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## Production of oat boza powder enriched with whey powder

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Boza is a traditional Turkish beverage made by yeast and lactic acid bacteria fermentation of millet, cooked maize, wheat, or rice semolina/flour. In this research oat meal was used in boza powder production. Further, boza was enriched with demineralized (70%) whey powder in different ratio of 0, 2.5, 5.0 and 7.5%. After fermentation, boza samples were dried with spray drier. Fermentation pH, color values (L, a and b) and some chemical, microbiological and sensory properties were determined in boza and boza powder samples. Oat boza containing 7.5 % whey powder had lower pH at the beginning and ending of the fermentation process. Ash content of oat boza samples ranged from 0.9956 to 1.8717%. The highest titratable acidity value was determined oat boza that contained 7.5% whey powder. Protein contents of samples were increased depending on the ratio of whey powder added. Average values for the different microbiological counts of boza samples were supplemented with whey powder (0, 2.5, 5.0 and 7.5%) were as follows respectively, 4.5x10<sup>8</sup>, 4.6x10<sup>8</sup>, 14.2x10<sup>8</sup> and 23x10<sup>8</sup> cfu/g for TAMB; 3.6x10<sup>8</sup>, 4.7x10<sup>8</sup> 7.5x10<sup>8</sup> and 16.5x10<sup>8</sup>cfu/g for LAB; and 6.4x10<sup>8</sup>, 2.4x10<sup>8</sup>, 5.5x10<sup>8</sup> and 9.3x10<sup>8</sup> cfu/g for yeast. Optimum sensory profiles were obtained with samples containing 2.5% whey powder.

### Biography

Cigdem Konak Goktepe began her career with BS in Food Engineering from the Agricultural Faculty of Selcuk University, Turkey, in 2001. She has completed her Master in Department of Cereal Science Technology in 2008 from Selcuk University and started PhD in the Department of Dairy Science and Technology at Selcuk University, in 2011. She is Lecturer in Karapinar Aydoganlar Vocational School in Turkey. She published 8 papers in various journals.

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