Nutritional Evaluation of Tea Produced from Lemongrass, Ginger and Tumeric

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Introduction

After water, tea is the most widely consumed drink in the world (Alan, 2004). Tea has a stimulating effect in humans primarily due to its caffeine content (Daria, 2015). Lemon grass has a very wide demand in nutritional, medicinal and flavouring industries because it provides excellent aromatic properties and lemony flavour, however, it is grossly underutilized especially in terms of commercialization, Processing lemon grass into the dry form has the potential to extend its shelf life, improve its availability, acceptability and ease of transportation. The addition of ginger and turmeric powder to the dried lemon grass leaves is an attempt to improve its nutritional qualities.

Materials and Methods

The three basic raw materials used in the production of the formulated tea include Lemon grass, turmeric and ginger. The turmeric and ginger were prepared according to the method described by Okoye (2008) while the lemon grass was prepared according to the method described by Shah *et al*., (2011). The prepared materials were divided into four samples in varying proportions with sample A representing 100% Lemongrass, B 80% lemongrass,10% Turmeric, 10% ginger, C 70% Lemongrass, 20% Turmeric, 10% ginger and D 60% Lemmon grass, 30% turmeric, 10% ginger. All samples were analysed for proximate and vitamin contents.

Results and Discussions

The result of this study shows an increase in the moisture content of samples in which ginger and turmeric powder were added. The fat content of samples B, C, and D reduces while the ash content increases. This result is in line with Rehman*et al.* (2002) who proposed that ash content should not exceed 5.54% to maintain the quality of tea during storage. Sample A was also significantly different from other samples in terms of its crude fibre, protein and carbohydrate contents. The result of the vitamin content determination shows that sample A have the least amount of vitamins A and B6 while it has the highest number of vitamins B12 and C.

Conclusion

All the tea samples produced in this research contain a significant amount of the vitamins analysed. However, sample D (60% Lemmon grass, 30% turmeric, 10% ginger) have the highest amount of vitamin A, B_6 and vitamin C. Hence, recommended for mass production. However, further research is recommended in the area of the drying method used because sample D which had the highest number of vitamins analysed was found to have the highest moisture content which could adversely affect its shelf-life.

Keywords: Lemon Grass, Ginger, Turmeric, Proximate Analysis and Moisture Content