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2020

Production of Flavoured Fiti Probiotic Yoghurt for the London Community

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Citation of this paper:

Guo, Chengyu (Jennifer); Huff, Stephanie; Medina, Maria; Gough, Bob; and Hekmat, Sharareh, "Production of Flavoured Fiti Probiotic Yoghurt for the London Community" (2020). *Africa Western Collaborations Day 2020 Abstracts*. 4.

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Production of Flavoured Fiti Probiotic Yogurt for the London Community

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Urinary tract infection (UTI) is a disease that affects 50-60% of women (Medina and Castillo-Pino 2019) and is a worldwide problem. *Lactobacillus rhamnosus GRI*, a bacteria discovered by Dr. Gregor Reid at the Schulich School and Medicine and Dentistry, has shown to significantly alter vaginal flora (Reid et al. 2003) and prevent the onset of UTI (Karlsson et al. 2012). Fiti Probiotic Yogurt was developed using the *lactobacillus rhamnosus GRI*. Although plain yogurts have been previously developed and its consumer acceptability has been tested, flavoured yogurts, however, are generally preferred over plain yogurts on the markets. In terms of producing the flavoured yogurts, retailers can choose to either develop a yogurt production on-site and incorporate the flavouring pre-fermentation, or to purchase pre-made plain Fiti probiotic yogurt and add their own flavouring ingredients post-fermentation. For the café retailers, the second option is definitely more convenient. However, it is still unknown how much flavouring should be added for the highest consumer acceptability. This project, in order to promote convenient and profitable flavoured probiotic yogurt to café retailers in the community, we aimed to develop a protocol to make Fiti Probiotic yogurts with different flavours that are accepted by the London community.

We made plain Fiti yogurts with pre-existing protocol and incorporated different amounts of jam from Youth Opportunities Unlimited post-fermentation. Then, we performed a sensory testing on the various flavours of yogurts to evaluate consumer acceptability. The participants in our study include the students and employees from Youth Opportunity Unlimited as well as the London residents, and asked them to rate the samples based on texture, flavoring intensity, and overall acceptability on a nine-point hedonic scale. We then analysed the results and provided the exact amount of jam to be added for each flavour.

This project provided café retailers more information on both product quality and consumer acceptability of the Fiti flavoured probiotic yogurts. This information facilitated their decision-making regarding how much jam to be added to the plain yogurt for retail purposes. The presence of Fiti probiotic yogurt on the market would be the first step towards UTI prevention via everyday diet.

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