

# Nutritional composition and kinaesthetic properties of white table olives from *Olea europaea* L. Leucocarpa cultivar

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*Olea europaea* L. Leucocarpa cv. is a little-known olive variety that, at the end of ripening, produces ivory-white fruits. The particular colour of ripe fruits is due to a block in the biosynthesis of flavonoids. In the present study, we have tried to transform the fruits of Leucocarpa cv. in "white table olives" evaluating their nutritional, sensorial and textural characteristics with the aim of enhancing the value of this new product. This product has a medium/low content in fat ( $14,9 \text{ g} \times 100\text{g}^{-1}$  of edible portion). Oleic acid is the predominant fatty acid (about 81%), palmitic acid is the second most abundant fatty acid (about 10-11%), followed by linoleic acid (4%), stearic acid (about 1,5%) and  $\alpha$ -linolenic acid (0,7%). The main phytosterols and phytostanols found in fresh fruits of Leucocarpa cultivar are  $\beta$ -sitosterol (80,9 %) and  $\Delta^5$ -avenasterol (10,5%), followed by campesterol (2,9%) and sitostanol (1,4%). This composition remains practically constant in the canned fruit. Finally, our olives are rich in natural antioxidants such as polyphenols ( $205 \text{ mg} \times 100\text{g}^{-1}$ ). From a sensory point of view, the product is characterized by strong kinaesthetic sensations as hardness (median value 3,7), fibrousness (median value 4,9) and crunchiness (median value 4,1) and by a strong bitterness (median value 5,8).

**Keywords:** fatty acid composition; Leucocarpa cultivar; *Olea europaea* L.; nutritive value; sensory evaluation; texture.

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