



Soybean is the best vegetable protein and cheap. Its production can be increased several folds in Thailand. Thus incorporation of soy protein into infant formula would be expected to reduce the cost of artificial feeding. Whether such incorporation will maintain the nutritive values of standard formula such a growth, protein status and stool parameters is a question which is the objective of the present study to answer.

The present study involved forty-two normal full-term infants, equally divided between a control group and an experimental group; each group comprised 10 boys and 11 girls. Each infant was randomly assigned a standard cow's milk based proprietary formula (control diet) and an infant formula derived its protein from a mixture of soy protein isolate and cow's milk protein in 60:40 proportion (experimental diet). The two formulas were completely supplemented with vitamins, minerals and methionine.

The infants were exclusively fed the assigned formulas for 3 months from about age 1 month through age 4 months. Anthropometry, and determinations of serum total protein, albumin and urea nitrogen were carried out at the beginning, the middle and the end of the study. Volume intake, skin rash, vomiting, stool frequency, stool color and consistency were

recorded daily at home on recording sheets provided to the mothers.

The results showed that caloric intakes, growth, concentrations of serum total protein, albumin and urea nitrogen, stool frequency and color were normal and did not differ between the two groups of infants, however, infants fed the cow's milk based infant formula tended to have loose stool.

It can be concluded that infant formula containing soy protein isolate and cow's milk protein in 60:40 proportion and completely supplemented with vitamins, minerals and methionine can promote normal growth and protein status in infants.