3636391 NUFN/M: MAJOR: FOOD AND NUTRITION FOR DEVELOPMENT;
M.Sc. (FOOD AND NUTRITION FOR DEVELOPMENT)

KEY WORDS : IODINE CONTENT / IODATED SALT / PICKLED VEGETABLES / SALTED BEEF / SALTED EGGS

EMWADEE KIATSIRI : STUDY OF IODINE CONTENT IN FOOD PRODUCTS PRESERVED BY IODATED SALT. THESIS ADVISORS: ANADI NITITHAMYONG Ph.D., PONGTORN SUNGPUAG D.Sc., SANGSOM SINAWAT M.D., M.Sc., 141 p. ISBN 974-662-334-6

Iodine content of four food products, each prepared with four kinds of salt (iodated marine salt, iodated rock salt, marine salt and rock salt) was studied. Salted eggs and salted beef were tested uncooked, and cooked after storage at room temperature (25-30°C) for 0, 7, 14, 21 and 28 days. Pickled pag-sein and pickled Chinese green cabbage were tested uncooked after storage in brine for 0, 7, 14, 21 and 28 days.

It was found that for uncooked salted eggs and salted beef, iodine content was highest on the first day of storage (day 0). Iodine content of both cooked salted eggs (boiling) and salted beef (frying) was less than that of the uncooked products by 9.1-14.8% and 6.7-17.1%, respectively, and gradually decreased with increasing storage time. Spoilage occurred after the 28 day storage of salted eggs and 7 day storage of salted beef. For the two pickled vegetables stored in brine, iodine content of vegetables increased with storage time while iodine content of brine decreased. Preparation using iodated rock salt produced the highest iodine content for all food products, followed, in descending order, by preparation using iodated marine salt, marine salt and rock salt. Iodine content in food products depended on iodine content of iodated salt used. Overall acceptability scores of food products using iodated salt were ranged between "like slightly" and "like moderately".

Iodated salt can be used for food preservation of these four preserved foods without having undesirable effects on quality or decreasing the sensory acceptability.