

# Reviews

## **The Complete Manual of Small-scale Food Processing**

Peter Fellows

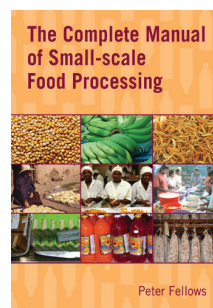
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This manual really does do what it says on the cover – it provides a *complete* overview of how to establish (or improve) a small-scale food-processing business. All aspects of establishing a business are covered in a very easy to read, practical fashion. The practical information is drawn from the author's wealth of experience in this field of assisting small-scale food-processing entrepreneurs to set up and succeed in business.

While this is primarily a technical manual on food processing, the first chapter of the book is dedicated to marketing; ensuring that you have a product that meets a market need is one of the most important principles behind any business. Clearly market research and understanding the market for a product are key skills in this respect. And so this is where we begin. The marketing chapter guides the reader through all stages that should be considered prior to developing a new product. It contains easy to understand practical examples such as how to calculate market size and relevant questions for a processor to ask to determine a suitable market segment to enter. The chapter finishes with a section on packaging and labelling. It covers the legal requirements of labelling, but also includes several useful practical and realistic tips for designing labels to attract consumers.

After completion of the marketing activities, the next logical step is to make a 'fit for purpose' production unit. As with all chapters in this manual, the chapter on establishing the production unit is comprehensive and packed with practical examples in different areas such as how to carry out feasibility studies, prepare business plans, and recruit and train staff. Sample floor plans are included for different sized food-processing units. Of course these are full of practical considerations that small-scale food processors would have to face: issues such as choice of fuel, water treatment, power supply and lighting are all included in this chapter, which is designed to help the food processor navigate the various hurdles encountered along the way.

Once the practicalities of establishing the production unit are dealt with, attention turns to the post-harvest processing and storage of foods and the conversion of raw materials into a range of edible products. Chapters 3 and 4 cover methods of both primary and secondary processing and Chapter 5 concentrates on the packaging and labelling of the different products.

The chapter on post-harvest processing and storage describes methods of cleaning, sorting, peeling, size reduction, blanching, mixing, and drying that are used to process both crops and animal products. The foods covered include cereals, legumes, oilseeds, root crops, fruits, vegetables, meat, and milk.

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Primary processing, or the initial preparation of all food groups, is covered in detail, with reference to suitable equipment for each stage. Chapter 4 turns to secondary processing techniques such as baking, roasting, boiling, extrusion, fermentation, and pasteurization – processes that are used to change the quality of food and make it suitable for consumption. Seventeen different food processes, alphabetically listed from baking through to smoking, all of which are suitable for small-scale food processors, are described together with the equipment necessary at each stage of processing.

What I like about the manual, and what makes it stand out from other practical manuals for food processors, is that it is organized according to process rather than commodity type. Hence, primary and secondary processes that are suitable for a range of commodities are explained in some detail and repetition of processes is avoided. This means that it can be adapted by processors to suit their own products. Each stage of a food process is described by use of a flow chart that is made up of a series of unit operations. The equipment required for each stage of the process is listed and reference made to where this can be sourced. A very practical addition to this manual is the inclusion of methods to calculate the size of equipment and process throughputs for each of the operations.

Many small-scale processors do not use formal quality management methods – mainly because they are not familiar with them or do not have the knowledge to implement them. Instead they rely on quality control checks of the final product such as its colour or weight. Chapter 6 aims to introduce the idea of quality assurance throughout the production process rather than quality control. It does so by introducing a practical approach to HACCP (hazard analysis and critical control point system) for a range of different products and processes. The manual includes practical examples of record keeping that form part of a quality assurance scheme. Methods of food analysis and the equipment needed for the analysis, that may be required as part of a QA programme, are also included.

Managing production is an essential part of any operation and can have profound effects on the success or failure of a business. With small-scale operations, it is an area that is easy to overlook. Again, this manual triumphs in explaining the different aspects of production management that need to be put into place for an enterprise to thrive and expand. As with the previous chapters, this and the subsequent chapter on financial planning are peppered with practical worked examples that are easy to implement.

The manual concludes with a reference section of useful links and further information on the topics covered. With access to the internet, a lot of this advice can be found online, but it is more reassuring to have a ready source of tried and trusted information at hand, all compiled in one useful, practical manual.

According to the author, one of the aims of this book is 'to provide detailed information that can enable advisers and entrepreneurs to develop and improve small food businesses'; the style and content of the book most certainly do this. This manual is *the* essential tool or handbook for all involved in the business of small-scale food processing – thank you and congratulations Peter for meeting that aim!

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