

# PENGARUH KOMBINASI EKSTRAK DAUN SALAM (*Eugenia polyantha L.*) DAN DAUN SELEDRI (*Apium graveolens L.*) TERHADAP KADAR TRIGLISERIDA

Studi Eksperimental pada Tikus Putih Jantan Galur Wistar yang Diinduksi Kuning Telur Puyuh dan PTU 0,02%

## THE EFFECT OF THE COMBINATION OF BAY LEAF AND CELERY LEAF EXTRACTION FOR TRIGLYCERIDE LEVELS

Shasha Amalia Masdhasari<sup>1</sup>, Nurina Tyagita<sup>2</sup>, Dian Apriliana Rahmawatie<sup>3</sup>

<sup>1</sup> Fakultas kedokteran Universitas Islam Sultan Agung (Unissula) Semarang

<sup>2</sup> Bagian Ilmu Biokimia Fakultas Kedokteran Universitas Islam Sultan Agung (Unissula) Semarang

<sup>3</sup> Bagian Ilmu Biokimia Fakultas Kedokteran Universitas Islam Sultan Agung (Unissula) Semarang

Korespondensi : Shasha Amalia Masdhasari, Mahasiswa Kedokteran Universitas Islam Sultan Agung, Jl Kaligawe KM 4 Semarang 50012 Telp (+6224) 6583584 Fax (+6224) 6594366, email : [amaliashasha212@gmail.com](mailto:amaliashasha212@gmail.com)

### ABSTRAK

**Latar Belakang :** Daun salam (*Eugenia polyantha L.*) dan daun seledri (*Apium graveolens L.*) mampu mempengaruhi kadar trigliserida, namun belum ada yang mengkombinasikan keduanya sebagai antihiperlipidemia. Penelitian ini bertujuan mengetahui pengaruh kombinasi ekstrak daun salam dan daun seledri terhadap kadar trigliserida tikus putih jantan galur *wistar* yang diberi diet tinggi lemak.

**Metode :** Penelitian eksperimental *post-test only randomized control group design* menggunakan tikus putih jantan galur *wistar* yang diinduksi kuning telur puyuh 3ml/200gBB dan PTU 0,02% peroral selama 28 hari. Tikus dibagi 4 kelompok secara random yaitu kelompok kontrol negatif, kelompok simvastatin 0,18 mg, kelompok kombinasi 25% berupa ekstrak daun salam 13,5mg/200gBB dan ekstrak daun seledri 10mg/200gBB, kelompok kombinasi 50% berupa ekstrak daun salam 27mg/200gBB dan ekstrak daun seledri 20mg/200gBB.

**Hasil :** Hasil rerata kadar trigliserida (mg/dL) pada kelompok hiperlipidemia adalah  $151,0 \pm 14,8$ , kelompok simvastatin adalah  $37,1 \pm 9,5$ , kelompok kombinasi 25% adalah  $47,9 \pm 7,3$ , dan kelompok kombinasi 50%  $44,2 \pm 10,1$ . Data dianalisis menggunakan uji *One Way Anova* didapatkan  $p=0,000$ , antar kelompok terdapat perbedaan trigliserida. Hasil uji *Post Hoc*,

kelompok kombinasi 25% dan kelompok kombinasi 50% terdapat perbedaan tapi tidak bermakna.

**Kesimpulan :** Pemberian kombinasi ekstrak daun salam dan daun seledri berpengaruh terhadap kadar trigliserida pada tikus putih jantan galur *wistar* yang diberi diet tinggi lemak.

**Kata kunci :** Daun salam, daun seledri, kombinasi, kadar trigliserida, antihiperlipidemia

### **ABSTRACT**

**Background:** Bay (*Eugenia polyantha L.*) leaves and celery (*Apium graveolens L.*) leaves has been shown alone to affect triglyceride levels, but its effect as a combination for anti-hyperlipidemia has not been known. This study aimed to determine the effect of the combination of bay leaf and celery leaf extract on triglyceride levels in male wistar rats fed with a high-fat diet.

**Methods:** In this experimental research with post-test only randomized control group design 20 male white wistar rats were given 3 ml/200g BB of quail yolk and PTU 0,02% orally for 28 days to induce hyperlipidemia condition. The rats were divided into four groups randomly: control group, 0,18 mg simvastatin group, combined group 25% such as 13,5 mg/200g BB of bay leaf extract and 10 mg/200g BB of celery leaf extract, combined group 50% which contains 27 mg/200 g BB of bay leaf extract and 20mg/200g BB of celery leaf extract.

**Results:** The mean triglyceride level (mg/dL) of the control group, combination 25% group, combination 50% group, simvastatin group was:  $151.0 \pm 14.8$ ,  $47.9 \pm 7.3$ ,  $44.2 \pm 10.1$ ,  $37.1 \pm 9.5$  respectively. One Way Anova test resulted  $p = 0,000$  show significant difference in triglyceride levels between groups. Post Hoc tests showed differences between combination 25% group and combination 50% group, however not significant.

**Conclusion:** The combination of bay leaf and celery leaf extract gave affect on triglyceride levels in male wistar rats fed with a high-fat diet.

**Key words:** Bay leaf, celery leaf, combination, triglyceride level, antihyperlipidemia.