원저 : 임상

한국인 모유의 영양소와 영아의 성장과의 관계 분석 연구

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Analysis of the Macronutrient Composition of Breast Milk from Korean Women

and Growth of Infants

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Purpose: The aim of this study was to determine the effect of the macronutrient composition of breast milk from Korean women on the growth of infants.

Methods: 173 healthy lactating women and breast-fed infants who visited Gangnam Severance Hospital and two breast-feeding centers in Seoul from October 2011 to March 2012 were recruited. We checked the birth weight and body weight of infants while collecting breast milk from the mothers, and analyzed the macronutrient component of breast milk with a mid-infrared milk analyzer (MIRIS® Human Milk Analyzer, HMA, Miris AB, Uppsala, Sweden). Group analysis was performed depending on more or less than 5 percentile and 25 percentile of body weight.

Results: The amount of daily intake/RDA for calories, proteins, lipids and carbohydrates of breast milk were significantly lower in the less than 5 percentile and 25 percentile group ($P<0.05$). Using multiple logistic regression analysis, the significant nutrient component that was insufficient in the less than 5 percentile and less than 25 percentile of body weight group respectively was carbohydrates ($P<0.05$).

Conclusion: We conclude that each macronutrient level of breast milk is statistically low in infants with less body weight. These results suggest that nutritional consideration of breast milk is necessary for the growth of breast-fed infants.

Key Words: Breast milk, Macronutrient Composition, Growth, Infant