Modelling of proteolysis in Iranian brined cheese using proteinase-loaded nanoliposome

ABSTRACT

In this study, Flavourzyme was encapsulated in liposomes to accelerate the ripening of Iranian white cheese. Liposomal enzyme was prepared using a modified heating method. The influence of enzyme content, ripening time and curd retention in saturated brine on proteolysis indices and sensory perception was investigated using response surface methodology. The most influential factor on proteolysis indices was ripening time, while the content of liposomal enzyme and retention time were also significant ($P < 0.05$). The maximum proteolysis indices and highest sensory characteristic scores were achieved by applying 0.3% w/w enzyme, ripening for 30 days and 8-h curd retention in saturated brine.