



## A new healthy yoghurt flavoured with menthol

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**Abstract:** Yoghurt was prepared from skimmed milk supplemented with menthol in an attempt to increase the health benefits of yoghurt. Four yoghurt treatments were made: yoghurt free from menthol as a control, yoghurt with 128, 256 and 512 ppm of menthol as T<sub>1</sub>, T<sub>2</sub> and T<sub>3</sub>, respectively. The antibacterial activity of menthol on some pathogenic bacteria (*E. coli* O157:H7, *Staph. aureus* and *Salmonella enteritidis*) was measured by the disc diffusion assay. The minimum inhibition concentration (MIC) and the minimum lethal concentration (MLC) were determined for each strain. *E. coli* exhibited the highest MIC and MLC of 128 and 256 ppm respectively. All yoghurt treatments were chemically, microbiologically and sensory analyzed throughout storage period of 21 days. Control had the highest acidity, lactic acid bacteria LAB and total viable (TVC) counts. T<sub>1</sub> ranked highest scores for flavour and total scores up to 21 days. However, T<sub>3</sub> had the lowest acidity, LAB and TVC. Fungi and coliform bacteria were not detected in all treatments. Control was bad after 30 days of storage, while yoghurt with menthol remained acceptable up to 45 days.

**Key words:** Antibacterial activity – Menthol – Fat free yoghurt