

## Effect of Milk Fat and Added Sugar Reduction on the Sensory Properties and Consumer Acceptability of Probiotic Set Yoghurts

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Unhealthy fat (UF) and added sugar (AS) are prominent risk factors that cause diet related non communicable diseases. Hence reshaping the food recipes by reducing, eliminating and replacing UF and AS is a timely requirement. However, this approach may adversely affect the consumer acceptance of food products. Therefore, the objective of this study was to determine the effect of different milk fats (MF, 0%, 1.5%, 3.3%) or AS (0%, 3.5%, 7%) levels on the sensory properties and consumer acceptability of probiotic set yogurts fermented with a symbiosis blend of *Streptococcus thermophilus*, *Lactobacillus acidophilus*, *Bifidobacterium bifidum* and *Lactobacillus delbrueckii subsp. Bulgaricus*. 7% AS and 3.3% MF containing yoghurt was considered as the control. A quantitative descriptive analysis was conducted using 12 semi-trained panelists to evaluate the sensory profile of yogurts by rating the intensity of sensory descriptors on a 10 unit scale. Consumers' preferences were determined by 31 untrained individuals applying the hedonic test for preference. Descriptive data showed significant differences ( $P < 0.05$ ) among the samples for 8 of the 15 attributes including flavor and texture parameters. Overall consumer preference reduces with the AS reduction while MF level has no largely influence on it. Low-fat yogurt is much preferred in taste than the control. Zero sugar is the least preferred sample.

**Keywords:** added sugar, milk fat, reduction