



## Book Review

Motarjemi Y., Moy G.G., Todd E. (2014). *Encyclopedia of Food Safety*. Elsevier, Inc. ISBN: 978-0-12-378612-8

Elsevier has a long history of producing encyclopedias in different aspects of science and medicine, but this four-volume work is the first of its kind in the field of food safety. Such an encyclopedia is meant to cover many related topics within this field, but each cannot be totally comprehensive. I believe the editors, the expert editorial advisory board, and the publisher have got it right when they created this encyclopedia. The fact that it takes four volumes means that the field of food safety is vast and it required many experts from around the world to put together this work. With 280 chapters, the encyclopedia provides the latest scientific information as concise overviews on a broad range of topics, such as: history and basic sciences that support food safety; prevalence, surveillance, and investigation of food borne diseases in six world regions; microbiological and chemical food borne agents; risk analysis; 16 types of traditional and newer food technologies; and food safety management systems to control potential hazards in different commodities by industry and government. Where there is overlap between food safety and other disciplines, there is some coverage of those aspects such as nutrition, food science and the environment. The publisher indicates that this encyclopedia should interest a wide range of professionals in industry, government and academia. I believe this is valid.

Although the whole encyclopedia is relatively expensive for individuals at over \$1000, various chapters can be purchased separately. For instance, for those with a particular concern for possible pathogens or other hazards in one food commodity, they can check the comprehensive index which chapters would be the most useful to them. Most potential purchasers will opt for the electronic-line version. Libraries may obtain the whole set for their readers.

As the oversight for the prevention and control of food borne diseases is expanded, especially in international trade, this encyclopedia will become invaluable to quickly explore specific topics and then follow up on the further reading list at the end of each chapter to obtain more information. In the microbiological area, there are over 33 bacterial, 27 parasitic, 10 viral agents and prions covered.

There are chapters on natural toxicants (11), environmental contaminants including toxic metals (9), contaminants associated with processing (13), food additives (7), pesticides (7), and veterinary drug residues (7). There are also chapters on nutritional hazards and allergies. There are 30 chapters on the safety of foods and beverages which include discussions on organic food, kosher and halal requirements, and deliberate food adulteration. There are 20 chapters on public health measures of prevention and control, and another 23 chapters on food safety assurance systems for industry. The last section describes institutions involved in food safety, primarily at the international level, such as World Health Organization (WHO), Food and Agriculture Organization (FAO) and International Organization for Standardization (ISO).

Interestingly, the International Commission for the Microbiological Specification of Foods (ICMSF) does not have a specific chapter but some of its members have contributed to various chapters throughout the encyclopedia. In summary, some of the chapter topics can be accessed in other text books or on-line sources, but there is nothing like this encyclopedia for its comprehensiveness in combining as many food safety related topics as possible less than one source. Some examples of the more unusual chapter topics are: History of food borne disease the Renaissance and Enlightenment; Food safety training and health education; Cost of food borne diseases; Food borne disease in travelers; Toxigenic corynebacteria; African Swine Fever Virus; Biogenic amines; Phthalates; Ectoparasiticides; Food-related choking; Nanotechnology and food safety; Safety of food in vending machines; Safety of Korean fermented foods; Risk governance; Management of biofilm risk; Food safety and ethics; and Global Harmonization Initiative.

If you want to expand your knowledge over the whole field of food safety you can look no further than dipping into this encyclopedia.

Dr. Ewen Todd

*Ewen Todd Consulting, Okemos, MI 48864, USA*

Email: [todde@msu.edu](mailto:todde@msu.edu)