# **Dedication**

To all My Family with Love and Respect.

#### **Acknowledgment**

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#### Research Abstract

This study was conducted to determine the total count of bacteria in the raw milk produced in the farm of the College of Veterinary Medicine and Animal Production University of Sudan, and accordingly bacterial contamination and suitability .for consumption

Sixty samples of bulk raw milk were collected, 30 from morning milk and 30 from evening milk and then subjected to laboratory test using the Direct Microscopic count. The data obtained was then compared with the different standards given for the total bacteria count in milk. According to the results obtained the produced farm milk is satisfactory and acceptable for consumption with a total bacteria count of an laverage 650.000 cell per 1ml milk.

The statistical analysis showed no significance variation in the total count of bacteria of morning and evening milk .((650.000  $\pm$  14002.3 and 651.000  $\pm$  98443.1 respectively The study explained that the factors led to the increase of bacteria number in the raw milk in relationship with the .production methods and raw milk treatment

.Finally certain recommendations are given in this aspect

#### ملخص البحث

أجريت هذه الدراسة لمعرفة العد الكلي لباكتيريا اللبن المنتج بمزرعة كلية الطب البيطري والانتاج الحيواني جامعة السودان لتحديد مدي التلوث الباكتيري بها وبالتالى صلاحيتها للإستهلاك .

تم جمع 60 عينة من لبن المزرعة بواقع 30 عينة من حلبة الصباح و 30 من حلبة المساء. ومن ثم أخضعت لإختبار العد المباشر بواسط المجهر. النتائج المتحصل عليها تم مقارنتها بالمعايير المختلفة الخاصة بالعد الكلى للباكتيريا في اللبن الخام.

توصلت الدراسة الي أن اللبن الخام المنتج بالمزرعة مقنع وصالح للاستهلاك بمتوسط عدد كلي للباكتيريا بلغ 650.000 خلية في 1 مللتر لبن, كما أظهر التحليل الاحصائي عدم وجود فروقات معنوية للعد الكلي للباكتيريا في ألبان حلبتي الصباح والمساء ( 14002.3 و 650.000 و 14002.3 علي التوالي. كما أوضحت الدراسة العوامل التي أدت الي إرتفاع عدد الباكتيريا باللبن الخام المنتج بالمزرعة المرتبطة بطريقة الإنتاج والمعاملات التي تجري علي اللبن الخام.