

## **EFFECT OF DIETARY SUGAR BEET PULP AND ENZYMES ON SOME PHYSIOLOGICAL PERFORMANCE OF GROWING RABBITS**

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A total number of 36 males, 8 weeks old growing New Zealand White (NZW) rabbits used in this study. Rabbits were randomly distributed into 6 treatments, each one contains 6 males. Three levels of sugar beet pulp (SBP) and two levels of enzymes preparation were used in a 3 x 2 factorial arrangement. Sugar beet pulp were used at levels of 0 (control), 50 and 100 % of the diets. Enzymes preparation was added a t 0 and 500 g/ ton of diet. At the end of experimental period blood samples were collected from 3 rabbits of each treated groups were chosen, two blood samples were immediately collected from each rabbit. The first sample was collected in heparinized tube (2.25µ heparin / 5 ml blood) for studying the blood picture. The second sample was collected in non-heparinized tube and centrifuged for 5 minutes at 10000 R.P.M to separate, serum, for studying some blood metabolites parameters. Obtained results showed that, Rabbits fed control diet recorded an increasing ( $P<0.05$ ) in corpuscular hemoglobin concentration (MCHC) values compared with rabbits fed 100% SPB in their diet. Adding enzyme to rabbit diets reduced ( $P<0.05$ ) the values of the packed cell volume (PCV) and hemoglobin (HB%) compared to the control diet. The greatest slightly numerically improvement in the values of Red blood cells (RBC`s), white blood cells (WBC`s), PCV, and mean corpuscular hemoglobin (MCH) was for rabbits fed dietary 100%SBPwithout enzyme addition compared with other dietary treatments. Rabbits fed dietary 100% SBP and incorporated with enzyme recorded the greatest ( $p<0.05$ ) value of glucose and triglycerides followed by others fed dietary 50% SBP and incorporated with enzyme compared with all dietary contain either SBP or encorporated with or without enzyme (SBP×enzyme). The greatest ( $P<0.05$ ) enhancement in the values of AST and AST / ALT ratio was recorded for rabbit fed dietary enzyme compared with the control diet.

***Keywords: sugar beet pulp, blood parameters, enzymes, growing NZW rabbits***