

DETERMINING REFRACTIVE INDICES OF LIQUIDS FROM DIFFERENT FRUITS

BY

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DECLARATION

I, Mukhwana Thomas, declare that this research report is my own work. It has not been submitted for any degree or examination to any other institution of higher learning.

Signed.....

Date.....

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APPROVAL

I certify that this project report entitled 'Determining refractive indices of liquids from different fruits' has been presented and submitted by Mukhwana Thomas for examination with my approval.

Signed.....

Date

DEDICATION

To my parents: Walakila David and Matuka Grace for the grateful work they have done for me. I really thank them so much for the tireless efforts and support they extended to me. May the almighty God add them more years of living and God bless them abundantly.

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ABSTRACT

The main objective of this study was to determine the refractive indices of liquids from different fruits which will help to identify the amount of sugar concentration contained in different fruits which are consumed by people in the communities of Bududa district in Uganda. The fruit with higher brix indicates much sugar and the one with low brix indicates less sugar. According to the experimental results, it is shown that lemon has much sugar and the mango has less sugar. This shows that lemon can be of harm to people suffering from diabetes.

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CHAPTER ONE: INTRODUCTION

1.0 Introduction

In the past years, people have fed on fruits. In many places where people are surrounded by forests, they find it easy to grow different fruits and feed on them. And since they are in abundance, they sell them and act as a source of income to their daily living.

Fruits grown include: mangoes, oranges, tomatoes, pine apples, apples, passion, and guava, among others.

Recently, diseases have developed in people for which some of them arise from consumption of these fruits.

Nevertheless, the fruits contain too much sugar and when consumed by people it causes diabetes mellitus.

This chapter will outline the background of the project, problem statement, general objectives, specific objectives, the scope and the significance of the study.

1.1 Back ground

Sugar gets a bad rap, but the truth is that it's a vital source of energy to our body and essential to our survival.

Fructose found in fruits and vegetables and lactose in dairy-rich foods are natural sugars which we cannot do without. They also contain fibre and calcium.

Many people eat much of these fruits, for example, when they are sick, they are advised by medical personnel to take much of these fruits without putting into consideration the fact that fruits contain sugars which can put their lives at risk.

This in turn cause serious harm to them and leads to lose of their lives, and if care is given to such individuals it sometimes consumes a lot of resources for example time and money for a person to recover.

This has been a common challenge to many communities in Uganda and has put lives at risk.

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