ASSESSMENT OF ADIPOKINES AND MAST CELLS IN THE DIGESTIVE TRACT OF RATS FED A CAPSAICIN-SUPPLEMENTED DIET

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- ✓ Adipokine
- ✓ Capsaicin
- ✓ Duodenum
- ✓ Immunohistochemistry
- ✓ Mast Cells
- ✓ Stomach
- ✓ Pancreas

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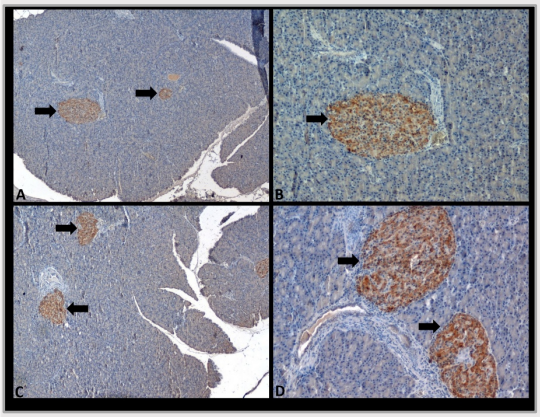

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THESIS ABSTRACT

This study aimed to determine, the possible effects of orally administered capsaicin on the expression of certain adipokines (adiponectin, ghrelin, leptin, resistin, visfatin) in the digestive system of rats using the immunohistochemical method, and also to evaluate mast cells. The findings indicate that capsaicin causes changes in the expression of leptin, resistin, and visfatin, as well as in the number of mast cells, in the digestive system.

APPLICATION AREAS OF THE THESIS RESULTS

This study demonstrates the localisation and density of five adipokines (adiponectin, ghrelin, leptin, resistin, visfatin), which play significant roles in numerous physiological processes in the body, altough some of their effects are still not fully understood. İn the stomach, duodenum, and pancreas tissues that are vital importance due to the secretions and hormones they produce. Furthermore, it shows the effects of dietary capsaicin on the expression of these adipokines. Understanding these potential effects of capsaicin may contribute to the literature by identifyig novel therapeutic targets for autoimmune and metabolic diseases through the modulation of adipokines.

ACADEMIC ACTIVITIES

1. Elarslan, A., & İlhan, T. (2023, February 17-19). *Expression of adipokines in gastrointestinal system of rats fed with capsaicin* [Conference presentation abstract]. 5th International Food, Agriculture and Veterinary Sciences Congress, Kars, Türkiye (Oral presentation).
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3. Elarslan, A., & İlhan, T. (in press). Effects of capsaicin on expression of adipokines in gastrointestinal system of rats. *Indian Journal of Experimental Biology*.