Over the last decade, food operators have increasingly used nutrition and health claims to promote foods due to different but convergent interests of consumers, industry, researchers and public authorities. This has rapidly resulted in the need for tighter specific regulations in addition to the general food law in many countries. All the regulations are more or less based on the general Codex Guidelines [1], but may substantially differ in administrative processes and scientific requirements, according to the regulatory and cultural context and the history of claims in a given country [for review see 2]. For example, specific food categories have been created in Japan (FOSHU), whereas in Europe a very general regulation covers all the foods.

Claims represent a continuum from very simple nutrition claims (nutrient content claims or comparative claims) to disease risk reduction claims, through nutrient function claims and health claims. Not misleading the consumer is the basic principle that implies that claim should be scientifically substantiated. Again, the substantiation requirements may differ. In the USA, nutrient function claims can be used without preapproval by the Food and Drug Administration (with the use of a disclaimer), whereas the European regulation requires a positive opinion from the European Food Safety Authority. The ‘significant scientific agreement’ originally required in the USA for claim support, and now used in Europe, has been replaced in USA and Japan by the possibility of ‘qualified claims’, the claim wording reflecting the strength of the scientific basis. The European regulation has introduced the concept of proprietary data, which allows offering some form of protection (and thus incentive for innovation) for claims, when the positive scientific assessment could have not been obtained without the studies funded by the applicant.

Disease risk reduction claims are considered everywhere as the highest claim level for which there is a general requirement of
preapproval on the basis of a sound scientific dossier, including in particular well-designed human intervention studies.

As proposed by the Codex Guidelines, qualifying and/or disqualifying conditions can be added for a food to bear a claim: nutrient profiles have been implemented in the USA, but are still under discussion in Europe where they recently became a very sensitive political issue.

Finally, claims do not stand alone, but are inserted into a complex network of information, linking in the consumer’s mind, according to the prominent model used by social scientists, values (for health), attitudes (toward functional foods, including hedonic expectations and perception of food healthiness) and behavior (intention to purchase). Some (still rare) works suggest that there could be a negative impact of health claims on consumers and especially children [3] for whom health and pleasure could be mutually exclusive. Some experimental research with foods also shows the relatively low acceptance of disease risk reduction claims for foods as compared to other claim types, which questions the industry’s interest to fund high-cost research necessary to substantiate this type of claims in the context of more and more stringent regulations [3].

References