

APPLE POMACE POWDER AS A NATURAL FOOD INGREDIENT FOR THE DEVELOPMENT OF YOGURT

**Florina STOICA¹, Roxana Nicoleta RAȚU¹, Florin Daniel LIPȘA¹, Irina Gabriela CARA¹,
Denis ȚOPA¹, Gerard JITĂREANU¹**

e-mail: florina.stoica@iuls.ro

Abstract

Apple pomace, the by-product of apple juice and cider production, is a promising source of phytochemicals and contains substantial quantities of dietary fibers, vitamins, and minerals. Incorporating apple pomace powder (APP) as a natural ingredient in yogurt presents a novel strategy to enhance the nutritional profile of a dairy product. The study examines the effects of APP addition on the physicochemical, bioactivity, sensory, and textural properties of APP-enriched yogurt—the evaluation involved including APP at different concentrations (1% and 2% w/w). The results showed that yogurts enriched with APP had enhanced antioxidant activity due to their increased polyphenol content. The investigation of the texture showed that yogurts with APP had a thicker and creamier consistency. The sensory evaluation revealed that consumers found smaller concentrations (up to 1%) acceptable, whereas greater concentrations impacted their taste and texture preferences. The APP demonstrates potential as a natural ingredient in yogurt, providing nutritional advantages and improving functional characteristics while maintaining consumer acceptability at suitable levels.

Key words: apple pomace, natural ingredient, bioactive compounds, yogurt enhancement, consumer acceptance