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## Investigations on the effects of peanut butter on improvement of burned and surgical injuries of rat skin.

Adibi Sh<sup>1</sup>, Nilforoushan MR<sup>2</sup>, Nekouei V<sup>2</sup>

<sup>1</sup>Veterinary Practitioner, <sup>2</sup>Torabinejad Dental Research Center, Faculty of Dentistry, Medical University of Isfahan, Isfahan, Iran (shah\_adibi@yahoo.com)

Introduction: peanut contain several types of fatty acids such as palmetic, oleic and so on and also protein, fat, starch, vitamins of the B group and minerals. Peanuts also contains of three different types of oil that two types of it extracts at room temperature under pressure while the third one at elevated temperature and pressure. It seems that according to its chemical composition, the peanut extracts may be used as curing agent for surgical injuries and burning parts of skin as it has been used in the past. In this study, peanut butter has been used as a curing agent for injuries and burned parts of rat skin. Methods and discussions: Forty rats were chosen for this study. Their skin was shaped on the back and sides. After giving anesthetic with Dozes of 20 mg/kg of ketamin and 2 mg/kg of Xylazin to each rat separately, an injury of 4Cm long were applied on the back side of 20 of them, while the other 20 were burned with a coin heated 120°C for 5 seconds in order to make a second type burning. From each group, 10 were used as control and the other 10 for curing. After 24 hours, the injured and burning zones were cleaned and peanut butter was applies on one group while the other part left uncured. Ever 48 hours, photographs were taken from the cured injuries and the dimension of injuries was compared with the control rats. Conclusion: According to investigations, the rate of improvements of both types of injuries was much faster on the rats which were cured with pinots butter, and also the injuries were also cleaner in the presence of peanut butter too. Based on the results of this research, peanut butter can be used as a safe curing agent for the farm animals and specially horses.

**Keywords:** peanut butter. wound healing, burning, rat, fatty acids

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## Prevalence and in vitro antimicrobial susceptibility of Staphylococcus Species Isolated from milk and Mammary gland secretions of Primigravid Dairy Heifers

Mohsenzadeh M, Amiriani M, Fallah-Rad AH

*Faculty of veterinary medicine, Ferdowsi university of Mashhad (mohsenzadeh@yahoo.com)*

Milk and Mammary gland secretions of 244 quarters were obtained aseptically during preparturient and postparturient period from the same Primigravid Holstein heifers in Mashhad to determine the prevalence of intramammary infections (IMI) and antimicrobial susceptibilities of Staphylococci Species. 35 percent of periparturient and 47 percent of postparturient samples were positive in culture analysis. A total of 119 isolates of coagulase-negative Staphylococci (CNS) and 7 isolates of Staphylococcus aureus were tested in vitro for susceptibility to 10 antimicrobial agents. About 28% of the 126 isolates were susceptible to all antimicrobial agents tested. CNS demonstrated an overall susceptibility of 30% to all antibiotics. There was no susceptibility to all antimicrobial agents among 7 isolates of S.aureus. In conclusion, results of this study suggest that coagulase-negative staphylococci ( CNS) are the most prevalent microorganisms isolated from intramammary secretions in pregnant heifers and there was obvious resistance to some antibiotics among the staphylococci isolates.

**Keywords:** Dairy Heifer, Staphylococci, Intramammary infection, antibiotic susceptibility testing