

Overview

This standard is about the principles of bulk size reduction produce and food materials. It is about understanding the technology of the size reduction process. Size reduction may typically be carried out for products like; potatoes, fruit, vegetables, fish, meat and poultry.

This standard is for you if you need a broad understanding of the food technology of bulk size reduction of produce and food materials, in preparation for further processing. You need to understand the functions of the size reduction processes. You need to know how these processes are best suited to food material types.

Performance criteria

You must be able to: See
IMPPO241S Select and prepare raw materials in food manufacture

Knowledge and understanding

You need to know and understand:

- 1 the definition of size reduction in produce and food materials
- 2 what the rationale is for the size reduction of produce and food materials after sorting and grading
- 3 what the role of size reduction is in the preparation of convenience foods and for other processes like blanching, canning, juice extraction
- 4 the purpose of crushing plant prior to many size reduction processes
- 5 what the characteristics of grinding processes are; hammer mills, disc mills, pin mills, ball mills
- 6 what types of material cannot be subject to grinding processes
- 7 the characteristics of reduction using cutting and dicing equipment
- 8 the type of food materials which are processed using cutting and dicing
- 9 what the characteristics of shredding processes are, and the food material best suited to this
- 10 how shredding increases food material surface area for further processing
- 11 how pulping is carried out for making juices and extracts, and the equipment used
- 12 the types of processes which rely on effective size reduction of produce and food materials

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