

## **Dedication**

**This thesis is dedicated to the spirit of my father late, who taught me that the best kind of knowledge to have is that which is learned for its own sake. It is also dedicated to my mother, who taught me that even the largest task can be accomplished if it is done one step at a time , also I dedicate this work to my brother , sisters , my wife and my little daughter .**

## **Acknowledgment**

**I would first like to thank Allah for supported me to complete this research.**

**Also thanks refer to my advisor Dr/ Omer Massad at Sudan University of Science and Technology who helped me to complete this research. The door to Prof. Mohammed Tag Eldin Ibrahim who was always open whenever I ran into a trouble spot or had a question about my research or writing. He consistently allowed this research to be my own work, but steered me in the right direction whenever he thought I needed it.**

## **Abbreviations**

FA:	Fatty Acids
S F A:	Saturated Fatty Acids
MUSAT:	Mono unsaturated Fatty Acids
U S F A:	Unsaturated Fatty Acids
PUSAT:	Poly unsaturated Fatty Acids

## Abstract

The current study was to examine the effect of beef fat on the broiler performance. The effect of feeding beef fat on broiler chicks performance at dietary level up to 3% were studied over 3 weeks period. Two hundred - Day old unsexed commercial broiler chicks ( ROSS 308) were used in this experiment. An experimental diets contain level 3% of beef fat, sorghum, wheat bran, and ground nut cake was formulated. Beef fat was used to adjust the energy levels in the diet. Lysine and methionine were added to the diets to raise their contents to the recommended levels. Chicks were randomly distributed into 2 groups of chicks in a completely randomized design. Each group was subdivided into 8 replicates. Feed and water supplied ad libitum, light was provided 24 hours daily throughout the experimental period. Feed intake and water intake were recorded daily. Body weight, weight gain and feed conversion ratio were recorded weekly. In addition blood and serum contains. Data obtained were subjected to analysis were determined variance. Results obtained showed a high significant different ( $p < 0.01$ ). Feed intake at week 1 and week 2, water intake, body weight, weight gain, production efficiency factor, blood and serum analysis. feed conversion ratio was significantly ( $p < 0.05$ ) better by the group fed beef fat during week 2 and week 3 of the experiment, also significant different were observed in cholesterol analysis. A significant effect ( $p < 0.05$ ) were observed in efficiency energy utilization and lysine efficiency.

The study concluded that feeding beef fat based diets improved broiler performance.

## ملخص الدراسة

صممت التجربة للتحقيق من أثر إضافة شحوم الابقار على الاداء الانتاجي للدجاج اللحم . تم دراسة أثر اضافة دهن البقر على اداء الدجاج اللحم باضافة 3 % من دهن البقر خلال 3 اسابيع , حيث استخدمت 200 كتكوت عمر 28 يوم غير مجنسة (روس 308) وزعت عشوائيا إلي مجموعتين تحتوي كل مجموعة علي مائة كتكوت, ثم قسمت كل مجموعة إلي أربعة مكررات بكل تكرار (25) كتكوت. تم تغذية كل مجموعة علي علائق الناهي من اليوم (28-49) والتي أضيف لها شحوم البقر محسوبة من العليقه بالنسب التالية: 0%, 3%. وتمتقدير كل من الأتي خلال فترة التجربة : الوزن الحي , الوزن المكتسب , العلف المستهلك, كفاءة التحويل الغذائي, نسبة كفاءة البروتين, نسبة كفاءة اللايسين كفاءة استهلاك الطاقة, استهلاك الماء, استهلاك الماء النسبي, عامل كفاءة الأنتاجيه , خصائص جسد الذبيحة واخذ عينات الدم لتحليل الكولسترول . ولقد أظهرت نتائج معطيات التجربة بأنه يوجد فرق معنوي جدا (  $p < 0.01$  ) بين المجموعات في حالة كمية العلف المستهلك في الاسبوع الاول والثاني , الوزن الحي , الوزن المكتسب, استهلاك الماء , عامل الكفاءة الأنتاجية. حيث كانت المجموعة التي أضيفت لها شحوم الابقار الأفضل. كفاءة استهلاك الطاقة وكفاءة اللايسين وجد فيها فرق معنوي بمستوى معنوية (  $p < 0.05$  ). يوجد فرق معنوي معدل التحويل الغذائي في الاسبوعين الثاني والثالث , وزن جسد الذبيحة و تحليل الكولسترول . وعليه خلصت هذه الدراسة الي ان إضافة شحوم الابقار لعلائق الدجاج اللحم أدت إلي تحسين معنوي في الأداء الإنتاجي لفراخ اللحم .

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