**Linear Regression**

Linear regression attempts to model the relationship between two variables by fitting a linear equation to observed data. One variable is an explanatory variable, and the other is a dependent variable.

Given by,

*y = X β + ε*

y = dependent variables (target variables),

X= Independent variables (predictor variables),

β is a linear coefficient

ε = error variable

Sugar level in diabetic patients is directly proportional to carbohydrate consumption. Since Carbohydrate is a major factor in controlling diabetes.

We will be using overall carbohydrate content of food as an independent variable (X) and blood glucose level as dependent variable (y).

(Blood Glucose level) = (Carbohydrate) *β + ε*

Scope and limitation of the project

Limitation

* No insulin tracking mechanism
* The meal which will be recommended by the app is not expert certified.
* Lack of certified datasets
* Use of dummy datasets

Scope

* Schedule based calorie intake
* It covers daily dietary intake of the diabetic patient through which a healthy meal.
* To predict Blood Glucose level with the meal that has been consumed so that patient does not have to depend on glucometer.