إلى روح أمي وأبي
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Biochemical reactions of the isolated bacteria from camel's raw milk
هدفت هذه الدراسة إلى قياس جودة الحليب الخام المستهلك العادي في مدينة بحري.

جمعت 20 عينة حليب خام من منطقة بحري: 10 عينات من حليب البقر و10 عينات من حليب البقر.

أجري العد البكتيري الكلي لعينات الحليب الخام المجمع من البقر والبل.

عينات الحليب اجري الفحص المخبري عليها لقياس المحتوى البكتيري عن طريق العد البكتيري الكلي. وكذلك معرفة أنواع البكتيريا الموجودة بالعينات عن طريق الكشف البيوكيميائي.

العدد البكتيري الكلي تمت مقارنته بالمواصفات السودانية والأمريكية.

العدد البكتيري لحليب البقر تراوح بين 0.2 × 1.5 × 10⁵ - 1.5 × 10⁶ cfu/ml

العدد البكتيري لحليب البقر تراوح بين 0.2 × 10⁵ - 1.5 × 10⁶ cfu/ml

معظم عينات حليب البقر صنفت على أنها جيدة لأنها تحتوى على عدد بكتيري أقل من 0.5 × 10⁵ cfu/ml.

أوضحت نتائج التحليل الإحصائي للعدد البكتيري الكلي لحليب البقر والبقر الخام لا توجد أي فروق معنوية بين حليب البقر والبقر الخام وكان نسبة الفرق المعنوي 0.336: حيث أن

نتيجة حليب البقر كانت 50×10⁶ وحليب البقر كانت 30×10⁶.
**Staphylococcus spp.** 8(30.8%), **Streptococcus spp.** 4(15.4%), **Enterococcus spp.** 4(15.4%), **Acinobacter spp.** 2 (7.7%), **Pseudomonas bacteria spp** 2(7.7%), **Yersenia pseudotuberculosis spp.** 2 (7.7%), **proteus morganii (bacteria spp.** 2 (7.7%), **Aerococcus spp.** 2 (7.7%)

وقد دلت النتائج أن نسبة البكتيريا موجبة الجرام هي 50% والسالبة الجرام نسبتها 50% في حليب البقر.

**Staphylococcus spp** 4(16.7%), **Aerococcus spp** 4 (16.7%) **Listeria spp** 2(8.3%) , **Klebsiella spp** 2(8.3%) , **Micrococcus spp** 4 (16.7%), **Enterococcus spp** 4(16.7%) ,**Vibreo metschnikovis spp** 2 (8.3% ) and **Yersenia spp**

وقد دلت النتائج أن نسبة البكتيريا موجبة الجرام 75% والسالبة الجرام 25% في حليب الأبل.
ABSTRACT

This study was aimed to determine the bacteriological aspect of raw milk in Bahry town. Twenty samples of raw milk were collected, 10 samples from cow's milk and 10 from camel's milk. Total bacterial count of cow's and camel's raw milk were determined. Milk samples were analyzed for microbial quality attributes including total plate count (TPC). Also the bacteria were isolated and identified according to their biochemical reactions.
The total plate count was compared by The Sudanese and American Standards.

The results of the total plate count for camel milk were $0.2 \times 10^5 \text{ cfu/ml}$ to $1.5 \times 10^5 \text{ cfu/ml}$ and $0.2 \times 10^5 \text{ cfu/ml}$ to $1.5 \times 10^5 \text{ cfu/ml}$ for cow milk. Most of camels and cows milk samples were classified as good because the total bacterial count was less than $0.5 \times 10^5 \text{ cfu/ml}$.

The statistical analysis of the total bacterial count showed no significance variation between cow's and camel's raw milk with level of significance (NS) 0.336. The camel's milk result was $50 \times 10^8$ and cow's milk result was $30 \times 10^9$.

The bacteria isolated from cow's milk were Staphylococcus spp. 8 (30.8%), Streptococcus spp. 4 (15.4%), Enterococcus spp. 4 (15.4%), Aerococcus spp. 2 (7.7%), Acinobacter spp. 2 (7.7%), Pseudomonas bacteria spp. 2 (7.7%), Yersenia pseudotuberculosis spp. 2 (7.7%) and Proteus morganii 2 (7.7%).

The results showed that the gram (-)ve bacteria in cow's milk were 50% and gram (+)ve bacteria were 50%.

The bacteria isolated from camel's milk were Staphylococcus spp. 4 (16.7%), Aerococcus spp. 4 (16.7%), Listeria spp. 2 (8.3%), Klebsiella spp. 2 (8.3%), Micrococcuc spp. 4 (16.7%), and...
Enterococcus spp. 4 (16.7%), Vibrometschnikovis spp. 2 (8.3%) and Yersenia spp. 2 (8.3%)

The gram (+ve) bacteria were 75% while gram (-ve) bacteria in camel's milk were 25%