

This study was conducted to investigate the effects of including potato peels (PP) and sugar beet pulp (SBP), as unconventional feeds, with and without enzyme in broiler diets from 1 to 42 days of age by observing the growth performance, blood parameters and carcass characteristics. A total of 150, 1-day old, chicks were randomly assigned into five groups, each with 30 chicks. Birds in group 1 were fed on the control diet. Chicks in groups 2 and 3 were offered diets containing PP and SBP at the rate of 15% and 7.5%, respectively, while those in groups 4 and 5 were fed the same diets but with adding an enzyme mixture. Using the unconventional feeds in the diets was found to decrease the body weight (BW). However, the feed intake, weight gain and feed conversion did not differ from the control in PP at the grower period, but decreased in SBP throughout the experiment. Addition of enzyme greatly improved the BW in PP and SBP to a degree that it surpasses the control and also increased the feed intake and conversion. The total cholesterol and low-density lipoprotein cholesterol serum levels were decreased in all tested groups. Carcass yield was not affected by treatments, but the carcass fat content was reduced using the unconventional feeds with or without enzyme. In conclusion, PP can be used at a rate of 15% in the grower diets of broilers. Furthermore, 15% PP or 7.5% SBP can be included in starter and grower diets, but with the addition of enzymes. This can help in solving the problem of current shortage and rising costs

of conventional feeds.