

CHAPTER 2

How to use the Fundamental Guidelines



Overview

The Fundamental Guidelines serve as a reference document describing potential hazards in the production and supply of fresh produce and recommending good practices for managing the risk of contamination by those hazards. They are voluntary guidelines and designed to inform, educate and support the fresh produce industry in enhancing food safety outcomes. Importantly, they do not impose obligations, nor do they involve certification or audits. Users should check that they are using the latest version of the Fundamental Guidelines by visiting the FPSC website: www.fpsc-anz.com.

2.1 Hazard versus risk

Understanding the difference between hazard and risk is essential for using these Fundamental Guidelines and managing food safety in a fresh produce business.

- **Hazard:** something that can potentially cause harm including injury or illness (e.g. a pathogen)
- **Risk:** the probability of a hazard being present in fresh produce (e.g. remote possibility – once per year) combined with the severity of the harm (e.g. will cause serious illness in people).

Hazards are objective and easily identifiable items like physical, chemical (including allergen) or microbiological contaminants. They are described as ‘black and white’ given something is either considered a hazard or it is not. Risk, on the other hand, is uncertain as it involves context, judgement, and probability of a hazard being present. Risk is therefore considered ‘grey’ given it is related to something that might happen.

Agrichemicals, for example, are hazards as they are inherently harmful. The risk of harm to peoples’ health depends on how they are used and applied, therefore growers conduct a risk assessment then adopt relevant good practices including those described in the Fundamental Guidelines to manage, minimise or eliminate the risk to an acceptable level.

2.2 Quick Guides for Fresh Produce Food Safety

The Fundamental Guidelines are complemented by Quick Guides for Fresh Produce Food Safety (known as the ‘Quick Guides’) which provide an easily digestible, user friendly aid for day to day use by growers and team members. The Quick Guides enable rapid identification of key hazards and practices for each management area. They have been developed using the same structure as these Fundamental Guidelines so users can easily find more information on a topic if needed.

2.3 Structure of The Guidelines

The Fundamental Guidelines are comprised of numerous chapters which are generally based on a management area (e.g. water), supporting system (e.g. testing) or useful information (e.g. microbes associated with fresh produce). A list of chapters can be found in the contents page, while an overview of the content within each chapter can be found in the introduction. The Fundamental Guidelines are published in two formats to meet varying user needs:

- Integrated – A complete document including all chapters and appendices
- Modular – Each chapter and appendix can be viewed or downloaded individually.

2.4 Structure of each chapter

To provide for user friendly experience and ease of use, each chapter for managing risk is comprised of a similar set of sub-headings including:

- Overview
- Hazards and sources of contamination
- Additional information for significant hazards and good practices
- Good practices for managing risk
- Resources

2.4.1 Overview

This section provides a brief summary of the chapter content including why it is important for fresh produce food safety.

2.4.2 Hazards and sources of contamination

This section introduces the relevant physical, chemical (including allergen) and/or microbiological hazards associated with that management area. It also provides a list of the most common sources of contamination for each type of hazard.

2.4.3 Additional information for significant hazards and good practices

Many chapters include additional sub-headings which provide further information on the key hazards and good practices for the relevant process or management area. For example, Personal Hygiene (Section 14.3) is a sub-heading in Chapter 14 on Managing People. It provides additional guidance on hygiene practices including handwashing and sanitisation given the importance of this practice for minimising the risk of contamination of fresh produce.

2.4.4 Good practices for managing risk

Throughout the Fundamental Guidelines, good practice replaces best practice to recognise continuous improvement and the evolving nature of evidence, technology and operations. This section provides a summarised and tabulated collection of good practices that businesses can adopt to manage, minimise or eliminate the risk of contamination. Good practices are grouped into relevant management areas (e.g. growing, training) to highlight the options available for users.

2.4.5 Resources

List of scientific papers, industry guidelines or regulatory documents relevant to that chapter where users can find more information on the topic.

2.5 Visual aids and diagrams

2.5.1 Decision Trees

These tools use a flowchart approach to support users to make decisions based on risk (e.g. assessing the risk of contamination with cadmium). The flow charts facilitate interpretation by using a series of questions, hazards, practices and operational settings to assess the level of risk, then direct users to good practices which manage the risk.

2.5.2 Figures

Figures provide visual presentation of processes, useful information and good practices.

2.5.3 Tables

Tables provide structured presentation of information and have been used mostly for sections on hazards and sources of contamination and good practices for each management area.

2.5.4 Images of good practice and risk

Images help to present information in a more meaningful way using practical examples from the fresh produce industry. There are two types of symbols used on images to illustrate if they are considered good practice or a potential risk.



Example of
good practice in
action.



Example of hazard
or scenario with risk
of contamination.