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# Tea and herbal infusions consumption in Portugal: consumer behaviors

A. C. Sousa 1,\*, C. Ribeiro 1, V. M. F. Gonçalves 1,2, I. Pádua 1,3 and S. Leal 1,4

- <sup>1</sup> TOXRUN Toxicology Research Unit, University Institute of Health Sciences, CESPU, CRL, 4585-116 Gandra, Portugal
- <sup>2</sup> UNIPRO Oral Pathology and Rehabilitation Research Unit, University Institute of Health Sciences (IUCS), CESPU, 4585-116 Gandra, Portugal
- Instituto de Saúde Pública da Universidade do Porto (ISPUP), Rua das Taipas 135, 4050-600 Porto, Portugal
- 4 CINTESIS@RISE, MEDCIDS, Faculty of Medicine, University of Porto, Rua Dr. Plácido da Costa, 4200-450 Porto, Portugal
- \* Correspondence: a23452@alunos.cespu.pt

#### **Abstract**

**Background:** Tea and herbal infusions (THIs) consumption is recognized for its beneficial effects, which are attributed to the antioxidant properties of phenolic compounds [1–3]. The wide diversity of THIs available in market and the absence or failure in quality control can expose the population to health risks [3]. Moreover, uncontrolled consumption may cause toxicity or lack of the expected benefits. Therefore, an understanding of the THIs consumption and consumer habits will allow adjustments in risk-benefit assessment for vulnerable population. Objective: The main aim was to understand THI consumption in Portugal. Methods: A web-based survey was developed and applied (January-February 2023), using Google forms® platform, after the Ethical Committee approval. Sociodemographic data, type of THIs consumed and brewing were collected. Descriptive statistics was performed using JASP 0.16.1.0. Results: A total of 720 participants completed the online survey, of which 47.2% declared drinking THIs ≥2 cups/week (medium consumers) and 17.8% consumed ≥2 cups/day (heavy consumers). In the latter, the majority were female (87.5%), of which 51.8% aged 40-60 years. In heavy THI consumers group, 10% were older than 61 years. Among the heavy and medium consumers, herbal Infusions, such as citronella (42.1%) and chamomile (35.7%), were most popular than green tea consumption (22.3%). For THI preparation, mostly of these consumers reported the use of tap water (82%) and bags (56%), but 41% reported the use either bags or leaves. Over 16% of heavy and medium consumers use more product quantity than recommended. Approximately 86% of the heavy and medium consumers indicated that, after boiling, let THIs rest for 5-10 minutes and, 78% removed bag/leave before drinking. Conclusions: Herbal infusions consumption was more frequent than green tea and heavy consumers were mainly older adults. This study contributes with relevant results for future risk-benefit assessments of THIs consumption available in the Portuguese market.

Keywords: tea and infusions consumption; web-based survey; consumer choice; beverages preparation

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