

# THE EFFECTIVENESS OF NUTRITION EDUCATION THROUGH ANDROID-BASED E-POCKET BOOK MEDIA "BALANCED NUTRITION DIET" ON KNOWLEDGE IN ADOLESCENTS

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## ABSTRACT

**Background:** The proportion of obesity is increasing every year. Education for adolescents about good and appropriate eating patterns is significant as a preventive effort for nutrition problems.

**Research Objective:** To determine the effectiveness of nutrition education through the e-pocket book balanced nutrition diet on knowledge in adolescents.

**Research Method:** This study used a quasi-experimental pre- and post-test design with a control group. The study was conducted from March 21 to March 30, 2023 at SMAN 2 Yogyakarta and SMAN 4 Yogyakarta. The study population consisted of 72 students with 36 students in each intervention group. The samples consisted of 29 student experimental groups and 27 students control groups. The sampling technique used was multistage sampling. The independent variable was the provision of media in the form of an e-pocket book and e-leaflet, while the dependent variable was the level of knowledge about balanced nutrition diet. Knowledge was measured by filling out questionnaires on pretest, posttest 1, and posttest 2. Data analysis used the Wilcoxon and Mann Whitney tests.

**Results:** There was a significant increase in the average knowledge score from 76.21 to 94.66 ( $p=0.000$ ) on posttest 1 and 94.14 ( $p=0.000$ ) on posttest 2 in the e-pocket book group. There was a significant increase in the average knowledge score from 72.96 to 82.96 ( $p=0.000$ ) on posttest 1 and 82.22 on posttest 2 ( $p=0.003$ ) in the e-leaflet group. Nutrition education using the e-pocket book was more effective than using the e-leaflet in improving knowledge ( $p=0.001$ ) on posttest 1 and ( $p=0.004$ ) on posttest 2.

**Conclusion:** The e-pocket book is more effective in improving knowledge about balanced nutrition diet in adolescents.

**Keywords:** E-pocket book, Balanced Nutrition, Knowledge, Adolescents.

**EFEKTIVITAS PENYULUHAN GIZI MELALUI MEDIA  
E-POCKET BOOK BERBASIS ANDROID "DIET GIZI SEIMBANG"  
TERHADAP PENGETAHUAN PADA REMAJA**

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**ABSTRAK**

**Latar Belakang:** Proporsi obesitas meningkat setiap tahunnya. Edukasi kepada remaja mengenai pola makan yang baik dan tepat penting dilakukan sebagai usaha preventif permasalahan gizi.

**Tujuan Penelitian:** Mengetahui efektivitas penyuluhan gizi melalui media *e-pocket book* diet gizi seimbang terhadap pengetahuan pada remaja.

**Metode Penelitian:** Jenis penelitian eksperimen semu (*quasy experiment*) dengan desain penelitian *pre and posttest with control group design*. Penelitian dilaksanakan pada tanggal 21 Maret -30 Maret 2023 di SMAN 2 Yogyakarta dan SMAN 4 Yogyakarta. Populasi penelitian terdiri dari 72 siswa dengan masing-masing kelompok intervensi 36 siswa. Sampel penelitian yaitu 29 kelompok eksperimen dan 27 kelompok kontrol. Cara pengambilan sampel menggunakan Teknik *multistage sampling*. Variabel bebas yaitu pemberian media berupa *e-pocketbook* dan *e-leaflet*, variabel terikat yaitu tingkat pengetahuan mengenai diet gizi seimbang. Pengetahuan diukur dengan cara mengisi kuesioner *pretest*, *posttest 1* dan *posttest 2*. Analisis data menggunakan uji *Wilcoxon* dan uji *Mann Whitney*.

**Hasil Penelitian:** Terdapat peningkatan signifikan rata-rata skor pengetahuan dari 76,21 menjadi 94,66 ( $p=0,000$ ) pada *posttest 1* dan 94,14 ( $p=0,000$ ) pada *posttest 2* kelompok *e-pocket book*. Terdapat kenaikan signifikan rata-rata skor pengetahuan dari 72,96 menjadi 82,96 ( $p=0,000$ ) pada *posttest 1* dan 82,22 pada *posttest 2* ( $p=0,003$ ) kelompok *e-leaflet*. Penyuluhan menggunakan media *e-pocket book* lebih efektif dibandingkan menggunakan media *e-leaflet* terhadap pengetahuan ( $p=0,001$ ) pada *posttest 1* dan ( $p=0,004$ ) pada *posttest 2*.

**Kesimpulan:** Media *e-pocket book* lebih efektif dalam meningkatkan pengetahuan tentang diet gizi seimbang pada remaja

**Kata Kunci:** *E-pocket book*, Gizi Seimbang, Pengetahuan, Remaja.