

CONTROLLED RELEASE SYSTEMS FOR FOOD APPLICATION

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Micro- and nano-particulate encapsulating systems have the potential to play a key role in the future of delivery of nutraceuticals which is an essential characteristic of functional foods. It is useful to control the rate and extent of their digestion in different regions of the gastrointestinal tract. The nature of a carrier material, as well as the nature of loaded active component are some of the key-factors determining delivery performance of these systems. In order to develop food additives with controlled release it is important to study the release characteristics of the encapsulated material from the particle matrix as a function of particle size, material properties and processing conditions. This lecture aims to give a short overview on the controlled released systems intended for delivery of active food compounds and its gastrointestinal fate which is currently one of the topics of nearly all journals on food science.