Influence of raisins puree on the physicochemical properties, resistant starch, probiotic viability and sensory attributes of coconut milk yogurt

ABSTRACT

Coconut milk is a good substitute for dairy milk in yogurt production, so that individuals with lactose intolerance and allergy may enjoy the benefits of probiotics in the yogurt. Addition of raisins puree in coconut milk yogurt will further enhance the probiotic viability and increase the prebiotics in yogurt. The objective of the research was to study the physicochemical properties, resistant starch, probiotic viability and sensory acceptance of coconut milk yogurt (CY) supplemented with raisin puree at different levels (0%, 17%, 23% and 29%). Using a commercial dairy yogurt milk (DY) as a comparison, CY with 0, 17, 23 and 29% raisins puree were characterized by pH, viscosity, total soluble solids, and colour. The nutritional properties were characterized by proximate analysis and resistant starch. The probiotic viability and sensory evaluation were also carried out. As compared to DY, increased level of raisins puree in CY showed significantly higher viscosity, total soluble solid, fat, probiotic viability and resistant starch, but lower protein content. The lightness of CY decreased with increasing raisins puree amount, whereas redness and yellowness decreased. Sensory evaluation showed that all CY had a better preference in terms of aroma, taste and overall acceptability. Except for CY with 29% raisins puree, the texture of DY was more preferred over CY. The study suggests that CY with 29% raisins puree is suitable to improve the overall physical and nutritional properties. Besides, it had significantly better sensory acceptance than DY that makes it a good alternative yogurt for lactose intolerance and milk-allergic individuals.

Keyword: Yogurt; Coconut milk; Raisins puree; Prebiotic; Probiotic