

عنوان مقاله:

Kinetics of Inactivation of Lysozyme and lysozyme added to Raw Milk Stored at Different Temperatures

محل انتشار:

بیستمین کنگره ملی علوم و صنایع غذایی (سال: 1390)

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نویسندگان:

Roya Koshani - M.sc studen, Department of food science and technology, shiraz university

Fariba Shekaripour

Mahmoud Aminlari

Roghayeh Ramezani

خلاصه مقاله:

The purpose of this work was to investigate the effect of storage temperature on the activity of lysozyme as natural preservative in milk. Hen egg with lysozyme and raw milk enriched with lysozyme were stored at different temperatures and at different time intervals lytic activity against cell wall of *Micrococcus lysodecticus* was determined. Result showed that decrease in lysozyme activity follows a first order kinetics. The activation energy for inactivation in buffer phosphate and milk was calculated to be ~ 12.76 and ~ 5.0 Kcal/mole, respectively, indicating different dependence of lysozyme inactivation on temperature in lysozyme in buffer solution and the lysozyme added to milk. These data might imply protection of lysozyme by some unknown component in milk. Taken together, the results of this study indicate lysozyme can be inactivated in milk stored at temperatures above 50°C , and at refrigeration and freezing temperatures.

کلمات کلیدی:

Activity, inactivation, raw milk, kinetics, lysozyme, storage

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