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The effect of fish meal substitution with chicken viscera in pig ration on blood and meat cholesterol, LDL and HDL

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The purpose of this research was to study the effect of substitution of fish meal with chicken viscera in the ration on cholesterol, LDL and HDL content in blood and meat of pig. Fifteen pigs crossbred of Spotted Poland Chinese and Chaster White at 10-week-old with live weight of between 15 and 23kg, put in individual cages. The treatments were substitutions of fish meal with chicken viscera meal as follows R0=fish meal 10%+0% chicken viscera (control); R1=5% fish meal+chicken viscera 5% and R2=fish meal 0%+10% chicken viscera. Treatment was given to 5 groups of pigs with different body weight each B1=16.00kg; B2=18.10kg; B3=20.25kg; B4=22.50kg and B5=24.10kg. The experimental design used was Randomized Block Design. The variables measured were total cholesterol content, LDL content, HDL content in blood and cholesterol in pig meat. The results showed that the total cholesterol content was significant ($P<0.05$) lower in the treatment of R2 compared with the treatment of R0 and R1 which both were not significantly different. The LDL content was significant ($P<0.05$) lower at the treatment of R2 compared with R0 and R1 while the latter two were not significantly different. While the HDL content in the treatment of R2 was significant ($P<0.05$) higher than the treatment of R0 and R1, followed by the decrease of cholesterol content in meat. Based on this result, it can be concluded that at 10% chicken viscera in pig ration could be improved the quality of meat of pork in terms of cholesterol content to ensure human food safety.

Biography

Lidya Siulce Kalangi, born in Manado on September 1st, 1977. In 2000, Graduated from Faculty of Animal Husbandry of Sam Ratulangi University, Manado, (Degree SPt). In 2006, Graduated Masters in Agricultural Economics Studies Program, Faculty of Post Graduate IPB, Bogor (MSi Degree). In 2014, Graduated Doctorate in Agricultural Economics Study Program, Graduate School, IPB Bogor (Doctorate Degree).

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