POTENSI EKSTRAK BUAH STRAWBERRY (Fragaria x ananassa) SEBAGAI PENURUN KADAR GLUKOSA DARAH MENCIT MODEL DIABETES MELLITUS

POTENTIAL OF STRAWBERRY (Fragaria x ananassa) EXTRACT TO REDUCE BLOOD GLUCOSE LEVEL ON DIABETIC MICE

ABSTRACT

Background: Diabetes mellitus is one of the most common diseases in the world nowadays. It caused a lot of death and other disadvantages. Some data about strawberry (Fragaria x ananassa) contains some ingredients that have some clinical potential as anti-cancer, anti-diabetes, anti-hypertension, and antioxidant. Ellagitanin Acid, catechin, and flavonoid are three main chemicals that have potential in reducing blood glucose level. Purpose: To prove the effect of strawberry in reducing blood glucose level and find an natural alternative treatment for diabetes mellitus. Method: This experiment was conducted on 28 male Mus musculus in the age of four to six month with weight between 20 to 30 grams. They were grouped into 1 control group and 3 experimental groups which consist of 7 mice each group. The mice were injected intraperitoneal with 40mg/kg of streptozotocin a day for 5 days in a row to raise blood glucose level. The strawberry extract were given in 3 different doses, 70mg/kg, 140mg/kg, and 280mg/kg. The blood glucose measured after 1 and 2 weeks of experiment. Result: There is no significant reduction of blood glucose in all groups. Conclusion: From this experiment, strawberry extract doesn’t have significant effects on blood glucose level in diabetic mice.

Keywords: strawberry, streptozotocin, diabetes mellitus, ellagitanin.