

## **Total Flavonoid dan Aktivitas Antioksidan *Jelly Drink Kurma (Phoenix dactylifera L.) dengan Penambahan Daun Torbangun (Coleus amboinicus L.) sebagai Minuman Fungsional bagi Ibu Menyusui***

Rr. Divine Hayyu Waruziqta Mawada Mas<sup>1</sup>, Ninik Rustanti<sup>1</sup>, Enny Probosari<sup>1</sup>, Nurmasari Widyastuti<sup>1</sup>

### **ABSTRAK**

**Latar belakang:** ASI yang tidak keluar dan produksi ASI yang tidak memenuhi kebutuhan bayi menjadi keluhan umum yang diungkapkan oleh ibu menyusui. Kombinasi *jelly drink* kurma dan daun torbangun dapat memberikan potensi keduanya dalam meningkatkan produksi ASI.

**Tujuan:** Mengkaji formulasi *jelly drink* kurma dengan penambahan sari daun torbangun serta menganalisis total flavonoid dan aktivitas antioksidan pada *jelly drink*.

**Metode:** Penelitian ini merupakan penelitian eksperimental dengan Rancangan Acak Lengkap (RAL) satu faktor yaitu variasi konsentrasi sari daun torbangun yang ditambahkan (F0=0%, F1=5%, F2=10%, F3=15%). Total flavonoid dianalisis menggunakan metode kolorimetri dan aktivitas antioksidan dianalisis menggunakan metode DPPH. Analisis statistik menggunakan *One-way ANOVA* dengan uji lanjut Tukey dan Duncan.

**Hasil:** Total flavonoid *jelly drink* pada berbagai formula berkisar antara 0,0093–0,0228 mg QE/g. Aktivitas antioksidan *jelly drink* pada berbagai formula berkisar antara 16574,6083–48147,9883 mg/L. Penambahan sari daun torbangun pada *jelly drink* kurma secara signifikan meningkatkan total flavonoid dan kemampuan antioksidan dibandingkan dengan formula yang tidak ditambah sari daun torbangun. Total flavonoid dan aktivitas antioksidan tertinggi ditemukan pada formula F3.

**Simpulan:** Penambahan sari daun torbangun dapat meningkatkan kandungan total flavonoid dan meningkatkan kemampuan antioksidan pada *jelly drink* kurma.

**Kata kunci:** kurma, daun torbangun, flavonoid, antioksidan, ibu menyusui

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<sup>1</sup>Program Studi Ilmu Gizi, Fakultas Kedokteran, Universitas Diponegoro, Semarang

## **Total Flavonoids and Antioxidant Activity of Date Jelly Drink (*Phoenix dactylifera L.*) with the Addition of Torbangun Leaves (*Coleus amboinicus L.*) as a Functional Drink for Breastfeeding Mothers**

Rr. Divine Hayyu Waruziqta Mawada Mas<sup>1</sup>, Ninik Rustanti<sup>1</sup>, Enny Probosari<sup>1</sup>, Nurmasari Widyastuti<sup>1</sup>

### **ABSTRACT**

**Background:** Inadequate breast milk and insufficient breast milk production to meet the needs of the baby are common complaints expressed by breastfeeding mothers. The combination of date jelly drink and torbangun leaves can provide the potential of both in increasing breast milk production.

**Objective:** To study the formulation of date jelly drink with the addition of torbangun leaf extract and analyze the total flavonoids and antioxidant activity in jelly drink.

**Methods:** This study is an experimental research using a Completely Randomized Design (CRD) with one factor, which is the variation in the concentration of added torbangun leaf extract (F0=0%, F1=5%, F2=10%, F3=15%). Total flavonoids were analyzed using the colorimetric method and antioxidant activity was analyzed using the DPPH method. Statistical analysis using One-way ANOVA was followed by the Tukey test and the Duncan test.

**Results:** Total flavonoids of jelly drink in various formulas ranged from 0,0093–0,0228 mg QE/g. Antioxidant activity of jelly drink in various formulas ranged from 16574,6083–48147,9883 mg/L. The addition of torbangun leaf extract to date jelly drink significantly increased the total flavonoids and antioxidant ability compared to the formula without the addition of torbangun leaf extract. The highest total flavonoids and antioxidant activity were found in formula F3.

**Conclusion:** The addition of torbangun leaf extract can increase total flavonoid content and increase antioxidant ability of date jelly drink.

**Kata kunci:** dates, torbangun leaves, flavonoids, antioxidants, breastfeeding mothers

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<sup>1</sup>Nutrition Science Department, Faculty of Medicine, Diponegoro University, Semarang