ABSTRAK

Islami, Diajeng Rochma. 2014. *Analisis Organoleptik Cookies Kaya Serat Pangan dan Protein Berbahan Baku Substitusi Tepung Garut dan Kedelai pada Anak.* Tugas Akhir, Fakultas Kedokteran Universitas Brawijaya. Pembimbing (1) Dian Handayani, S.KM, M.Kes, PhD. (2) Yudi Arimba Wani, MPH

Obesitas pada masa anak akan berlanjut sampai masa dewasa dapat meningkatkan risiko penyakit degeneratif di masa mendatang, dapat dicegah salah satunya dengan konsumsi serat. *Cookies* sebagai jajanan yang disukai anak biasanya rendah serat sehingga substitusi tepung garut diharapkan meningkatkan kadar serat pangan dan juga protein dari tepung kedelai untuk masa pertumbuhan anak sehingga menjadi salah satu alternatif jajanan kaya serat dan protein bagi anak. Penelitian ini bertujuan mengetahui daya terima cookies yang disubstitusi tepung garut dan tepung kedelai dan analisa kadar serat pangan serta protein pada produk yang diterima. Metode penelitian menggunakan Rancangan Acak Lengkap dengan perbandingan tepung terigu:tepung garut:tepung kedelai adalah P1 (100:0:0), P2 (80:20:0), P3 (75:20:5), P4 (70:20:10) dan P5 (65:20:15) dan 4 kali pengulangan. Variabel yang dinilai meliputi organoleptik, kadar serat pangan dan kadar protein pada kelompok perlakuan *cookies* yang diterima. Hasil penelitian menunjukkan variabel warna dan aroma *cookies* berbeda signifikan ($p<0.05$) dan juga terdapat peningkatan kadar serat pangan ($p<0.05$) serta kadar protein ($p<0.05$) pada *cookies* yang diterima oleh panelis (P2) dibandingkan dengan *cookies* kontrol (P1). Kesimpulannya, *cookies* dengan subtitusi tepung garut sebesar 20% tanpa penambahan tepung kedelai merupakan perlakuan *cookies* yang diterima oleh panelis dan meningkatkan kadar serat pangan dan protein yang lebih tinggi daripada perlakuan kontrol.

Kata kunci: *cookies*, tepung garut, tepung kedelai, serat pangan, protein

ABSTRACT

Islami, Diajeng Rochma. 2014. *Cookies Organoleptic Analysis which Rich of Dietary Fiber and Protein with Substitution of Arrowroot and Soy Flour for Children.* Tugas Akhir, Fakultas Kedokteran Universitas Brawijaya. Pembimbing (1) Dian Handayani, S.KM, M.Kes, PhD. (2) Yudi Arimba Wani, MPH

Childhood obesity will continue until adult and may increase risk of degenerative diseases in future. It can be prevented by the consumption of fiber. Cookies as a child's favorite snacks are usually low in fiber, therefore arrowroot flour substitution is expected will increase levels of dietary fiber. Whilst, additional protein from soy on arrowroot and soy cookies will give beneficial effect for protein source. Accordingly substitution of flour on cookies using arrowroot and soy will provide alternative snack rich in dietary fiber and protein. This study aims to determine the acceptance of cookies with arrowroot and soy flour substitution and analysis of dietary fiber and protein content in the productthat has been accepted. Research methods using completely randomized design with wheat flour : arrowroot flour : soy flour ratio are P1 (100:0:0), P2 (80:20:0) , P3 (75:20:5), P4 (70:20:10) and P5 (65:20:15) respectively with 4 repetitions. Variables assessed include organoleptic , levels of dietary fiber and protein content in treatment group which accepted. The results showed variable color and aroma of cookies significantly different ($p < 0.05$), and also contained elevated levels of dietary fiber ($P < 0.05$) and protein levels ($p < 0.05$) in cookies which received by the panelists (P2) compared to control cookies (P1). In conclusion, arrowroot flour cookies with the substitution of 20% without the addition of soy flour cookies are the treatment group which accepted by the panelists. It also has fiber and protein levels higher than controls group.

Keywords: cookies, arrowroot flour, soy flour, dietary fiber, protein