

Utilization of Oat in Rabbit Feed for the Development of Healthier Rabbit Meat and Its Impact on Human Blood Lipid Profile

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Abstract : Functional foods may be a good tool that can be simply utilized in reducing community health expenses. Regular consumption of rabbit meat can offer patrons with bioactive components because the manipulation in rabbit feed is much successful to raise the levels of conjugated linoleic acid, ecosapentaenoic acid, decosahexaenoic acid, polyunsaturated fatty acids, selenium, tocopherol etc. and to reduce the ω -3/ ω -6 ratio which is performing a major role in curing of cardiovascular and several other diseases. In comparison to the meats of other species, rabbit meat has higher amounts of protein with essential amino acids, especially in the muscles and low cholesterol contents that also have elevated digestibility. The present study was carried out to develop the functional rabbit meat by modifying feed ingredient of rabbit diet. Thirty-day old rabbits were fed with feeds containing 2 % and 4 % oat. The feeding trial was carried out for eight weeks. Rabbits were divided into three different groups and reared for the period of two months. T0 rabbits were considered control group while T1 rabbits were reared on 4% oat, and T2 were on 2% oat in the feed. At the end of the 8 weeks, the rabbits were slaughtered. Results presented in this study concluded that 4 % oat seed supplementation enhanced n-3 PUFA in meat. It was observed that oat seed supplementation also reduced fat percentage in the meat. Utilization of oat in the feed of rabbits significantly affected the pH, protein, fat, textural and concentration of polyunsaturated fatty acids. A study trial was conducted in order to examine the impact of functional meat on the blood lipid profile of human subjects. They were given rabbit meat in comparison to the chicken meat for the period of one month. The cholesterol, triglycerides and low density lipoprotein were found to be lower in blood serum of human subject group treated with 4 % oat meat.

Keywords : functional food, functional rabbit meat, meat quality, rabbit

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