Effect of Time-Temperature Schedule and Amylose Content of Rice on Color and Texture of Rice-based Emergency Canned Food


ABSTRACT

Rice-Based Emergency Canned Food (RB-ECF) was made from rice and chicken meat as a main ingredients. It was produced to fulfill the required daily energy level (2100 kcal) and consumed directly in emergency condition. The product was packed in 307 x 113 silver enamel can and canned in retort at 250°F (Tr). The product’s weight was 200 gram per can with the total energy value was 639.42 kcal. The total energy value was given from fat (49.63%), protein (11.26%), and carbohydrate (39.11%).

Several types of rice with different of amylose content (19.50% –Cisadane, 23.88% -IR 64 and 28.24% -IR 42) was used to make RB-ECF. Thermal processing was carried out by different time–temperature schedules to achieve 15 and 20 minutes sterilized value (Fo). Objective analysis of the products showed that amylose content and Fo value affected the color and texture of the products.