

## **ABSTRACT**

### **THE EFFECT OF USED COOKING OIL PURIFIED BY NONI FRUIT (*Morinda citrifolia*) ON THE OVERVIEW OF MALE WISTAR RAT HEPATOCYTES**

**By**

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Cooking oil is a basic needs in the household. The use of cooking oil is increasingly higher day by day and becomes less affordable for fried foods merchants. To save costs, the merchants tend to use cooking oil that is used repeatedly. This can damage the quality of cooking oil and make it decomposes the composition of the oil and can damage the hepatocyte. The aim of this study is to know the effect of using cooking oil purified by noni fruit to the liver.

This research is experimental study with a long 4 weeks treatment by using 20 Wistar rats which divided into 4 groups. In group A (control). In group B given by 3 hours cooking oil. In group C given by 6 hours used cooking oil. In group D given by 6 hours used cooking oil which purified with noni fruit as the antioxidant. Each treatment was given with 10 ul/g BW/day in dose.

The results showed there were 27,14 $\pm$ 3,62% damage of hepatocyte on group B, 35,00 $\pm$ 2,69% on group C and in group D there were lowering damage of

hepatocyte into  $26,06 \pm 6,03\%$ . It showed that giving used cooking oil can damage hepatocyte and noni fruit can lowering the damage of hepatocyte.

**Keywords** : Noni fruit, Rat's liver, Used cooking oil