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PhD Thesis Title:	"Traditional foods as a healthy dietary choice in the 21st century: The case of Tsigarolachana in Eastern Crete"
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Abstract:	**Introduction:** The importance of nutrition in human health, lifestyle and culture is widely recognized in modern times. The Mediterranean Diet, renowned for its health benefits, plays a crucial role in this context. A fundamental component of this dietary pattern is the consumption of greens and vegetables, many of which, particularly within the Cretan Mediterranean diet, are wild, native, edible plants that serve as a rich source of bioactive compounds, including secondary metabolites. Despite their nutritional and cultural importance, comprehensive studies on their dietary value, particularly in relation to secondary metabolites and their practical applications in traditional cuisine, remain limited. This doctoral dissertation seeks to address a substantial portion of this research gap. Investigating and highlighting the secondary metabolite content of a traditional food product, such as lachanopitakia (small savory pies filled with wild greens), will contribute to ongoing efforts to promote traditional, health-oriented food choices as viable options in contemporary dietary habits while simultaneously supporting the sustainability of traditional dietary models. **Aim:** This dissertation focuses on the study of plant species traditionally known as tsigarolachana, which are combined to prepare meals within the traditional Cretan diet. These wild greens are consumed as accompaniments to various food groups and as key ingredients in traditional dishes, such as hortopitakia or lachanopitia. The research aims to identify the type and quantity of secondary metabolites present in these wild greens in their raw state, prior to their use as a filling in lachanopitakia, as well as in the final, ready-to-consume product. **Methodology and Sample:** The study sample will consist of plant species that have been traditionally utilized for at least 30 years in the region of Eastern Crete. The selection of plant species is based on previous research conducted by the Department of Nutrition & Dietetics at the Hellenic Mediterranean University, as well as other affiliated institutions. The plant materials will undergo appropriate processing and preparation for laboratory analysis at the Food Chemistry and Processing Laboratory within the Department of Nutrition & Dietetics. The evaluation of secondary metabolites in both the fresh mixture of wild edible greens and the final ready-to-eat product will be conducted at the Pharmacognosy Laboratory, Department of Pharmacy, Aristotle University of Thessaloniki. The analysis will employ

	various chromatographic techniques, such as High-Performance Liquid Chromatography (HPLC), and spectroscopic methods, including Nuclear Magnetic Resonance (NMR) spectroscopy. **Thesis Contribution**: This study aims to establish a metabolite profile of the secondary compounds present in the wild greens that are used as a filling for traditional pies. The data obtained can be incorporated into nutritional databases, benefiting public and private institutions, healthcare professionals, and the general public. The identification and correlation of secondary metabolites found in wild greens with potential health benefits, particularly in relation to a traditional product such as lachanopitakia, pave the way for their application in innovative food solutions, including functional foods. These foods offer health benefits beyond basic nutrition, contributing to disease prevention and management while simultaneously reinforcing the role of traditional food products as healthy dietary choices in contemporary nutrition. Furthermore, promoting the cultivation and commercial utilization of wild greens can support sustainability, biodiversity conservation, and local economic growth. Lastly, this research contributes to the preservation of cultural heritage and the reduction of environmental impact associated with food production and transportation. This doctoral dissertation seeks to bridge the gap between traditional knowledge and modern nutritional science, underscoring the value of traditional Cretan foods. By enhancing scientific understanding of the bioactive compounds found in wild greens, this research will contribute to the promotion of a healthy, sustainable, and culturally rich dietary model.
Keywords:	Mediterranean Diet, Cretan Diet, Wild Greens, Bioactive Compounds, Secondary Metabolites, Functional Foods, Traditional Foods, Sustainability, Biodiversity