Current trends in nano-encapsulation of flavours and aromas

ABSTRAK

Nano-encapsulation of flavour and aroma represents an efficient alternative in increasing their stabilities, prolong sensory perception, bio availability, and improve their efficiency. Presently, the applications of nanotechnology in the food industries are in the areas of nanoparticle coatings for packaging applications, health-promoting products, and beverages. Apart from the advantages, nanotechnology has raised a number of safeties, ethical and regulatory issues as a result of little knowledge regarding the impact of nano-sized materials on human health. While there are some reported studies on nanocapsule-containing fragrances or perfumes, very few studies have focused on nanoencapsulation of flavor and aroma. Currently, various techniques such as emulsification, complex coacervation, and supercritical fluid are being employed in nano-encapsulation of flavor and aroma. This review attempts to examine the current state of knowledge and limitations on the technology of nano-encapsulation of flavour and aroma.

Keyword: Nano-encapsulation; Flavor; Safety