ABSTRACT

This study talks about how best to minimize diet for optimum consumption using Linear programming. It described the use of linear programming as a method to design and to identify the most difficult consumption patterns in human diets. It will help future dietetics know how to minimize or maximize diet to maintain a healthy life style. The study will also help people to know the effect of diet to health and avoid over consumption or malnutrition. It will also help man to know how to maintain acid – alkaline balance in their body and thereby help to enable man know how to avoid growth of micro-organism in the body and control excess body fat. It is meant to help or enable man to know the importance of maintaining a healthy diet to promote a healthy living and know the best way to combine foods to avoid diet related diseases.

The model was developed using the secondary data gotten from the Internet based on the consumption rate of the seven basic classes of food. It was then posed as a linear programming problem, put in tables and analyzed by the use of simplex method.

The result of the analysis showed that the rate at which we consume certain food will either nourish our body or bring about deterioration of our health because no single food contains all the necessary nutrients our body needs. Thus, linear programming was used to select diets based on foods that satisfy nutritional constraints while minimizing the total energy content of diet.

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