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Preface

The term "nutraceutical" was coined in 1989 from "nutrition" and "pharmaceutical" [1]. According to reference [1], nutraceutical could be defined as a food (or part of a food) that provides medical or health benefits, including the prevention and/or treatment of a disease. Since then, the term nutraceutical has significantly expanded and although a generally accepted exact definition of this term does not exist today, it is now described in more general terms as any substance that is a food or a part of a food and provides medical or health benefits, including the prevention and treatment of disease. Thus, some isolated nutrients, dietary supplements, specific diets, genetically engineered foods, herbal products, etc., are now considered as nutraceuticals.

The increasing interest of consumers in nutraceuticals has brought about a rise in demand for these type of compounds and, in parallel, an increase in the number of scientific studies having this type of substances as main topic.

The works published in this special issue on *Nutraceuticals Analysis* illustrate well the different trends that can be observed at present in this active area. Thus, in five different reviews authors show the new tendencies regarding: (i) the analysis of phytosterols in foods; (ii) the analysis of isoflavonoids and lignans in different matrices; (iii) the chemical and biological characterization of nutraceutical compounds of broccoli; (iv) the occurrence, extraction and analysis of phenolics in cereals, fruits and vegetables and (v) the analysis and biological properties of amino acid derivates formed by maillard reaction in foods.

Research articles published in this special issue focus on the study of different nutraceuticals including polyphenols, fatty acids, vitamins as well as other more specific compounds such as ginkgolides, isoflavones, glucosamines, ephedrine alkaloids, saponins, etc. The existence of these compounds is studied in different natural matrices including rosemary, oregano, traditional herbs used as medicines, honey, meat products, berries, cod liver, soy, as well as in other different food products and dietary supplements. To do this, new extraction procedures as well as new chemical and/or biological methods to characterize the nutraceutical compounds are presented by using different analytical approaches including e.g., subcritical water extraction, preparative-supercritical fluid chromatography, LC–MS, LC–MS–MS, LC–ELSD, capillary electrophoresis (CE), CE–MS, isothermal titration calorimetry, etc.

We believe this issue devoted to *Nutraceuticals Analysis* can be a good reference for many laboratories working on this hot topic.

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Reference

[1] Stephen DeFelice, MD, 1989. Foundation for innovation in medicine, Cranford, NJ (Brower V. Nutraceuticals: poised for a healthy slice of the healthcare market? Nat. Biotechnol. 16 (1998) 728–731.

Bezhan Chankvetadze
Alejandro Cifuentes

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