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"COCOGO" THE ANTIDIABETIC CARBONATED COCONUT DRINK INNOVATION ADDED BY THE EXTRACT OF ALBEDO FROM WATERMELON AND PUGUNTANO LEAF AS COMMODITY OF NORTH SUMATERA

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Increased of soft drink consumption in society is increasing every year. Consuming soft drink in high quantity for a long time will increase the risk of Diabetes Mellitus Type II disease or decrease the sensitivity of glucose receptor. It also declines the ability of beta Langerhans Pankreas Cell in producing Insulin. It will make the accumulation of glucose in blood. Hence the concentration of glucose in blood will increase. Puguntano plant has antidiabetic activity coming from flavonoid compound which gives hipoglikemic effect. North Sumatera, Indonesia, is one of some places that produces red watermelon excessively. Red watermelon has Albedo (the white pulp) which is always disposed and been waste. Albedo of water melon contains sitrulin compound which potentially overcome the excess glucose in blood. In this research, this local resource is utilized in making carbonat coconut drink as the healthy soft drink product. This research was carried out with a design of treatment consisting of one factor, that is a comparison of the treatment of commercial and coco-carbonated drinks. The best carbonated coconut drink getting from this research is identified by organoleptic respon and the high activity of antiocsidant. Then This best carbonated coconut drink is used as preparation test in testing the hiperglicemic effect in experimental rats. This test is carried out by Completely Randomized Design Method using 4 male Rats dividing into 2 group. The first group is the controlled group given comercial soda drink in rats with DM II. The second group is the controlled grup given cocogo drink in rats with DM II. The parameter measurement is the decreased of glucose level in the blood and the decreased of rats weight.

Keywords: Albedo, Watermelon, Carbonated Coconut Drink, Coconut, Diabetes Mellitus II, Pugutanto leaf.







