The contemporary development of an acceptable food additive requires a level of biological understanding increasing like that of pharmacotherapeutic substances. The advent of the class of intensive sweeteren as food additives, for which the dipropyl aspartame has been a prototype, exemplified such a need and opportunity. Animal studies alone will not do, and a variety of randomised double-blind controlled studies to look at tissue kinetic, metabolic, physiological and toxicological issues need consideration. This scholarly book on the topic will become a reference point in the field. A remarkable number of investigations have been carried with special reference to known and putative metabolites and their possible effects. Particular attention has been directed towards the study of any adverse central nervous system (CNS) effects and so sensitivity or allergic manifestations – none, as it turns out, with any findings of concern. This is an invaluable data base as new questions and challenges to any additive will emerge time to time; the recent publication by Olney in relation to the epidemiology of brain tumour and aspartame is in point, effectively refuted by a number of basic and applied scientists, biologists and toxicologists. But it does raise the need for improved postmarketing surveillance and epidemiology as the food supply now rapidly changes, and with much interest in food.