
Extra virgin is the top grade of olive oil commercial quality. It is physically extracted, without the use of chemicals or biochemical agents and excessive heat and it does not have sensory defects, but, at least, it must present a noticeable intensity of fresh olive fruit flavor. Olive oil’s sensory attributes and nutritional value are increasingly attracting the attention and interest of the oil consumers. Thus, the constant increase of demand for extra virgin olive oil has led to new cultivation and production in zones of English Speaking, such as USA, Australia and South Africa. This book allows the readers of these countries to know the requirements necessary to obtain exquisite olive oil. It is an accessible and interesting guide for those who intervene in the links that form the chain of the olive oil world, from the farmer who cultivates the olive tree to the consumer who buys this product.

Claudio Peri, the editor, is professor emeritus of Food Technology at the University of Milan and president of the Centre for Quality Studies of the Academy of Georgofili of Florence. Although he developed his investigative stage mainly in tomato’s studies (see Scopus, basic search Peri C.), he became famous for having promoted the creation of the Association 3E (Ethics, Excellence, Economics), a nonprofit organization with the mission of fostering the culture and commercial success of excellence in extra virgin olive oil. This group proposed the introduction of a category of commercial quality superior to Extra in the virgin oils (Beyond Extra Virgin), demanding better values in the parameters that define its commercial quality. With this purpose, between 2007 and 2011 they developed an intense campaign of conferences worldwide. Claudio Peri considered in Italy as one of the most renowned experts in olive oil, tries with this book to continue the policy of this group, not conforming to the obtaining of a product that expires with the regulation, but looking for maximum quality.

The book is divided into three sections: The product, the process and the process control system. The book is authored by 18 different Italian experts and the references cited mainly belong to Italian authors, being Dr. Peri also author or co-author of numerous chapters in each one of these sections. This fact determines that the 25 chapters of the book result homogeneous, something not always achieved when a book is written by so many authors. Nevertheless, this exclusively Italian vision deprives the reader of the knowledge of the investigations performed in other countries, as the studies of cultivation carried out in Israel or Tunisia, of mechanized harvesting in California, of postharvest in Spain or of quality analysis in Australia.

Section I (“The product”) begins with a general summary of the stages that the production of olive oil needs from the tree up to its extraction or possibly refining. It continues with a series of chapters in which the product is described from different points of view. The official definitions of the categories, the quality parameters used to evaluate the commercial quality of the oils, its chemical composition together with its nutritional value, the method of evaluation of its incomparable sensory quality, the characteristics of the main cultivars used and, finally, the possible pollutants that it can contain are mentioned. The chemical characteristics of extra virgin olive oil give an indication of the care with which it was made: how the fruit
was grown, harvested, stored and transported, how it was processed into oil and how the oil was stored and bottled. This section includes also an interesting chapter about the effect oxygen and water on the quality of the product, although it would be better located in the second section, which describes the process of extraction. The reader obtains with this section basic notions necessary to understand what an extra virgin olive oil (EVOO) is and how its commercial quality is evaluated, also a better comprehension of the influence of the production stage on the final result.

Section II (“The process”) accurately explains the different stages of the VOO production from the fruit harvesting up to the product bottling, including a final chapter that covers its refining. In all the chapters of this section the aim of the editor and the authors is to present those aspects related to obtaining oils of maximum quality highlighting the admissible margins of temperature and time that each process stage needs in order to avoid the deterioration of the product. However, this reviewer is not in agreement with figure 9.4 (page 110), which shows the time-temperature relationship of the storage of healthy olives. Apparently, the graph is the result of five years of field tests carried out by Assotiation 3E and was published in two books authored by C. Peri. In this figure the time that healthy olives could be stored at 5 °C without deterioration of the oil quality subsequently extracted is limited to a period of 100 hours. This fact is not in agreement with an important number of publications of this reviewer where it is demonstrated that healthy olives correctly stored in ventilated plastic boxes of the varieties ‘Gordal’, ‘Picual’, ‘Arbequina’, ‘Verdial’, ‘Manzanilla’, ‘Villalonga’ and ‘Blanqueta’ could be stored for a minimum of 15 days without noticing a deterioration of the oil quality. In any case, the aim of the author is to report that the time between the harvesting and the processing of the olive fruit must be as minor as possible. This idea makes to the industry of the olive oil extraction, mainly Italian very happy.

Section III (“The process control system”) includes 8 chapters and an useful appendix that presents conversion factors, and the chemical and physical characteristics of olive oil. The gist of this section is on the first three chapters. They include the application to the process of EVOO elaboration of a Process Management System for the identification of the critical points of risk, for achieving a maximum of effectiveness (chapter 18); the need to establish a traceability of at least 4 stages (miling, harvesting, storage and packing) for the identification of the causes of loss or quality deterioration (chapter 19) and the convenience of an independent accreditation and certification to control the fairness, reliability and transparency of the whole system (Chapter 20). The rest of chapters are complementary, but also very interesting and necessary to be taken into account for the correct development of the elaboration of an EVOO that intends to achieve excellence in quality, being economically viable and obtained in a respectful way with the environment.