

The Impact of Supplementary Feeding Program on Nutritional Status & Academic Performance of University Students

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Abstract

Various feeding programs have previously been delivered for specific vulnerable groups. The present feeding program was designed for university needy students in Indonesia. The objective of the program were to review and evaluate previous feeding program; to develop "better and revised" feeding program suited for student's target; to develop standard for supplemental product; to identify and develop set of performance indicators for successful feeding program; to develop working scheme involving SMEs and/or food industries to ensure the sustainability of the program; to execute feeding program for the IPB needy students; to monitor and evaluate the progress of the feeding program; and to establish a standardized sustainable feeding program model.

The program was conducted in students' dormitory of IPB Campus in Darmaga Bogor, Indonesia for duration of 18 months, started in November 2005 until June 2006. Four hundred and ninety seven students participated in this program purposively. The criteria of the program participants were Body Mass Index (BMI) < 25; coming from family with low in social- economic status; monthly allowance less than Rp. 500,000,-; and experienced no chronic diseases. Eligible participants were 199 male and 298 female students.

The feeding program has been shown some impacts i.e. the number of underweight students decreased from 39.5% to 21.6% (females) and from 33.5% to 27.6% (males). The number of female and male students who were shifting from underweight to normal category was increased 16.1% and 6.0% respectively; the prevalence of anemia in female students decreased from 23.4% to 16.0%, while in male students the prevalence was constant (0.5%); the number of female students with IDE (Iron Deficiency Eritropoiesis) was decrease form 41.2% to 26.1%, while in male students also decrease from 57.6% to 40.4%; the average of the National Exam Score (NUN) as indicator of academic performance before the program of participants (23.54 ± 2.20) was not significantly different with non-participants (23.45 ± 2.40). After completion of