Assessment of Measurement Methods of Peroxide Value in Ozonized Olive Oil

atoosa haghighizadeh¹, vahid soheili², Neda Ghobadi³, and Omid Rajabi³

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Abstract

Ozone has been fascinated by researchers as an outstanding disinfectant due to its oxidizing properties. It can react with unsaturated substrates chemically, which results in active ozonized compounds. In literature, ozonized olive oil was characterized by different factors such as peroxide value (PV), a significant feature to define the quality of oils. It has been proven previously that even minor changes in the reaction conditions can effect on the PV. In this study, peroxide content was evaluated in extra virgin olive oil and its ozonized form under various conditions including variable temperatures, sample amounts and reaction times. The results indicated that although iodometric method is an official technique for determining the PV of oils, but also dependent to the amount, temperature and time for ozonized olive oil.

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¹University of Tehran College of Science

²Mashhad University of Medical Sciences

³Affiliation not available