Relatif validitas dan realibilitas semi food frekuensi kuesioner omega 3 dan omega 6 untuk anak Indonesia usia 6-23 bulan di Jakarta = Relative validity and reproducibility of omega 3 and omega 6 semi quantitative food frequency questionnaire for Indonesian children aged 6-23 months in Jakarta / Muhammad Ridwan Ansari

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Abstrak

[ABSTRAK
Informasi mengenai adanya semi-quantitative food frequency questionnaire (SFFQ) yang valid untuk mengukur asupan PUFA pada anak di Indonesia masih minim. Oleh karena itu, tujuan dari penelitian ini adalah untuk mengembangkan SFFQ dan menguji validitas dan reliabilitas dari SFFQ tersebut untuk mengukur asupan PUFA pada anak di Indonesia usia 6-23 bulan.
Penelitian ini dilaksanakan dengan desain cross sectional di dua kelurahan wilayah Jakarta Timur. Penelitian ini melibatkan 89 anak yang dipilih secara multistage random sampling. Anak-anak tersebut dilakukan pengukuran intake melalui SFFQ dan wawancara recall selama 3 hari tidak berturut-turut. Beberapa anak (n=35) telah dipilih untuk dilakukan pengukuran plasma lipid dalam darah. Formulir SFFQ terdiri dari 78 item makanan yang disusun dari tabel komposisi bahan makanan luar Indonesia. SFFQ tersebut kemudian divalidasi dengan wawancara recall dan plasma lipid dalam darah. Pelaksanaan SFFQ dilakukan dua kali dengan rentang 4 minggu terpisah untuk mengetahui reliabilitasnya. Relatif validitas dan realibilitas dari SFFQ disimpulkan dari hasil analisa Bland-Altman. Uji korelasi parsial yang telah dikontrol dengan status gizi dan usia anak dilakukan untuk mengukur absolut validitas dari SFFQ.
Kecocokan yang baik ditemukan antara hasil SFFQ dan wawancara recall untuk DHA, EPA, DPA dan AA akan tetapi tidak untuk total n-3, n-6, ALA dan LA. Lebih jauh, SFFQ menunjukkan korelasi yang moderat dengan plasma lipid dalam darah untuk n-6 dan LA (r: 0.40; p=0.025 and r:0.42 p=0.018, secara berurutan). Hasil analisa Bland-Altman menunjukkan 95% kecocokan antara hasil SFFQ pertama dan pengulangan SFFQ untuk semua asam lemak esensial. Secara keseluruhan, SFFQ yang dikembangkan relatif valid untuk mengukur asupan PUFA kecuali untuk total n-3, n-6, ALA dan LA. SFFQ juga reliable untuk mengetahui asupan PUFA pada anak.
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ABSTRACT
The information on the existing validated semi-quantitative food frequency questionnaire (SFFQ) to capture the intakes of PUFA for Indonesian children is lacking. Therefore, this study aimed to investigate the validity and reproducibility

of developed SFFQ for assessing poly-unsaturated fatty acids (PUFA) intake for Indonesian children aged 6-23 months.
A cross sectional study was conducted in two sub-districts of East Jakarta involving 89 healthy children selected by multistage random sampling. These children were assessed by SFFQ and 3-day non consecutive 24-h recall. Some children (n=35) were randomly selected for plasma assessment (PA). The SFFQ consist of 78 food items which were constructed from the non-Indonesian food composition database. It was validated against dietary recall and PA. Repeated administration of SFFQ (4-week apart) was conducted to assess the reproducibility of SFFQ. The relative validity and reproducibility of SFFQ were determined by Bland-Altman analysis. The adjusted correlation for children nutritional status and age was performed to assess absolute validity of SFFQ. Good agreement was found between SFFQ and dietary recall for DHA, EPA, DPA, and AA, but not for total n-3, n-6, ALA and LA. Moreover, SFFQ showed moderate correlations with plasma n-6 LCPUFA and LA (r: 0.40; p=0.025 and r:0.42 p=0.018, respectively). A 95% level of Bland-Altman agreement was clearly observed between first SFFQ and repeated SFFQ for all essential fatty acids. In conclusion, the SFFQ was relatively valid to assess usual PUFA intake except for total n-3, n-6, ALA and LA and reproducible to estimate PUFA intake of children, The information on the existing validated semi-quantitative food frequency questionnaire (SFFQ) to capture the intakes of PUFA for Indonesian children is lacking. Therefore, this study aimed to investigate the validity and reproducibility of developed SFFQ for assessing poly-unsaturated fatty acids (PUFA) intake for Indonesian children aged 6-23 months.
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