

### **Nutritive Value of The Pineapple Peels Compared to The Flesh and Its Incorporation to Human Diet and Nutrition.**

*Chepkwony Peter<sup>1</sup>, Getrude Onsando<sup>1</sup>*

<sup>1</sup>The Eldoret National Polytechnic

<sup>1</sup>Corresponding Authors Email: **Nonsando@Gmail.Com**

#### **Abstract**

Pineapple peels refer to the tough outer layer or skin of the pineapple fruit, which is usually removed before consumption. The peels are fibrous and contain a higher concentration of nutrients and bioactive compounds compared to the flesh of the fruit in which in most cases is rendered unused since its benefit have not been discovered in relation to human health and nutrition. The aim of this research was to explore the nutritive value of the pineapple peels compared to the flesh and its incorporation to human diet and nutrition. An experimental research design was used through proper selection of pineapples depending on their variety, maturity level and sizes in terms of their masses. Different food test processes were carried out in different times of the day to so as to monitor the results of tests conduct in different conditions using the pineapple peels products such as pineapple peels smoothie, pineapple tea, pineapple peel juice and syrup extracted from the peels to test for both macronutrients and micronutrients. The results were recorded on an observational checklist and analysed using descriptive and inferential statistics methods which indicated that pineapple peels are rich in anti-oxidants such as zinc, copper, B complex vitamins compared to the flesh there was an average percentage difference of 32% from every variety between the pineapple flesh and peels in their nutritive value in relation to time and temperature under which the experiment was carried out. The peels are found to be of high nutritive value especially the anti-oxidant substances. The research recommends incorporation of this part of the fruit in use of human diet and nutrition to curb and manage different oxidative conditions. Products from pineapple peels can also be used in hospitality industry as important beverages to increase variety of pineapple beverages.

**Key words:** Peels, Nutrients, Macronutrients, Micronutrients, Anti-oxidant.