***CLUSTERING OF THESE NUTRIENTS IS ESSENTIAL FOR :***

**WEIGHTLOSS** :

**PROTEIN , FIBRE , FATS , CARBOHYDRATES**

**WEIGHTGAIN :**

**CALORIES , PROTEIN , CARBOHYDRATES , FATS , CALCIUM , IRON , SUGARS , VITAMIN D**

**HEALTHY :**

**CARBOHYDRATES , PROTEINS , FATS , POTASSIUM, IRON , CALCIUM , VITAMIN D**

**NOTE :**

**FOR AGE , HEIGHT , WEIGHT PARAMETERS …these can be just taken in the GUI and after calculating BMI from the values … a message can be displayed for Underweight , Obesity. And after that the user can be allowed to choose for a healthy diet , weightloss or weightgain and the timings of the meal i.e Breakfast , Lunch or Dinner .**

**Final Remarks:-**

**Enhance the Dataset.**

**Improve the GUI.**

**Work on accuracy of Random Classification Algorithm, Feature Selection.**

**Work on publishing the paper.**