

## QUALITY OF YOGHURT ENRICHED BY INULIN AND ITS INFLUENCE ON HUMAN METABOLIC SYNDROME

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**Abstract.** The aim of this study was to determine the impact of biologically active inulin-type prebiotic, introduced into the yogurt, on the quality characteristics of the product. The influence of inulin-enriched yogurt on health characteristics of patients with metabolic syndrome was determined.

Enrichment of yogurt with inulin improved the sensoric properties (flavor and consistency) of the product. Individuals with metabolic syndrome showed significant decrease of high density lipoprotein cholesterol ( $p<0.05$ ), low density lipoprotein cholesterol ( $p<0.05$ ) and malondialdehyde ( $p<0.01$ ) after a 28-days period of consumption of yogurt with inulin. Consumption of inulin-enriched yogurt had a tendency towards lower total cholesterol and had no effect on the triglyceride concentration. No significant effect on glucose concentration was observed. Reduction of both systolic and diastolic blood pressure was found after a 28-days period of consumption of yogurt with inulin. According to these findings, consumption of yogurt enriched with inulin might have a beneficial effect on patients with metabolic syndrome and improve their health.

**Keywords:** inulin, yoghurt, quality, metabolic syndrome.