

Research Topic: "Analyzing the Impact of Lifestyle Factors on Cardiovascular Health Among Adults"

Statistical Model: Multiple Linear Regression

Objective 1: Investigate the Relationship Between Diet and Cardiovascular Health

- Statistical Analysis: Multiple Linear Regression
- Variables:
 - Dependent Variable: Cardiovascular health score
 - Independent Variables:
 - Daily calorie intake
 - Saturated fat consumption (grams/day)
 - Fiber intake (grams/day)
 - Consumption of fruits and vegetables (servings/day)

Objective 2: Examine the Influence of Physical Activity on Cardiovascular Health

- Statistical Analysis: Multiple Linear Regression
- Variables:
 - Dependent Variable: Cardiovascular health score
 - Independent Variables:
 - Weekly hours of moderate-intensity exercise
 - Weekly hours of vigorous-intensity exercise
 - Average daily step count

Objective 3: Assess the Impact of Stress Levels on Cardiovascular Health

- Statistical Analysis: Multiple Linear Regression
- Variables:
 - Dependent Variable: Cardiovascular health score
 - Independent Variables:
 - Self-reported stress levels (measured on a scale)
 - Hours of quality sleep per night
 - Presence of stress-relief practices (e.g., meditation, yoga)

In this research, we aim to use multiple linear regression to understand the relationships between various lifestyle factors (diet, physical activity, and stress levels) and cardiovascular health among adults.

The dependent variable is the cardiovascular health score, which may be based on a composite measure of heart health, and the independent variables include dietary habits, exercise routines, and stress-related variables. The research seeks to provide insights into how these lifestyle factors impact cardiovascular health and can inform interventions for preventing heart-related conditions.