food Fads and Trends**

A food fad is a food or food product that experiences a quick rise in popularity followed by a sharp decline. A food trend is generally longer lasting and remains a favourite or popular food for a more extended period of time.

Food fads and trends tend to promote specific health benefits such as the ability to cure a disease or assist with a particular health problem. The claims made about many food fads and trends are not always accurate. While some food fads or trends, such as the consumption of home-grown or organic foods, may positively impact health, some food fads and trends do not. Individuals following food fads and trends, in the long term, may cause more harm to their bodies than good. This is because they may restrict their intake of certain foods and promote the consumption of others. They often do so because the food fad or trend they follow has a minor link with specific health benefits such as alleviating a particular health condition or curing a disease.

Popular food fads and trends such as the consumption of bliss balls and vegetable chips may seem like healthy snack foods; however, commercial varieties can contain hidden fat, salt, and sugar.

Examples of other contemporary food fads and trends are pictured below:



*Plant-based meats lack vitamin B12. The only foods that contain vitamin B12 come from animal sources.*



*Plant-based milk does not contain the same nutritional value as milk from mammals. Additional nutrients often need to be added.*



*Excessive quantities of turmeric need to be consumed daily to experience specific health benefits.*



*Consuming cauliflower may help to increase vegetable intake; however, as a replacement for rice, it may decrease carbohydrate intake.*

## Contemporary Fad Diets

Fad diets are diets that promise weight loss or other health advantages. Fad diets often restrict or eliminate essential food groups, recommend a specific kind of food in copious amounts, or reduce kilojoule consumption to dangerous levels. They usually provide short-term results, are challenging to sustain, have rigid rules, and often deprive people of essential nutrients. They are popular because they promise fast weight loss or other perceived benefits. Very few fad diets align with the *Australian Dietary Guidelines* and the *Australian Guide to Healthy Eating*. Those that do are usually supported by extensive scientific research and have been proven successful long term. The Mediterranean and CSIRO Total Wellbeing are examples of diets with scientific backing.

Examples of contemporary fad diets include gluten-free, juicing, keto, paleo, fat-free, and sugar-free diets.

**Watch** this video about the type of things you should look for when trying to identify a fad diet:

<https://youtu.be/8V15Z-yyiVg>

## The Principles of Evidence-Based Research

As discussed earlier in Unit 3, Outcome 1, the three principles of research were used to develop the *Australian Dietary Guidelines* and the *Australian Guide to Healthy Eating*. These three principles of research included:

- Accurate Analysis of Data
- Evidence-based Information
- Recognition of Credible Sources

Refer to Unit 3, Outcome 1, Topic 4 for further information about the principles of research.

### Application of Evidence-Based Research in Response to Contemporary Food Fads, Trends and Diets

Evidence-based research refers to using research that has already been done to inform a new study about a specific topic. It involves making decisions after thoroughly researching a topic and using the best information available rather than relying on others' opinions. Evidence-based research is essential because it eliminates the use of irrelevant or untrustworthy information that is not scientifically based. Examples of evidence-based research include systematic reviews and meta-analyses, randomised trial testing, cohort studies, peer reviews, and case study analysis. Some food fads, trends, and diets can lead to insufficient intake of nutrients in the body and increase the risk of health problems in the long run. Therefore, it is important to seek evidence-based research when determining the validity of food fads, trends, and diets.

Evidence-based research was used to develop the *Australian Dietary Guidelines* and the *Australian Guide to Healthy Eating*. For this reason, the *Australian Dietary Guidelines* and the *Australian Guide to Healthy Eating* should be used to analyse the nutritional efficacy of contemporary food fads, trends, and diets.

## References

Worsley, P. T. (2011). *Food Knowledge Survey 2011: Preliminary Report*. Retrieved from Deakin University, Centre for Physical Activity and Nutrition Research:  
[https://www.deakin.edu.au/\\_\\_data/assets/pdf\\_file/0020/307028/food-knowledge-survey-report.pdf](https://www.deakin.edu.au/__data/assets/pdf_file/0020/307028/food-knowledge-survey-report.pdf)