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## Influence of preservation methods on the bioactive compounds of *Thymus Vulgaris*

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Thyme (*T. vulgaris*) is used mainly as a food seasoning, as a source of essential oils for perfumery, but also as a worming and bactericidal agent in medicine. Additionally, thyme is known to contain a high concentration of phenolic compounds, such as thymol and carvacrol which are found in its essential oils. The quality control of the herbs which are used as food products as well as for the therapeutic purposes is a big challenge in all around the world. World Health Organization has issued guidelines to validate the herbs that are used for medicinal and therapeutics purposes. In this study, it was investigated the effect of different preservation methods on the quantitative and qualitative parameters of the bioactive compounds (alcoholic extract and essential oil) from local *Thymus vulgaris*. The thyme was preserved using three different techniques: drying at room temperature in dark conditions, drying in drying oven at 50°C and freezing at -18°C. On the basis of the results obtained, thyme used as natural antioxidants due to its significant antioxidant and antibacterial activity. Further, the functional studies of these bioactive compounds will further be using in developing new food products to increase shelf life. The study concluded that the optimal preserving method for thyme is by drying at room temperature in lack of light. After a five months storage period, the investigated bioactive compounds were found in high concentrations.

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