

**ANTI-HYPOXEMIC, BRONKHOLYTIC, ANTI-INFLAMMATORY  
AND IMMUNOMODULATING ACTIVITY  
OF HERBAL BALM «HEALTHY BREATH»**

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SUMMARY

The study of anti-hypoxic, bronchodilator, anti-inflammatory, immunomodulating activity of food balm «Healthy Breath» (balm hereafter) in experiments on the infant animals was the aim of the research. The goals included: (1) comparative study of anti-hypoxic activity of balm in a tissue hypoxia model in experiments with mice; (2) comparative study of balm anti-inflammatory activity in model of adrenalin pulmonary edema in rats as well as cotton pellet granuloma and antiproliferative effect in rats; (3) study of balm of immunomodulating activity in reaction of leukocyte migration braking and in model of cyclophosphan-induced immunosuppression in mice; (4) evaluation of spasmolytic and mukolytic effects of balm in experiments with rats and rabbits.

As object of research was the food balm «Healthy Breath» (produced by company ASKOR according to TU 9185-003-65541988-2013) on the basis of spirit-water and water extracts from herb of *Melissa officinalis* L., herbs and rhizomes with roots of *Polemonium caeruleum* L., fruits of *Rosa majalis* L., thalli of *Cetraria islandica* (L.) Ach.

The «Healthy Breath» balm showed the expressed anti-hypoxic effect in models of acute hypobaric hypoxia, hemic tissue hypoxia and in the overheating. Thus anti-hypoxic activity of balm exceeded or was comparable to activity of a reference antihypoxant and drugs of comparison. Expressed anti-inflammatory activity of balm in the cotton pellet granuloma model and antipyretic effect in models of adrenalin pulmonary edema, as well as its antiproliferative activity in model of the pyrogenal-induced fever was established.

Balm showed expectorant and broncholytic effect that could be imputed on lightm-cholinolytic activity. Balm surpassed drugs of comparison in effect on mucous transport.

Thus, food balm «Healthy Breath» is prospective for application as preventive functional food for children with recurrent respiratory infections.

Key words: hypoxia, inflammatory, anti-hypoxemic, anti-inflammatory, immunomodulating activities, balm «Healthy Breath», extractions from medicinal herbs.