

Pengaruh Minuman Kombucha *Caesalpinia sappan* L. pada Parameter Obesitas Tikus Ovariektomi = The Effect of *Caesalpinia sappan* L. Kombucha Beverage on Obesity Parameters in Ovariectomized Rats

Anisa Nurhidayah, author

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Abstrak

Obesitas merupakan masalah kesehatan yang ditandai dengan nilai Indeks Massa Tubuh 30. Obesitas dapat memicu penyakit lain seperti Diaebetes Mellitus dan penyakit Kardiovaskular. Pada penelitian sebelumnya, ekstrak *Caesalpinia sappan* L. atau dikenal di Indonesia sebagai kayu Secang, terbukti dapat mengurangi akumulasi lemak secara in vitro. Sementara, kombucha dipercaya dapat meningkatkan sistem imun. Pada penelitian ini, dilakukan eksperimen secara in vivo pada kombucha C.sappan. Penelitian ini menggunakan tikus putih betina Sprague-Dawley yang dibagi menjadi 8 kelompok, yaitu kontrol sham dan kontrol negatif (CMC-Na 0,5% 2 mL/200 grBB), kontrol positif (Tamoksifen 0,4 mg/200gr BB), ekstrak Secang (20 mg/200grBB), kombucha (1 mL/200grBB), serta 3 kelompok variasi dosis kombucha Secang dengan D1 (1 mL/200 gr BB), D2 (3 mL/200 grBB/), dan D3 (3 mL/200 grBB/3 kali sehari), dengan pemberian secara oral. Semua tikus dilakukan ovariektomi, kecuali kelompok sham dilakukan pembedahan tanpa pengambilan ovarium. Tikus dipelihara 4 minggu pasca operasi, lalu diberi perlakuan selama 28 hari. Parameter yang diukur adalah berat badan, food intake, akumulasi lemak viseral, dan ukuran sel adiposit. Berdasarkan penelitian, kombucha Secang dosis 3 (3 mL/200grBB/3 kali sehari) menurunkan berat badan, nafsu makan, mengurangi akumulasi lemak viseral dan ukuran sel adiposit.

.....Obesity is a health problem characterized by a Body Mass Index value 30. Obesity can trigger other diseases such as diabetes mellitus and cardiovascular disease. In previous studies, *Caesalpinia sappan* L. extract was shown to reduce fat accumulation in vitro. Meanwhile, kombucha is believed to boost the immune system. In this study, in vivo experiments were conducted on kombucha from *C. sappan* extract. This study used female Sprague-Dawley white rats which were divided into 8 groups, namely sham and negative control (CMC-Na 0.5% 2 mL/200grBW), positive control (Tamoxifen 0.4 mg/200grBW), *C.sappan* extract (20 mg/200grBW), kombucha (1 mL/200grBW), as well as 3 groups of dose variations of *C.sappan* kombucha with D1 (1 mL/200 gr BB), D2 (3 mL/200grBW), and D3 (3 mL/200grBW/3 times a day), with oral administration. All rats were ovariectomized, except for the sham group. After 4 weeks ovariectomy, rats were treated for 28 days. Parameters measured were body weight, food intake, visceral fat accumulation, and adipocyte cell size. Based on the study, *C. sappan* kombucha dose 3 (3 mL/2grBW/3 times a day) decreased body weight, food intake, reduced visceral fat accumulation and adipocyte cell size.