

Nutraceuticals, Health and Social Development

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The so-called “nutraceuticals” have recently gained a growing role, thanks to their capacity to contribute to the keeping of a health status through the prevention of diseases. Such property derives from the particularly high content of bioactive molecules that, properly isolated, quantitatively characterized and determined, can be used to law regulated certification of the food itself, providing it with a notable added value in commercial terms. A nutraceutical food displays health properties highly preventive towards various human pathologies. In this regard, it must be remembered that chronic inflammatory diseases, metabolic diseases like diabetes and obesity and also different types of tumors have often been connected to the life style, and consequently, to nutrition.

Today we are able to test whether the products of interest for a local or extra-local community contain distinctive nutritional elements, that might be used both to qualify the products themselves as “nutraceuticals” and to recognize and certify their quality and to defend their originality. This calls for the interaction among research professionals from very different backgrounds and the use of complementary techniques of analytical chemistry (to identify the food active principles), biochemistry and molecular biology (to determine the biological effects of those principles) and electronics (to detect through non-invasive sensors the active principles in products and therefore to control their quality). Moreover, we need competences in patent law and economics, to make possible the commercial exploitation of new products beneficial for health.

The University seems to be the elective place where to find and integrate those multidisciplinary competences, which through the discovery and law regulated certification of nutraceuticals might generate new employment opportunities. In fact, considering the commercial importance of “made in Italy”, that nowadays sells in the United States alone about one third of really Italian agricultural food and two thirds of “imitated” products (for an amount of about 3.500 millions dollars a year), it is possible to grasp the importance of this sector as engine of socio-economic development of the “country-system”.

To conclude, the qualification of nutraceutical food might be considered a virtuous example of interaction among academic research, public health defense and promotion of social development. Some concrete cases will be displayed and discussed in the report.