

Motoric Score					
Enrollment	95,33 ± 12,58	95,33 ± 12,58	91,00 ± 16,08	98,20 ± 17,52	0.811
6 mo	111,03 ± 14,74	111,80 ± 14,32	111,65 ± 13,94	109,79 ± 10,77	0.012
Change (Δ)	16,47 ± 16,41 ¹	15,77 ± 16,75 ¹	20,65 ± 18,38 ^{1 a}	11,59 ± 15,82 ¹	0,005 ²

* All values are $x \pm SD$ assessed by The Bayley Scale Infant Development Thirth Edition (2006)

¹ Significantly difference before and 6 mo later within groups, $P < 0,05$ (Wilcoxon Sing Ranks Test)

² Significantly difference at 6 mo later from each groups $P < 0,01$ (Kruskal Wallis Test)

Abbreviations: FS-group = Food Supplementation-group; PS-group = Psychosocial Stimulation-group; FS+FP-group = both Food Supplementation and Psychosocial Stimulation-group; C-group = Control-group

In this study, food supplementation MP-ASI give effect being to increase the length of the infants but little effect on weight gain. Still not achieve optimal growth of infants in this study, among others, can be caused by the intake of nutrients, especially energy intake (61.20%) and protein (70.19%) infants were still lower than the nutritional adequacy should be. In addition, infants in these complementary feeding group had experienced diarrhea with an average length of duration of 5.11 days (range 2-14 days). A history of disease infections experienced by children causes of nutritional supplementation given can not be used by the body to achieve optimal growth, but this nutritional supplementation is needed to meet the nutritional needs of children after recovery from illness.

IV. CONCLUSIONS

The potential local food source can be to produce for complementary feeding with optimal nutrient contain for optimal infant's growth and the infants who get food supplementation additional intake of nutrients, especially energy and protein so that infants become more active and able to carry out activities related with the better of motoric development.

ACKNOWLEDGMENT

This study is partly funded by Indonesian Danone Institute Foundation. The views expressed herein are those of the individual authors, and do not necessarily reflect those of Indonesian Danone Institute Foundation. We also thanks to Ministry of Education Indonesia, Government Tanah Datar district, Supervisors (Risatianti Kolopaking, Rina Hasniati, Susmiati), interviewers, and the community health workers for assistance.

REFERENCES

- [1] Black RE AL, Bhutta, Caufield LE, de Onis M, Wzzati M, et al. Maternal and child undernutrition: Global and regional exposures and health consequences. . The Lancet 2008. p. 243-60.
- [2] Ministry Of Health I. The Basic Health Research Indonesia 2013. Jakarta: Ministry of Health Indonesia; 2013.
- [3] Martorell R, Bernardo L H, linda S A, Aryeh D S, Linda. Weigh Gain in first two years of life is an important predictor of schooling outcomes in pooled analyses from five birth cohorts from low and middle income countries. The Journal of Nutrition. 2009;Vol 109.
- [4] Dewey KG, Begum K. Long-term consequences of stunting in early life Maternal and Child Nutrition. 2011.
- [5] Victora CG, Onis Md, Pedro Curi Hallal et al. Worldwide Timing of Growth Faltering: Revisiting Implications for Interventions. Pediatrics. 2010;125 (3):e.473-80.
- [6] Herawati N, Hardinsyah, Khomsan A, et al. Effects of Fortified Supplement, Nutrition Education and Stimulation on Growth and Development Of 6-12 months infants. Pacific Early Childhood Research Association; Singapura: PECERA; 2012.
- [7] Yuliana. Effect of Nutritional Education and Psychosocial Stimulation on Growth and Development of Preschool Children Indonesia. Bogor: Bogor Institute of Agriculture; 2007.
- [8] Lemeshow S, Lwanga SK. Sample size determinant in health studies. Jeneva: World Health Organization; 1991.
- [9] Bettye M. Caldwell and Bradley RH. Home Observation For Measurement Of The Environment. Little Rock, Arkansas: University of Arkansas at Lilltle Rock; 1984.
- [10] Bayley N. Bayley Scales of Infants Development Third Edition. New York: The Psychological Cooperation; 2006.
- [11] Fahmida U. Multi-Micronutrient Supplementation for Infant Growth and Development and the Contributing Role of Psychosocial Care. Dissertation Post Graduate Program. Jakarta: University Indonesia.; 2003.
- [12] Gibson SR. Principle of Nutritional Assessment. New York: Oxford University Press; 2009.
- [13] Walker SP, Powell CA, McGregor SM G, Himes JH, Chang SM. Nutritional supplementation, psychosocial stimulation, and growth of stunted children: the Jamaican study. Am J Clin Nur. 1991.
- [14] Walker SP, Chang SM, Powell CA, McGregor S. Effect of psychosocial stimulation and early supplementation in early childhood on psychosocial functioning in late adolescence: follow-up of randomized controlled trial. BMJ, doi:10.1136.2005.
- [15] Nahar B. Effects of food supplementation and psychosocial stimulation on growth and development of severy malnourished children; Intervention studies in Bangladesh. Sweden: Uppsala University; 2012.
- [16] Pollit E PS, Jahari A, et al. Effect of an energy and micronutrient supplement and mental development and behavior under natural condition in undernourished children in Indonesia. European of Clinical Journal of Nutrition 2000;54(Suppl 2):S80-S90.
- [17] Mora J, Herrera M, Super C. Long-term effects of food supplementation dan psychosocial intervention on the psysical growth of Colombian infants at risk of malnutrition. Child Dev. 1990;61 (1):29-49.
- [18] McGregor SG, Schofield W, Powell C. Development of severe malnourished children who receive psychosocial stimulation six-year follow up. Pediatrics 79. 1987.
- [19] Eagle PL, Menon P, Haddad L. Care and Nutrition concept and Maesurement. International Food policy Research Institute. 1997.
- [20] Wachs TD, Georgieff M, Cusick S, McEwen BS. Issues in the timing of integrated early intervention: contribution from nutrition, neuroscience, and psychological research. AnnN YAcadSci. 2014;1308 89-106.