

PERBEDAAN KADAR TIMAH HITAM (Pb) SUSU KENTAL MANIS KEMASAN KALENG BERDASARKAN PERBEDAAN MASA SIMPAN

RIZKI ALFINA KAMAL

KKC KK TKM 09 09 Kam p

Pembimbing : Prof.Dr.H. Tjipto Soewandi,dr.,M.OH.,Sp.OK Erwin Dyah N., dr.,
M.Kes

2009

Canned sweetened condensed milk is a kind of milk product which largely consumed by Indonesian citizen. But the use of lead solder in the canning process has been identified as one source of lead contamination in canned food, beside the environmental factor and absorption from the equipment used in the processing of sweetened condensed milk. The objective of this research was to find out the effect of storage period in canned sweetened condensed milk's lead content.

This research was deal with factors affecting lead in sweetened condensed milk and the accomplishment had effectively done through factorial completely randomized design. It was involved 2 factors which were 2 different brands of sweetened condensed milk and 8 different storage periods with 3 times replications. Sample was taken with purposive nonrandom sampling and statistically analyzed with 2 way anova in 95% confidence interval.

With the Atomic Absorption Spectrofotometri analyze method, showed that all samples identified contain lead which ranged 0,038 to 0,254 mg/kg. There were difference in the lead contained between the 2 brands ($p=0,020 < \alpha(0.05)$). Lead contained in Y brand were higher than lead in X brand. On the X brand, the lowest lead content identified in sample which stored for 2 months ($0,080 \pm 0,01$ mg/kg), and the highest was found in in sample kept for 8 months ($0,145 \pm 0,06$ mg/kg). While in the Y brand, the lowest lead content was found in the samples which kept for 2 months ($0,115 \pm 0,01$ mg/kg) and the highest was in the samples kept for 3 months ($0,206 \pm 0,02$ mg/kg). There was no increasing or decreasing trend showed in lead contain on the different storage period but statistically noticed that there were difference in lead content in samples based on the different storage periods ($p=0,000 < \alpha(0.05)$).

Conclusion : Those results showed that the lead content in samples did not affected by the storage periods, but might be caused by the lead contamination in raw milk, as well as contamination from the processing stages.

Keywords : lead, canned sweetened condensed milk, storage period

