Summary of Thesis Project

Thesis Project Name: Diabetic Patient Data Analysis and Prediction on Diabetic Patient

What We need to do:

We are analysing diabetic patient data and using Classification technique we are going to give prediction regarding patient's disease.

What We have Done so far:

1.Generation of Patient’s data:

Patient’s:

* Id
* Age
* Gender
* Weight
* Height
* Body Mass Index(BMI)(Weight(kg)/Height^2(m^2))
* Calories Need Calculation Based onthe Mifflin St Jeor Equation
* Exercise Time Based on Working Field and Area

2.Patient’s data Generation Procedure:

#We have generated Randomly Patient’s

* Id
* Age
* Gender
* Height

#After Generation of Height,We have used Height to Weight Ratio to Genearate Weight

#We have used some mathematical model and algorithm to generate patient’s data .

We have made a relation between age ,height ,weight ,gender and calories need.

Algorithm:

Input:Patient’s Age,Height,Weight,Gender

Output:Patient’s Calories need

CalNeed()

( if(gender==male)

Time=ExerciseTime();

Cal=(10\*Weight+6.25\*Height+5\*Age+5)\*ExerciseFact(Time)

Else

Cal=(10\*Weight+6.25\*Height-5\*Age-161)\*ExerciseFact(TIme)

Return Cal

)

Algorithm:

Input:Patient’s Working Area,Working Field

Output:ExerciseTime

ExerciseTime()

(

If(workarea==city)

(if(workingfield==office)

Rand=randomExerciseTimeGeneration(5,20)

Else

Rand=randomExerciseTimeGeneration(20,300)

)

Else

(

If(workingfield==No work)

Rand=randomExerciseTimeGeneration(5,20)

)

Else

Rand=randomExerciseTimeGeneration(20,300)

Return Rand

)

Algorithm:

Input:ExerciseTime

Output:ExerciseFact

ExerciseFact(ExerciseTime)

( e= ExerciseTime

if(e>=5&&e<20)

{

fac=1.2;

}

if(e>=20&&e<60)

{

fac=1.375;

}

if(e>=60&&e<240)

{

fac=1.55;

}

if(e>=240&&e<420)

{

fac=1.7;

}

Return fac;

)

Algorithm:

Input :Calneed  
Output:

1. Database:

* Creation of Meal Plan Database
* Creation of Patient Database
* Creation of Food Database

Next to do:

* Relational Model between Carbohydrate and Blood Sugar, Insulin
* Complete Database of Patient