

Sania Angelisa F Depari (173307010088), Daffa Jihan Azmi Rambe (173307010027), Cut Lisyia (173307010031), Rifki Meilando (173307010106). 2020. (*Uji Efektivitas Ekstrak Kulit Jeruk Sunkist (Citrus sinensis (L.) Osbeck) Terhadap Kadar Gula Darah Tikus Wistar (Rattus norvegicus) dengan Hiperkolesterolemia yang di Induksi Streptozotocin*). Dosen Pembimbing: dr. Maya Sari Mutia, M.K.M, M.Biomed. Fakultas kedokteran. Universitas Prima Indonesia.

ABSTRAK

Kondisi kadar gula darah yang tinggi pada penderita diabetes ternyata memicu peningkatan LDL dan penurunan HDL dimana pada orang dengan diabetes energi yang didapatkan tubuh berasal dari penguraian lemak dan metabolisme protein. Kulit jeruk Sunkist (*Citrus sinensis (L.) Osbeck*) dilaporkan memiliki aktivitas antidiabetik, antihiperkolesterolemia, antiinflamasi serta antioksidan . Penelitian ini bertujuan untuk mengetahui efektivitas dari ekstrak etanol kulit jeruk Sunkist (*Citrus sinensis (L.) Osbeck*) terhadap kadar gula darah pada dosis 500, 750 dan 1000 mg/kgBB. Penelitian ini menggunakan rancangan penelitian *True Experimental Pre-Test and Post-Test Control Group Design* dimana kulit jeruk Sunkist yang diekstraksi dengan metode maserasi diberikan secara oral selama 14 hari pada tikus wistar hiperkolesterolemia yang diinduksi streptozotocin. Hasil pengujian statistik menunjukkan bahwa ekstrak etanol kulit jeruk Sunkist mampu menurunkan kadar gula darah dan kadar kolesterol tikus wistar hiperkolesterolemia yang diinduksi streptozotocin ($p < 0,05$). Dosis ekstrak etanol kulit jeruk Sunkist yang paling efektif dalam menurunkan kadar gula darah dan kadar kolesterol tikus wistar hiperkolesterolemia yang diinduksi streptozotocin adalah 1000mg/kgBB.

Kata Kunci: Diabetes Melitus, Ekstrak Kulit Jeruk Sunkist (*Citrus sinensis (L.) Osbeck*), Kadar Gula Darah, Profil Lipid, Berat Badan. Supervisor:

Sania Angelisa F Depari (173307010088), Daffa Jihan Azmi Rambe (173307010027), Cut Lisya (173307010031), Rifki Meilando (173307010106). 2020. (*The Effectiveness of Sunkist Orange Peel (Citrus sinensis (L.) Osbeck) Ethanol Extract on Blood Sugar Level of Streptozotocin Induced Wistar Rat (Rattus norvegicus) with Hypercholesterolemia*). Supervisor: dr. Maya Sari Mutia, M.K.M, M.Biomed. Fakultas kedokteran. Universitas Prima Indonesia.

ABSTRACT

The Condition of high blood sugar levels in people with diabetets appears to trigger an increase in LDL and a decrease in HDL where in people with diabetes the energy obtained by the body comes from the decomposition of fat and protein metabolism. Sunkist orange peel (*Citrus sinensis (L.) Osbeck*) is reported to have antidiabetic, anti-hypercholesterolemia, anti-inflammatory and antioxidant activities. This study aims to find out the effectiveness of Sunkist orange peel ethanol extract (*Citrus sinensis (L.) Osbeck*) on blood sugar levels at doses of 500, 750 and 1000 mg/kgBB. This study used the True Experimental Pre-Test and Post-Test Control Group as research design where sunkist orange peel was extracted by maceration method and was given orally for 14 days to streptozotocin induced wistar rat with hypercholesterolemia. Statistical test results showed that *ethanol extract of Sunkist orange peel* was able to lower blood sugar levels and cholesterol levels of h streptozotocin induced wistar rat with hypercholesterolemia ($p < 0.05$). The most effective dose of Sunkist orange peel ethanol extract in lowering blood sugar levels and cholesterol levels of streptozotocin induced wistar rat with hypercholesterolemia is 1000mg/kgBB.

Keywords: diabetes mellitus, Sunkist orange peel ethanol extract (*Citrus sinensis (L.) Osbeck*), blood sugar level, lipid profile, body weight

