

**OXIDATIVE STABILITY OF COOKIES INCORPORATED WITH TEA
EXTRACT**

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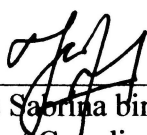
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ABSTRACT

OXIDATIVE STABILITY OF COOKIES INCORPORATED WITH TEA EXTRACT

This study was conducted to compare the oxidative stability of cookies treated with and without antioxidant. There were 4 cookies formulation prepared for this study ; Cookies without antioxidant (Control), Cookies treated with 200 ppm of tea extract (T200), Cookies treated with 400 ppm of tea extract (T400) and cookies treated with 200 ppm of synthetic antioxidant (BHA/BHT). Tests used were peroxide value (PV), thiobarbituric acid (TBA) and solid phase micro extraction (SPME-GCMS). The trends of the results obtained from PV and TBA test was observed to be Control > T200 > T400 > BHA/BHT. For SPME-GCMS test, it was found that less concentration of volatile compound was detected compared to Control sample the highest, second by T200 and third by T400. It can be concluded that addition of antioxidant into food such as cookies can retard the oxidation process and increases cookies shelf life.