

## ABSTRACT

**Wiorita PradiaNingsih. B4109513. Department of Health, Clinical Nutrition Program. Polytechnic of Jember. Effect of Leaf Stew Breadfruit (*Artocarpus altilis*) To Decrease Blood Sugar Levels During hyperglycemic mice. Supervising Commission, Chairman: dr. Adhiningsih Yulianti, Members: Agustina Endah W, S.Sos.M.kes.**

**BACKGROUND:** Diabetes Mellitus categorized as a global disease by the World Health Organization (WHO) with the number of people in the world reached 199 million in 2009. According to statistics from the study of the WHO Global Burden of Disease, 2004, Indonesia is ranked first in South East Asia, with the prevalence of the disease as much as 8.426 million in 2000 and projected to increase 2.5 times as many people with diabetes 21.257 million in 2030 (Astiyandani in Pertamasari, 2011). One of the traditional plants used as medicine are the leaves of breadfruit (*Artocarpus altilis*). Breadfruit leaves are reported to have the effect of lowering blood sugar levels while due to the flavonoid and polyphenols in it, with breadfruit leaf is expected to increase the vocabulary of traditional medicines as lowering blood sugar levels while working as an antioxidant. Flavonoids are known to one substance magnitude powerful antioxidants, so as to eliminate the damaging effects of oxygen which occurs in the human body. Flavonoids function captures free radicals in the liver so that no oxidative stress, 8-gerany compound-4 ,5,7-trihydroxyflavone useful for treating diabetes because it is a powerful antidiabetic. Phenol also acts as an antioxidant that can inhibit the oxidation process and the process of free radicals, free radicals are molecules of a substance instability of the human body's normal metabolic processes that have the effect of damaging the blood vessels so as to prevent the disease occurs DM (Shabella, 2012).

**Metedologi RESEARCH:** This research is an experimental study (True Experimental). The design used was a pre-test and post-test control group design. The experiment was conducted at the Biomedical Laboratory of the Faculty of Dentistry (FKG) College of Jember in May 2013.

**CONCLUSION:** The average blood sugar levels when (mg / dl) mice after treatment that is in the positive control group (p +) 321 mg / dl, treatment group (p1) 276.5 mg / dl, (p2) 251.83 mg / dl, and (p3) 297.83 mg / dl.

**Key words:** breadfruit leaf decoction, when blood sugar levels, male mice