# CHAPTER V SUMMARY, CONCLUSION & RECOMMENDATION

## **Summary**

Calorie calculation is a process used to estimate the number of calories an individual needs to consume in order to maintain, gain, or lose weight. It takes into account factors such as age, gender, weight, height, activity level, and goals. To calculate the number of calories required for weight maintenance, an individual's basal metabolic rate (BMR) is determined. BMR is the number of calories the body needs to maintain basic bodily functions while at rest. It can be estimated using formulas such as the Harris-Benedict equation. Once the BMR is calculated, the individual's activity level is taken into consideration to determine Their Total Daily Energy Expenditure (TDEE). Activity levels are usually classified as sedentary, lightly active, moderately active, very active, or extremely active. Multiplying the BMR by the appropriate activity level factor gives an estimate of the calories needed to maintain weight. For weight gain or loss, a calorie deficit or surplus is introduced. A pound of body weight is approximately equivalent to 3,500 calories, so to lose one pound, a calorie deficit of 3,500 calories needs to be created over time. Conversely, to gain weight, a calorie surplus is required.

## **Conclusions**

Calorie calculator can help user estimate the number of calories user need each day based on user age, weight, height, gender and level of physical activity. With this information, user can adjust user food intake to achieve user health goals, such as losing weight, controlling weight, or increasing muscle mass. However, keep in mind that the calorie calculator provides estimates only, and the results may not always be accurate. It is important to consult a doctor or nutritionist for recommendations that suit user health condition.

## **Recommendations**

These are some recommendations for improving system functionality and accuracy in future calorie calculators. Here are the following ideas:

* + - * By adding an animated display design about the condition of the calorie user
      * UI can be improved to be more attractive like adding more colors because the current system still has a basic but functional UI.