

**CALCIUM-SUPPLEMENTED INTAKES FOR REDUCING
BLOOD-LEAD LEVELS AMONG URBAN CHILDREN IN BANDUNG, INDONESIA**

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Background: In Indonesia, with the number population of more than 200 million in 2003, lead (Pb) is still been using in many products especially as octane booster for gasoline. Means that the negative effects of lead to children, such as: decreasing IQ, decreasing hearing, decreasing growth, and decreasing hemoglobin content are still occur and will continue in the future. However, the preventive program in protecting children from environmental lead exposure should be generated soon while waiting for national policy of leaded gasoline phasing-out.

Objectives: The objectives of the study to: a) assess the association between blood-lead levels and decreasing IQ, decreasing hearing, decreasing growth, and anemia, and b) asses the effectiveness of calcium-supplemented intakes in reducing blood-lead levels of 3rd-and 4th-grader school children in Bandung, Indonesia.

Methods: The population based cross sectional blood-lead survey its health impacts will be conducted as a baseline involving 800 school children. A randomized double-blind calcium supplemented intakes of 3 months intervention for those 3rd- and 4th-graders elementary school children with elevated blood-lead levels will be applied following the baseline results (about 35% of children). Pre-post test analysis will be applied as well as the bivariate and multivariate statistical analyses.