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Quality and safety

This chapter deals with the quality and safety of the finished processed table olive products and the chemical and microbiological testing that is required to guarantee the quality of the final product. The physical properties of table olive products that need to be monitored, including firmness, Flesh:Stone ratio and colour, are discussed. The chemical analyses that are required to develop the nutritional panel (mandatory for commercially packed olives) are presented. (The chemical testing carried out by the authors (Kailis and Harris 2004) showed that some of the mineral content of olives is leached out during processing.) A general nutritional label is given along with two worked examples and a typical label for tapenade. The concentrations of brine solutions are listed along with the pH required for the storage of processed olives to prevent microbiological spoilage. The importance of microbiological testing is emphasised as problems in this area can have rapid and devastating effects on the consumer as well as the manufacturer. The types of microbiological tests available are provided and we discuss the need for all table olive producers to have a product recall system in place. The successful production of table olive products rests on their organoleptic and safety qualities. A number of organoleptic tests and a scoring regime that is consistent with the IOOC Table Olive Standards (2004) are provided. Spoilage and deterioration of table olive products that can occur during production, or appear later in the final product, are also discussed.

Introduction

Processed table olives must be edible, tasty, nutritious and safe to eat. These objectives can only be achieved if processors follow practices that ensure such qualities are retained. As indicated in Chapter 3, quality starts at the planning stage so that appropriate varieties relevant to processing method, style and consumer preference are used. Olives selected for processing should be produced by Good Agricultural Practices (GAP); processed by