

## APPLICATION OF LOW ENERGY ELECTROMAGNETIC RADIATION FOR RESTORATION OF ANIMAL SKIN FABRIC

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*Розглядається застосування немедикаментозних методів відновлення кісткової тканини кінцівок тварин на основі застосування низькоенергетичних електромагнітних випромінювань.*

The use of electromagnetic radiation of information nature in animal husbandry is due to the fact that the electromagnetic field has a number of positive features. The electromagnetic field is characterized with energy saving, ecological purity, economy and technological and hardware simplicity.

In-depth data on the impact of low-energy electromagnetic radiation on biological tissues and improving physical and technical parameters of medical devices provide highly efficient use of low-energy electromagnetic radiation in medical practice.

The main directions in the research are the use of electromagnetic fields to increase productivity and non-drug treatment of animal diseases. Low-energy electromagnetic radiation, which is used to treat animals, does not adversely affect the human body through food and may be more effective than medical methods, including the restoration of skin tissue of animals with infected wounds.

Low-energy electromagnetic radiation is used to restore skin tissue to increase animal productivity. The preservation and the increase in livestock depend largely on injuries to the skin and surrounding tissues. Skin injuries in cattle account for up to 40% of total animal morbidity. Skin damage in animals is due to mechanical, physical, chemical, biological and mental factors. Injuries to the skin tissue of animals reduce their productivity, and injured animals are often rejected.

Currently, pharmacological preparations containing antibiotics, hormones and other chemicals are used to restore the skin tissue of animals with infected wounds. Electromagnetic action in diseased organs changes the energy activity of cell membranes, increases the rate of oxidative phosphorylation and biological oxidation. The energy of metabolic processes is increased too. The effect of electromagnetic radiation on the affected skin tissues of animals will reduce the duration of the inflammatory phase, increase blood flow rate and improve blood and lymph microcirculation. Oxygen uptake by tissues is increased. Regenerative processes is intensified. That will lead to animal recovery.

Therefore, the restoration of skin tissue of animals with infected wounds is an urgent task.