

**LEMBAR  
HASIL PENILAIAN SEJAWAT SEBIDANG ATAU PEER REVIEW  
KARYA ILMIAH : JURNAL ILMIAH**

Judul Artikel Ilmiah

: **Tempe Nuggets Provision Improves Energy Adequacy and Protein Intake in Underweight Underfive Children**

Nama semua penulis

: Oktavina Permatasari, Retno Murwani (Korespondensi), **M Zen Rahfiludin**

Status Pengusul (coret yg tidak perlu)

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- ) Nama Jurnal
- ) Tahun terbit/Vol/No halaman
- ) Edisi (bulan, tahun)
- ) ISSN
- ) DOI
- ) Alamat WEB Jurnal

: **Current Research in Nutrition and Food Science**  
 : Volume 6 / No. 1/ Hal. 89-96  
 : April 2018  
 : ISSN: 2347-467X, Online ISSN: 2322-0007  
 : -  
 : <https://www.foodandnutritionjournal.org/volume6number1/tempe-nuggets-provision-improves-energy-adequacy-and-protein-intake-in-underweight-underfive-children/>  
 : Scopus Q3 SJR 2019 = 0,222

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	<b>Reviewer I</b>	<b>Reviewer II</b>	
a. Kelengkapan unsur isi jurnal (10%)	4	4	4
b. Ruang lingkup dan kedalaman pembahasan (30%)	10	11	10,5
c. Kecukupan dan kemutahiran data/informasi dan metodologi (30%)	10,5	11	10,75
d. Kelengkapan unsur dan kualitas penerbit (30%)	10,5	11	10,75
<b>Total = (100%)</b>	<b>35</b>	<b>37</b>	<b>36</b>
<b>Nilai pengusul = 20% x 36 = 7,2</b>			

Reviewer 1

Reviewer 2

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**Hasil Penilaian Peer Review:**

No	Komponen yang dinilai	Nilai Maksimal Artikel Jurnal bereputasi & memiliki impact factor Q3	Nilai yang didapat artikel
a	Kelengkapan unsur isi artikel (10 %)	4	4
b	Ruang lingkup & kedalaman pembahasan (30 %)	12	10
c	Kecukupan dan kemutahiran data/informasi dan metodologi (30 %)	12	10,5
d	Kelengkapan unsur dan kualitas jurnal (30%)	12	10,5
	Nilai Total	<b>40</b>	35
<b>Nilai yang didapat pengusul: 20% X 35 = 7</b>			

**Catatan Penilaian artikel oleh Reviewer**

a	Kelengkapan unsur isi artikel	Unsur artikel lengkap, telah memenuhi kaidah penulisan artikel dalam jurnal ilmiah
b	Ruang lingkup & kedalaman pembahasan	Artikel membahas efek pemberian tempe terbuat dari nugget terhadap asupan energi protein pada balita underweight. Pembahasan telah menggunakan referensi yang cukup
c	Kecukupan dan kemutahiran data/informasi dan metodologi	Data mutakhir diperoleh dari penelitian inferensial namun kekurangan dalam naskah ini adalah tidak disebutkan secara explisit design penelitiannya.
d	Kelengkapan unsur dan kualitas jurnal	Diterbitkan pada jurnal terindex scopus Q3 SJR 0,23 similarity index 10%

Surabaya, 1 Januari 2020  
Reviewer 1



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b	Ruang lingkup & kedalaman pembahasan (30 %)	12	11
c	Kecukupan dan kemutahiran data/informasi dan metodologi (30 %)	12	11
d	Kelengkapan unsur dan kualitas jurnal (30%)	12	11
	Nilai Total	<b>40</b>	37
<b>Nilai yang didapat pengusul: 20% x 37 = 7,4</b>			

**Catatan Penilaian artikel oleh Reviewer**

a	Kelengkapan unsur isi artikel	Penulisan artikel telah sesuai dengan "Guide for Author" substansi artikel telah sesuai dengan bidang ilmu pengusul yaitu "Ilmu Gizi Kesehatan Masyarakat".
b	Ruang lingkup & kedalaman pembahasan	Substansi artikel telah sesuai dengan ruang lingkup jurnal "Current Research in Nutrition and Food Science" kedalaman pembahasan telah melibatkan semua rujukan (15 rujukan)
c	Kecukupan dan kemutahiran data/informasi dan metodologi	Data hasil penelitian telah dianalisis dengan metodologi yang tepat menghasilkan informasi baru sehingga dapat ditarik Kesimpulan yang dapat dipertanggung jawabkan.

d	Kelengkapan unsur dan kualitas jurnal	Journal Current Research in Nutrition and Food Science merupakan jurnal internasional bereputasi terindex scimagojr SJR 0,230 (102 citations >130 documents) dengan analisis scope journal metrics
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Surabaya 3 Januari 2020  
Reviewer 2



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Volume 6, Issue 1, April 2018, Pages 89-96

## Tempe nuggets provision improves energy adequacy and protein intake in underweight underfive children (Article) [\(Open Access\)](#)

Permatasari, O.<sup>a</sup>, Murwani, R.<sup>a,b,c</sup> Rahfiludin, M.Z.<sup>d</sup> <sup>a</sup>Department of Nutrition, Faculty of Medicine, Diponegoro University, Indonesia<sup>b</sup>Natural Product Laboratory, Integrated Laboratory for Research and Services, Diponegoro University, Indonesia<sup>c</sup>Faculty of Animal and Agricultural Science, Diponegoro University, Indonesia[View additional affiliations](#) ▾

### Abstract

View references (15)

Tempe is a well known fermented soybean food, inexpensive, and a good source of dietary protein and energy. To improve fresh Tempe as an attractive food to children, Tempe is processed into nugget. A study using pre and post-control group design was conducted to determine the effect of the Tempe nugget provision on energy and protein intake, and body weight/age (W/A) of 24-59 months old children. Forty six subjects were selected according to inclusion criteria from local Community Health Center (Puskesmas) and grouped into intervention (provision of Tempe nugget) and control group (no provision). Data of energy and protein intake of subjects before intervention were obtained by 2x24 food recall to determine deficiency in intake for the respective age. The amount of the nugget given to each underweight child in intervention group was calculated on the basis of deficiency in energy and protein intake of each child (W/A) per day. Body weight was recorded pre and post intervention. The deep-fried nuggets contained 276.53 calories per 100 g, 8.60% protein, 28.41% carbohydrate, 13.28% lipid, and 44.28% fiber. The mean age of the subjects in intervention and control group were homogeneous i.e.  $40.52 \pm 10.88$  months and  $42.39 \pm 12.35$  months respectively. Tempe nugget provision for 30 days improved significantly energy intake ( $p < 0.001$ ) in intervention compared to control group. Protein intake and W/A in intervention group were higher compared to control although not significant and further study with higher amount of Tempe nugget provision is needed. This study provides evidence that deep fried Tempe nugget can be used as inexpensive and nutritious food to improve protein and energy intake for underweight under five children. © 2018 The Author(s).

### SciVal Topic Prominence

Topic: Severe Acute Malnutrition | Child Nutrition Disorders | Stunting

Prominence percentile: 98.792

①

### Author keywords

[Fermented soybean](#) [Stunting](#) [Tempe flour](#) [Under nutrition](#)

**ISSN:** 2347467X  
**Source Type:** Journal  
**Original language:** English

**DOI:** 10.12944/CRNFSJ.6.1.09  
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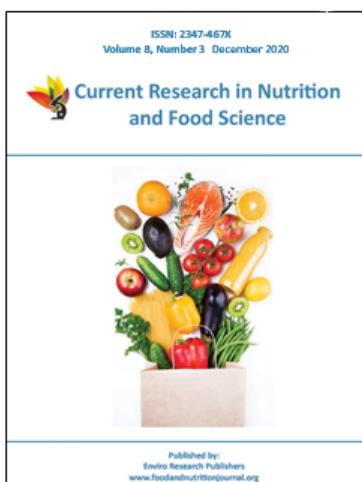
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Narsih\* and Agato

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Nurliyana Najwa bt Md Razip , Huzwah bt Khaza'ai\*

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#### Changes in Phytochemical Content During Different Growth Stages in Tubers of Five Varieties of Potato (*Solanum Tuberosum L.*)

Pages : 12-22

Geoffrey Kipkoech Kirui\*, Saifuddin Fidahussein Dossaji, Nelson Onzere Amugune

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#### Antioxidative Properties and Cytotoxic Activity Against Colon Cancer Cell WiDr of Rhizopus Oryzae and Rhizopus Oligosporus-Fermented Black Rice Bran Extract

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Kristian Edo Zulfafamy<sup>1</sup>, Ardiansyah<sup>2</sup> , Slamet Budijanto<sup>1,3\*</sup>

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Sumaya Farooq, Amit Sehgal\*

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## Tempe Nuggets Provision Improves Energy Adequacy and Protein Intake in Underweight Underfive Children

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### Abstract:

Tempe is a well known fermented soybean food, inexpensive, and a good source of dietary protein and energy. To improve fresh Tempe as an attractive food to children, Tempe is processed into nugget. A study using pre and post control group design was conducted to determine the effect of the Tempe nugget provision on energy and protein intake, and body weight/age (W/A) of 24-59 months old children. Forty six subjects were selected according to inclusion criteria from local Community Health Center (Puskesmas) and grouped into intervention (provision of Tempe nugget) and control group (no provision). Data of energy and protein intake of subjects before intervention were obtained by 2x24 food recall to determine deficiency in intake for the respective age. The amount of the nugget given to each underweight child in intervention group was calculated on the basis of deficiency in energy and protein intake of each child (W/A) per day. Body weight was recorded pre and post intervention. The deep-fried nuggets contained 276.53 calories per 100 g, 8.60% protein, 28.41% carbohydrate, 13.28% lipid, and 44.28% fiber. The mean age of the subjects in intervention and control group were homogeneous i.e.  $40.52 \pm 10.88$  months and  $42.39 \pm 12.35$  months respectively. Tempe nugget provision for 30 days improved significantly energy intake ( $p < 0.001$ ) in intervention compared to control group. Protein intake and W/A in intervention group were higher compared to control although not significant and further study with higher amount of Tempe nugget provision is needed. This study provides evidence that deep fried Tempe nugget can be used as inexpensive and nutritious food to improve protein and energy intake for underweight underfive children.

### Keywords:

Fermented soybean; Stunting; Tempe flour; Under nutrition.



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## Changes in Phytochemical Content During Different Growth Stages in Tubers of Five Varieties of Potato (*Solanum Tuberosum L.*)

Geoffrey Kipkoech Kirui\*, Saifuddin Fidahussein Dossaji, Nelson Onzere Amugune

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### Abstract:

Potato (*Solanum tuberosum L.*) synthesizes a variety of bioactive metabolites including phenolic compounds and glycoalkaloids that protects against insects and diseases, and may influence its nutritional quality. Phenolics provide valuable health promoting antioxidants, whereas glycoalkaloid concentrations exceeding the upper safety limit of 20 mg/100 g fresh weight (Fwt) are potential neurotoxins. Therefore, efficient selection for tuber nutritional quality is dependent upon safe and reliable analytical methods. The aim of this study was to determine the changes in the concentration of glycoalkaloids and phenolic compounds during different growth stages in tubers of five selected potato varieties grown in Kenya.  $\alpha$ -chaconine and  $\alpha$ -solanine were separated and identified by HPLC. Total glycoalkaloids (TGA) and phenolics were determined by UV spectrophotometry. Recovery efficiencies for validation of analytical methods ranged from 85.9–93.5%. Significant differences in TGA and phenolic contents were detected among potato varieties. Tuber TGA content ranged from 6.80 to 10.56 mg/100g Fwt in vars. Dutch Robijn and Tigoni, respectively, and were within the upper safety limit. The corresponding values for chlorogenic acid contents in the examined varieties ranged from 46.39 to 58.04 mg/100 g Fwt. Total phenolic concentration in the examined tuber extracts varied ranged from 129.24 to 192.52 mg CGA/g Fwt. Glycoalkaloid and phenolic production were significantly reduced from time of initiation to maturity at 55 and 125 days, respectively, after planting (DAP). These results demonstrate that tuber phytochemicals were strongly influenced by variety and level of maturity. For nutritional safety and quality purposes, harvesting of mature potato tubers after 125 DAP is recommended.

### Keywords:

Chlorogenic acid; Glycoalkaloids; Phenolic acids; Maturity stage; *Solanum tuberosum*



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## Review on Potential Vitamin D Mechanism with Type 2 Diabetes Mellitus Pathophysiology in Malaysia

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### Abstract:

Evidences on vitamin D deficiency suggest there is increasing risk of diabetes. To date, some cohort, observation, cross-sectional studies on populations and randomized controlled trials in vitamin D supplements highlighting the potential of vitamin D are essentially in modifying Type 2 Diabetes Mellitus (T2DM) pathophysiology. Relevant literature sought in a various databases focus on the discovery of vitamin D studies in Malaysia, particularly in dietary, health status and disease study. However, recent data in Malaysia, the scope of the literature focuses on the deficient vitamin D mediated insulin impairment. The development of literary findings encompasses on the etiology of diabetes which highly correlates with decreased mechanism of action of vitamin D. It is important to understand diabetes etiology before explaining more about insulin resistance mechanisms which is strongly correlated with the involvement of c-Jun N-terminal kinase (JNK) pathways in insulin signalling. Furthermore, the vitamin D works synergistically with calcium homeostasis which is believed to have interaction with insulin. The purpose of this article is to illustrate the potential of vitamin D in modulating T2DM pathophysiology. Existing evidence showing the biochemical function of vitamin D is strongly involved in the pathogenesis of T2DM which requires considerable attention.

### Keywords:

Calcium homeostasis; Vitamin D Type 2 diabetes mellitus; Insulin



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