

# [Calorie management](https://assignbuster.com/calorie-management/)

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Calorie Management Calorie Management Identifying the variables for the program The first step in monitoring calorie-burn through particular calorie calculators program involves defining the input variable (X), which is the amount of calorie taken daily. Data on variable X is determined by identifying the type and summing up the amount of calories consumed in each meal (Klingensmith & American Diabetes Association, 2003). Summed up data as obtained from the calorie calculator is then fed into the program for a detailed analysis. The next stage involves determining input variable (Y), which is the amount of burned calories. Data on the input variable, Y, is obtained from calorific calculator and is known to be affected by age, gender, body activities, weight as well as height of the person (Klingensmith & American Diabetes Association, 2003). The final step involves making a comparison based on the analysed data from the two input caloric. The comparison will present two important cases:   
1. Where X= Y, the program will indicate a balance between the calories, and this simply means that there are no pounds or ounces gained or lost.   
2. Where the value of X variable exceeds the value of Y, then we should compute other explanatory variables M, N and O. Where: M= X-Y, N= M/K and O= N, and K is a constant figure valued at 3500. M, therefore, explains a case where more calories are taken in than expended while N-pounds or O-ounces might have been gained.   
3. Where the value of Y variable is greater than X, we again compute M, N and O to act as our explanatory variables. With this regards, M= Y-N, N= M/K while O= N. M= Y-X means that the individual expand more calories than he/she consumes where N-pounds and O-ounces might have been lost. All the data and information on that particular individual is then stored in the computer memory to help monitor the person’s health standards in a given period.   
Flowchart for the algorithm   
Algorithm in pseudocode for the tasks and subtasks   
Define variables   
X, Y   
Define M   
N= M/3500   
O= N/16   
Start the program   
Enter the value of X   
Enter the value of Y   
Compare the values of X and Y   
If X> Y, compute M= X-Y   
Compute N= M/3500   
O= N\*16   
Print “ more calories consumed than expected”   
Else   
Compare X and Y   
If X= Y   
Print “ calories balanced”   
Else compare X and Y   
If X