**ADVANCED BMI CALCULATOR WITH UNDER AND OVERWEIGHT ALERTS**

**ABSTRACT**

The project aims at developing a BMI (Body Mass Index) calculator which plays

a major role in alerting the risk of diseases due to overweight. The proposed system not

only shows the calculated value through LCD display but also, alerts through buzzer

regarding over and under weights. BMI stands for “Body Mass Index,” a ratio between weight and height. BMI is a standard “tool” for helping you judge your body weight and the amount of body fat you have. Carrying excess body fat, not muscle, puts you at greater risk for health problems such as heart disease, cancer, diabetes and stroke.

The Controlling device of the whole system is a Microcontroller. The data from

the load cell and ultrasonic sensor are processed to calculate the BMI. The calculated

BMI is displayed on to a LCD. Also, the Microcontroller continuously monitors the BMI

value and judges whether the person is overweight or under weight and alerts through

Buzzer. To perform the above mentioned intelligent task, intelligent program written

using embedded ‘C’ is loaded into it.

**The objectives of the project include:**

1. Very accurate measurement of height and weight to avoid BMI calculation errors.

2. Alerts through buzzer, in case of overweight or under weight.

**BLOCK DIAGRAM UNIT**

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