2 An Exploration of Food, Food Quality and Food Qualities

2.1 Introduction

If, as the New Oxford Dictionary of English suggests, food means “any nutritious substance that people or animals eat or drink or that plants absorb in order to maintain life and growth” [67], how do we classify dietary fibre? More to the point, how do we classify those modern food ingredients designed specifically not to carry calorific value? The food industry critic Derek Cooper has already provided a possible answer to that question in creating the concept of unfoods, which he applies specifically to the fat substitute Olestra [68]. The introduction of so-called novel foods into European Union food markets is controlled by regulation [69], but fulfilment of what criteria allows a potential food to transform itself into an actual one?

In this chapter, the essential nature of what it is exactly that turns some material or substance into a food suitable for human consumption is put under the spotlight, and is examined from both biological and cultural perspectives. Clearly, there are a number of different types of intrinsic quality attribute that can be applied to food in general. However, few foods, if any, will incorporate all of these. For example, a food product may offer high nutritional value but little hedonic pleasure, or vice versa. From the cultural perspective, the same food that provides a high level of pleasure when offered to one group of people may be rejected equally vehemently by another, for whom it may even constitute a taboo food. Having come to some understanding about what constitutes a food, critical (quality) attributes applicable to foods are examined and categorised. This second part of Chapter 2 thereby sets up a strong link with Part 2 of the book. However, the scope of the discussion is not limited to the kinds of intrinsic, tangible quality attributes that find their origin in physical realities. An equally strong focus is provided on assigned quality attributes, e.g., price, on signalling attributes and on any other relevant categories of quality attributes.

2.2 Foods for Human Consumption

Some of the essential characteristics that, individually or in combination, identify and designate materials as foods suitable for human consumption are: harmlessness, edibility (acceptable flavour, ease of chewing and swallowing),
nutritiousness and ease of digestion, and social acceptability. Palatability, or pleasantness, draws both on factors related to edibility and on aspects of social acceptability. For example, a piece of fish may cease to be enjoyed if a parasitic worm is discovered in it. Similarly, the palatability of meat may be reduced if it is learned that the animal from which it derived was likely to have been raised on feed incorporating sewage [15]. Consumers’ perceptions of the fundamental nature of food generally, and of good or proper food in particular, are embedded in the wider belief and value systems of individuals which, in turn, are largely culturally determined. The production of energy from food molecules is fundamental to life. However, as well as supplying fuels and building blocks for the body, food and meals serve as vehicles for both hedonistic and cultural consumption. Eating food is therefore not merely a matter of feeding the body. It is well known that many edible and nutritious materials are strongly rejected on cultural grounds. The most extreme manifestation of this is the taboo against cannibalism. Nevertheless, ever since men began sailing the oceans, famished sailors have sustained themselves on the remains of dead shipmates [70]. Taboos forbidding the consumption of the flesh of certain types of animal exist in many cultures and religions. Societies without formal food taboos also have social norms and conventions in this respect.

Hunter-gatherer societies typically have a wider range of food sources available to them than do settled farming communities, whilst urbanisation brings added restrictions. There are very few poisonous plants and most of these are uncommon. It is estimated that only one per cent of the known 500 000 plant species are deadly poisonous [71]. The prominent UK naturalist Richard Mabey still includes many hundreds of wild foods in his diet [72]. Australian aborigines traditionally ate a wide variety of wild foods in his diet [72]. Australian aborigines traditionally ate a wide variety of wild foods (fruits, roots, tubers, leaves, flowers), insects (witchetty grubs, bogong moths), small reptiles (snakes, lizards, goannas), as well as large game [73]. They had developed techniques of dealing with potentially harmful foods such as cycad seeds which, when eaten by some of the early explorers and settlers, caused violent vomiting and diarrhoea. One of the possible aims of both traditional and modern food preparation and processing is to transform potential foods into actual ones.

First and foremost, to qualify as a food for human consumption, a material or substances must be safe to eat. However, food safety is both a relative and a subjective concept, as any negative outcome of an eating episode is likely to depend on the amount eaten and on who is doing the eating. Whether an individual becomes sick is often a function of the dose of the poisonous material received. To take this argument to its extreme conclusion, the truism applies that anything consumed in excess is harmful, and this includes water. Food safety therefore needs to be defined in the context of the normal conditions of use of that food. From the subjective perspective, whilst all common food components are, again by definition, harmless to the population at large, there will always be specific categories of consumers with particular sensitivities towards some of these. These consumers need to be provided with the necessary information either to avoid certain foods or to consume them safely.

For the purposes of international food law, a definition of food is given in the Codex Alimentarius [74] (Table 2.1).