ABSTRACT

LALITYA CITTA NIRMALA. The Effect of Ready to Drink Rice Bran Oil-Chocolate Beverage on Plasma Lipid Profile in Obese College Students. Supervised by EVY DAMAYANTI.

Rice bran oil has been known for its hypocholesterolemic effect due to γ-oryzanol. The objectives of this study was to assess subjects’ eating habit correlated with the amount and type of fat consumed, to assess fatty acids within the ready to drink rice bran oil-chocolate beverage and to analyzed its effect on plasma lipid profile in obese college students. The design used was pre-experimental study with one group pretest-posttest design using six men and six women college students. Each subjects were given two cups per day for 15 days which contained 57.6 mg γ-oryzanol per two cups.

There was no significant changes on subjects’ eating habits before and during the intervention phase. The beverage contained 32.57% oleic acid, 28.44% linoleic acid and 17.51% palmitic acid mostly. Total cholesterol and LDL-cholesterol were significantly lower after the intervention. Total cholesterol and LDL-cholesterol decreased by 21.2 mg/dl and 18.7 mg/dl, while HDL-cholesterol and triglyceride levels unsignificantly changed. Overall the ready to drink rice bran oil-chocolate beverage was good to manage health by lowering the plasma cholesterol and LDL-cholesterol levels.

Keywords: beverage, rice bran oil, obese, plasma lipid profile, college students.