Effect of adding different levels of yeast Saccharomyces cerevisiae in the production of milk and its components and some blood parameters for Crossbred Holstein cow

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Summary

The experiment was conducted at the Agricultural Research Station of the Faculty of Agriculture / University of Basrah / Karma Ali site. The experiment was used in four experimented Holstein cows from the animal field. The cows were randomly distributed in the individual feeding sheds and the appropriate conditions were established in terms of cleanliness of barns, to the cows periodically. The experiment included four groups, four periods and four cows in the design of the Latin square as follows.

1- Control group: fed cattle on the concentrated diet, which consisted of barley by 25% and bran bran 72%, salt food 1% and vitamins 1%, which were free of yeast.

2. Second group: which included the addition of 5 g / kg center feed from Saccharomyces Cerevisiae bread yeast to the Feed concentrated

3. The third group. Add 10 g / kg to the Feed Center

4. The fourth treatment. 15 g / kg to the Feed Center

The study reached the following:

1- The addition of yeast to the feed material by 5, 10, 15 g / kg center feed resulted in a significant increase ($P < 0.05$) in the daily milk production which was 4.28, 4.18 and 4.36 kg respectively, compared to the control group which reached 3.51 kg. It also led to an increase in the weekly milk production of 29.58, 29.34 and 30.54 kg, respectively, compared to the control group which reached 24.21 kg.

The addition of 5 g / kg feed center of yeast resulted in an increase in the milk protein ratio which reached 4.03 compared to the control group

which reached 3.26 and also showed significant differences in the proportion of non-greasy solids, which amounted to 10.25 compared with the control group which amounted to 8.82, Led to an increase in lactose in milk, which amounted to 5.22 compared to the control group, which amounted to 4.68, has not had an effect on the proportion of milk fat.

3. The amount of the concentrated diet consumed by the addition of yeast to the feed material in the three groups increased by 5,10,15, respectively, which reached 4.27, 4.27, 4.46 kg compared to the control group which reached 3.61 kg.

4. Blood parameters of Hemoglobin and blood cell count showed the addition of 5 g / kg center feed significant difference in hemoglobin concentration, which amounted to 12.00 g / 100 ml compared to the control group which amounted to 10.75 g / 100 ml, and the ratio of blood cells compacted was 33.44 Compared to the control group which reached 32.03%, respectively.

5- It was found that the addition of yeast to the feed material resulted in a significant increase in the concentration of cholesterol in the three groups which amounted to 106.61, 121.58, 119.05 mg / 100 ml, respectively, compared to control group, which was 96.11 mg / 100 ml. As for triglycerides, the third and fourth groups, which reached 129.16, 132.21 mg / 100 ml, respectively, compared with the control group and the second group, which reached 111.66, 118.88 mg / 100 ml. The yeast showed a significant increase of $P < 0.05$ in the third and fourth group of the total protein, which was 6.27, 7.04 g / 100 ml, respectively, compared to the control group and the second group, which reached 4.70, 5.16 g / 100 ml, respectively. However,

the addition of yeast did not show any significant difference in blood albumin level.

6 - he addition of Yeast Bread did not change glucose glucose, urea concentration, and liver enzymes of GPT and GOT, but showed significant differences ($P < 0.05$) in the concentration of ALP in the third and fourth group of 165.83, 171.47 IU / L Respectively compared to the control group and the second group which reached 148.22, 151.90 IU / L respectively.