4036171 PHPH/M: MAJOR: NUTRITION; M.Sc. (PUBLIC HEALTH)

KEY WORDS: BIRTH WEIGHT DOUBLING TIME / INFANT FEEDING / INFANT

GROWTH

KIATSUDA BOONMEE: FACTORS RELATED TO BIRTH WEIGHT DOUBLING TIME. THESIS ADVISORS: CHUTIMA SIRIKULCHAYANONTA, M.D.,M.P.H.M. PARADEE TEMCHAROEN, M.Ed.,M.P.H. SUWAT SRISORRACHATA, B.Ed.,M.A. 89 p. ISBN 974-664-199-9

The main objective of this prospective research was to determine the factors related to birth weight doubling time. The sample of the study consisted of 335 normal infants with birth weight between 2,500 and 4,000 g, who attended the well baby clinic at Bamrasnaradura Hospital. Infants were followed up until they were gained double their birth weight. The research was conducted over a period of 8 months, from December 11, 1998 to August 6, 1999.

The result of this study showed that the mean age of birth weight doubling time was 114 days. Boys doubled their birth weight earlier than girls (p < 0.001). Infants whose birth weight was 2,500 - 2,499 g doubled their birth weight earlier than those with 3,000 - 3,499 and 3,500 - 4,000 g and infants whose birth weight was 3,000 - 3,499 g doubled their birth weight earlier than those with 3,500 - 4,000 g (p < 0.001). Infants who had not been given complementary food revealed shorter birth weight doubling time than infants who were given complementary food (p < 0.001). There were no significant associations between breast-feeding, formula-feeding, a combination of breast and formula feeding, mother's education and family income (p > 0.05).

Factors affecting birth weight doubling time were sex, birth weight and the time infants were given complementary food. There should be further study concerning control variables and clearly compared groups for conclusion factors that are related to birth weight doubling time.