

Spices from *Lamiaceae* as a source of biologically active compounds

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INTRODUCTION

Herbs and spices are often added to food not only to improve the taste and smell, but also facilitate digestion and improve human health. Many spices contain high levels of polyphenolic compounds and demonstrate high antioxidant capacity [1][2]. According to a literature review polyphenolic compounds possess antimicrobial, antiparasitic, antiprotozoal, and antifungal properties [3][4]. Many spices contain high levels of polyphenolic compounds and demonstrate high antioxidant capacity. Phenolic compounds in herbs and spice plants are closely associated with their antioxidant activity [1][2]. Many of the spice-derived compounds which are potent antioxidants may help protect the human body against oxidative stress and inflammatory diseases [4]. Particularly noteworthy is the *Lamiaceae* family (*Lamiaceae* Lindl., *Labiatae* Juss.). Among that species most commonly used as a food additives are basil (*Ocimum basilicum*), peppermint (*Mentha piperita*), thyme (*Thymus vulgaris*), marjoram (*Origanum majorana*), oregano (*Origanum vulgare*), rosemary (*Rosmarinus officinalis*) and sage (*Salvia officinalis*).

EXPERIMENTAL METHODS

The present study demonstrates the current evidence about the bioactive compounds derived from spice plants from *Lamiaceae* family as a common food additives and natural preservatives. The study also investigates the content of polyphenolic compounds and antioxidant capacity of selected spice plants as well as the total protein content in plant tissues.

CONCLUSIONS

Spice plants from *Lamiaceae* family have a similar concentration of polyphenols and antioxidants in the tissues, only thyme has a bit higher polyphenols content as well as antioxidant capacity. The concentration of phenolic compounds in plant tissue corresponds to the antioxidant capacity.

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