

## **Abstract**

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Fatty acids and their effects on human health have been paid attention in modern times. In the last few decades, many studies concerning the influence of fatty acids on human organism were conducted. Mainly n-3 and n-6 unsaturated fatty acids and their potential impact on physiological and pathological processes were investigated. These acids and their derivatives can positively influence the cardiovascular system by various mechanisms. They may protect from myocardial infarction or reduce hyperlipidemia, which is a risk factor for other diseases. They also have potential effects in inflammatory diseases such as rheumatoid arthritis, asthma or inflammatory bowel disease. There is also possible benefit of administration of unsaturated fatty acids to women during pregnancy and lactation, which can affect several parameters. In addition, clinical studies evaluated use of fatty acids in diabetes mellitus and their positive effect on various indicators of successful compensation of the illness, such as blood glucose concentration and glycated hemoglobin or insulin production.