# The impact of daily diet and exercise on weight

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# Outline

- Introduction
- Tools for develop model
- Results
- Conclusion

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# Introduction

- People emphasize their health and strengthen it by exercising at the gym, in the park, or even at home.
- We aim to establish a website to help them check whether their healthy is normal.
- Given their age, gender, height, weight, eating habits, activity level, goal, daily calories and after days.
- Displays result with suggestions and amounts of each nutrient in a histogram.

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# Tools for develop model

- Programming Language via CSS, HTML, JavaScript and Python.
- Data transmitting via Flask.
- Aesthetic via JavaScript.

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# Results

## Our anticipate

- Accurately calculate the actual results using BMR, TDEE, and so on.
- Provide a histogram to show the amounts of each nutrient.

## Our website anticipate

- Suggestion.
- A histogram displays each nutrient.

# Results (Continued)

## Analysis Results

| Parameter | Value |
|---|---|
| Actual Weight | 53.19 kg |
| TDEE | 2186.13 kcal |

**Suggestion: You are underweight. Consider increasing your calorie intake and doing strength training.**

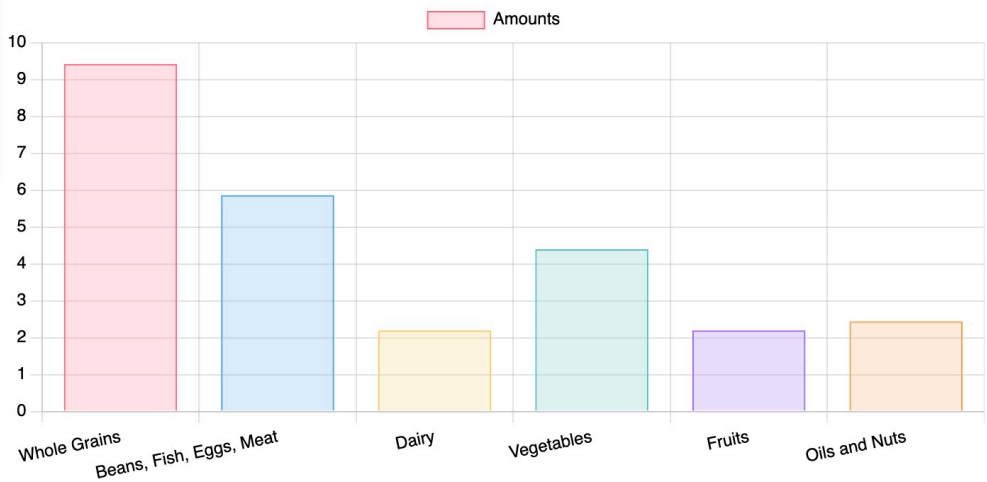


Figure I. Results of entering data.

# Results (Continued)

| Sedentary | Light | Moderate | Active | Very active |
|---|---|---|---|---|
| 1.2 | 1.375 | 1.55 | 1.725 | 1.9 |

Table I. Consume calories from the exercise.

| Vegetarian | Meat | Lacto ovo vegetarian | Balanced |
|---|---|---|---|
| 1800 | 2500 | 2200 | 2000 |

Table II. Consume calories from the daily diet.

# Results (Continued)

$$\text{Male's BMR} = (9.99 \times \text{weight}) + (6.25 \times \text{height}) - (4.92 \times \text{age}) + 5$$

$$\text{Female's BMR} = (9.99 \times \text{weight}) + (6.25 \times \text{height}) - (4.92 \times \text{age}) - 161$$

# Results (Continued)

$$\text{Calorie deficit} = \text{Daily calorie intake} - \text{TDEE}$$

$$\text{Weight changes} = \frac{\text{Calorie deficit}}{7700}$$

$$\text{Actual weight} = \text{Weight} + \text{Weight changes per day} \times \text{After days}$$

$$\text{BMI} = \frac{\text{Actual Weight}}{\text{Height}^2}$$

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- Using precise tools to calculate the actual weight, ensuring that users receive accurate and reliable measurements for better health management.
- Providing accurate options for computation, allowing users to input various parameters and receive tailored recommendations based on their unique needs.
- We learned fundamental front-end and back-end development, including figure display using JavaScript and Python, to develop an application that seamlessly integrates user data and visualizes results effectively.

# Acknowledgment


- Wen-Shuo Hsu
- Tzu-Chi Hsiao


Thank you for listening! We wish you a pleasant day.