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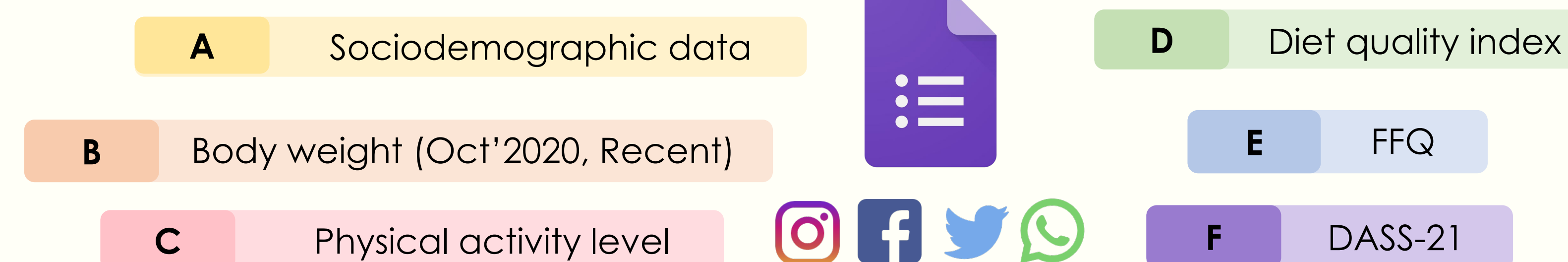
INTRODUCTION

- Body weight changes had been observed since the COVID-19 pandemic due to the lockdown or confinement at which **weight gain is dominant**¹⁻⁸
- In Malaysia, the low-income adults (B40 households) suffered a **negative cash-flow** during the MCO 1.0 in 2020⁹
- White flag campaign arose in 2021
- The COVID-19 pandemic had caused the closure of sports facilities, promoted physical inactivity, worsened mental health, and altered eating habit¹⁰⁻¹¹
- To date, **no published study** is found in Malaysia to identify the body weight changes and the associated factors during the pandemic



METHOD

- A cross-sectional study in Selangor
- Convenience sampling
- Sample size required: 188
- Self-administered online questionnaire distributed via Google Form on social media
- Adults aged 18 – 60 y/o



OBJECTIVE

- To determine the **associations** between **sociodemographic factors, lifestyle factors, emotional factors and body weight changes** during the COVID-19 pandemic among low-income adults in Selangor, Malaysia.

RESULTS & DISCUSSION

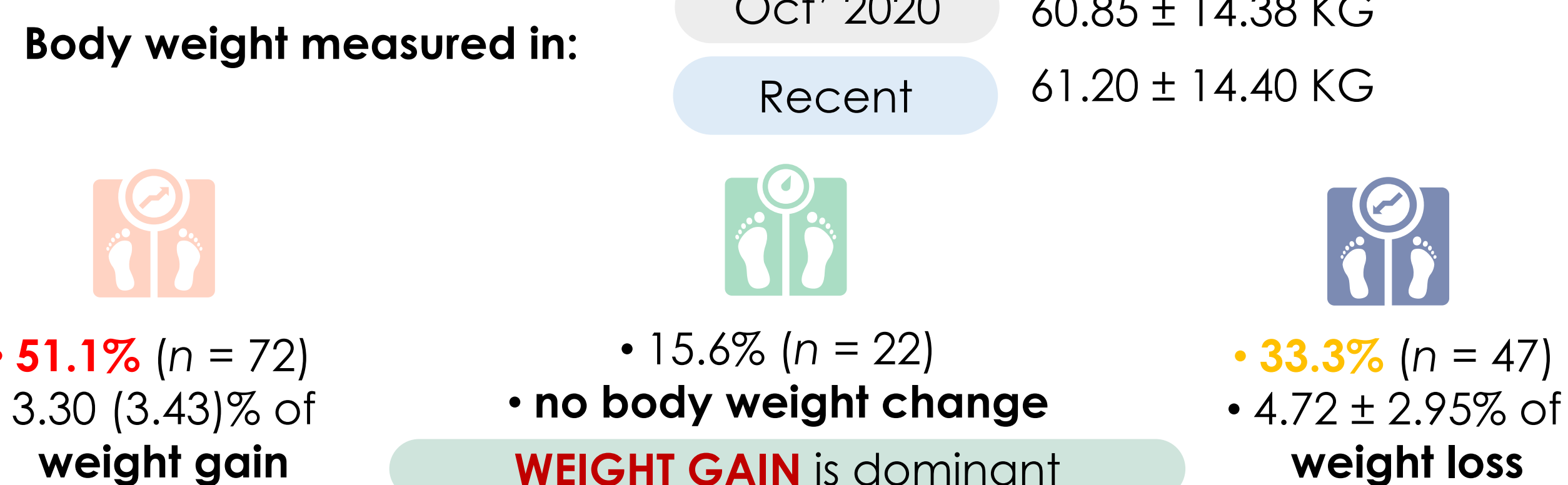
1 Sociodemographic data

- A total of 181 respondents answered the online questionnaire with **142** of them fulfilled the inclusion criteria



- Age = 28.73 ± 8.26 years
- 72.1% female, 60.6% Chinese, 66.2% with/pursuing Bachelor degree, 39.7% students

2 Body weight changes



5 Associations between IVs & DV

Age & Gender

- Significantly correlated ($r = -0.226, p = 0.007$) and associated ($\chi^2 = 11.000, p = 0.004$) with body weight changes
- Consistent with previous study conducted in Spain¹³
- Female respondents had a higher proportion in weight change

- Females who were at a **younger age** were more likely to experience weight changes during the COVID-19 pandemic

Habitual food intake

- Significant positive correlation between mean fat intake & body weight changes ($\rho = 0.211, p = 0.027$)
- Increase in **high fat foods** caused **weight gain** during the pandemic^{4-6, 16}

Stress

- Stress was positively correlated with body weight changes ($r = 0.180, p = 0.045$)
- It was suggested that weight gain could only be reflected if the respondents use food to cope with stress¹²
 - There was a significant correlation between stress and 'Sugar-rich foods' ($r = -0.209, p = 0.020$)
 - More consumption of sugar-rich food when the individual is stressed

Diet Quality

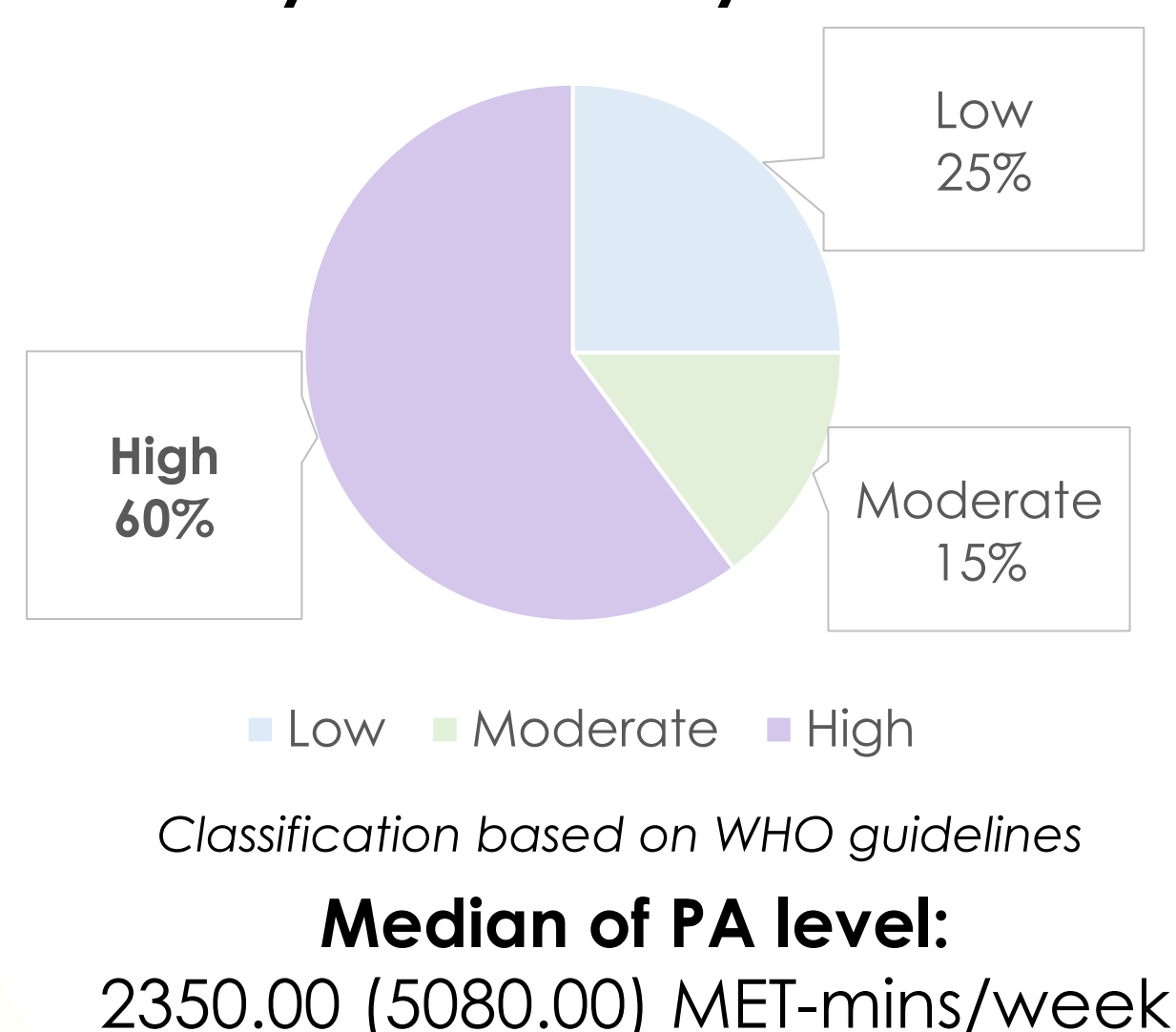
- 'Fruits' – significantly correlated with body weight changes ($r = -0.200, p = 0.026$)
- Increased fruit consumption may lead to a **lesser degree** of body weight changes, or vice versa

- Higher fruit consumption managed to lose weight¹⁴
- Fruit helps in maintaining fullness state, hence help in reducing total energy intake if there is increased intake¹⁵

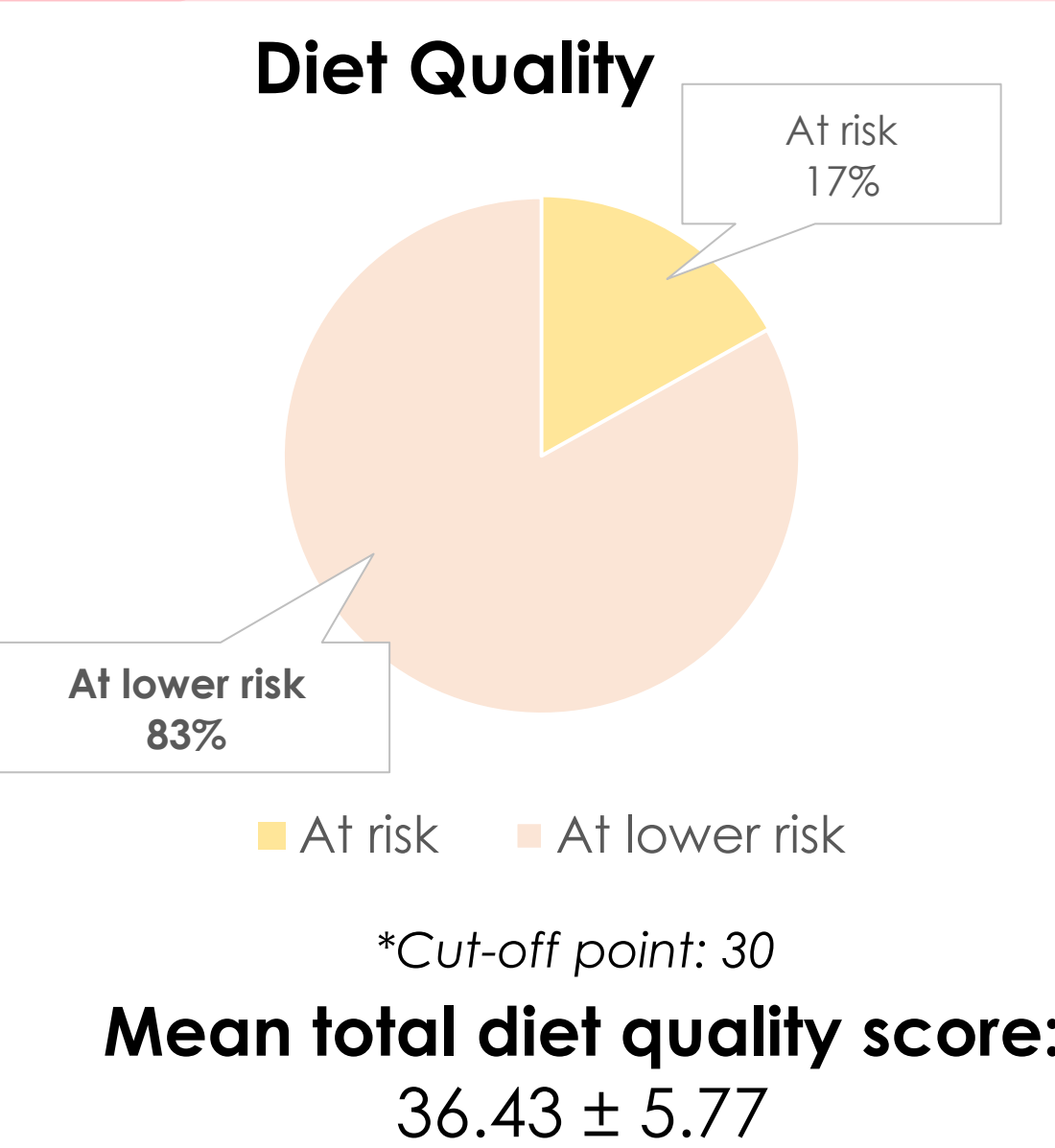
- 'Sugar-rich foods' – significantly correlated with weight loss ($r = 0.317, p = 0.038$)
- Decreased sugar-rich foods may help in reducing body weight

- Sugar-rich foods = energy- or calorie-dense
 - Reduced intake helps to reduce calorie intake
 - Increased consumption in sweet foods during pandemic posed a higher odd on gaining weight⁴⁻⁵

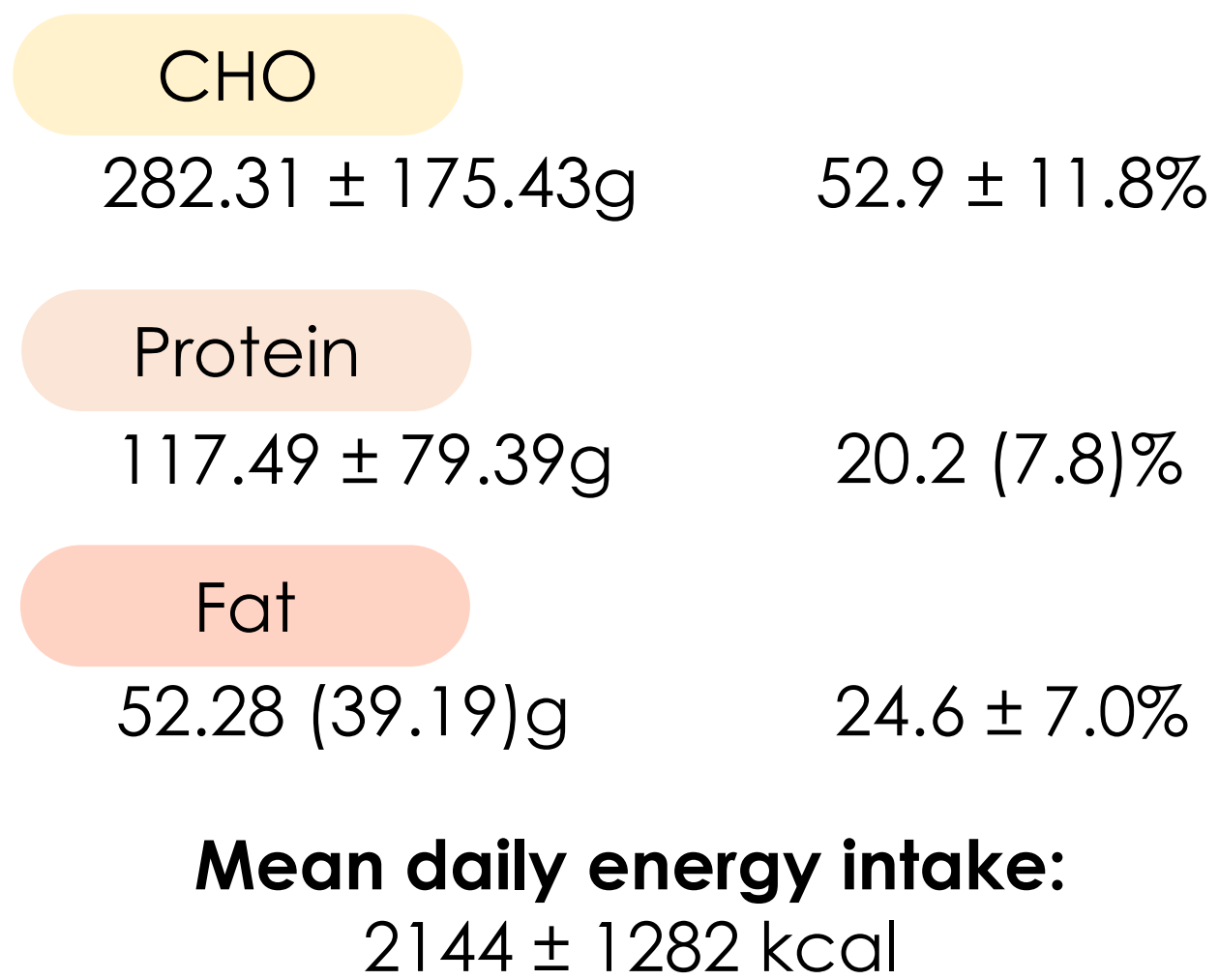
Physical Activity Level



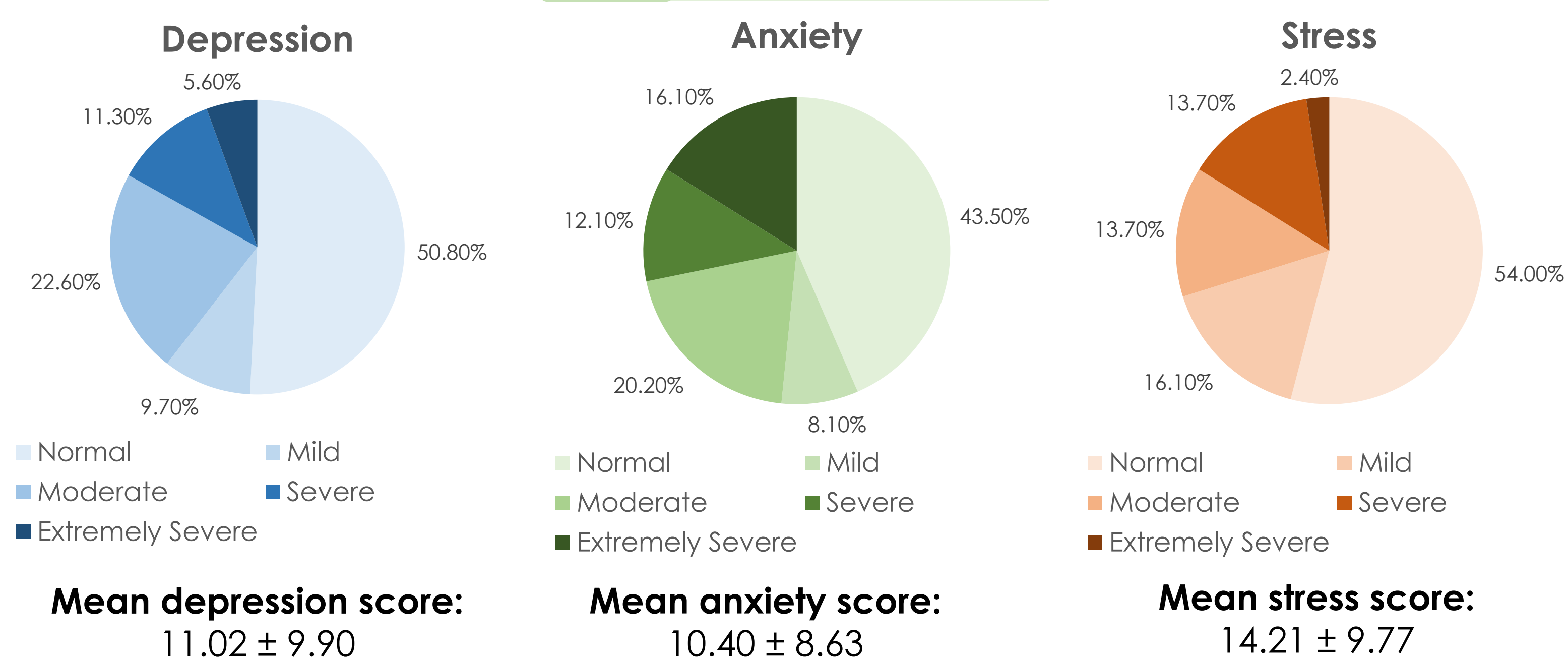
3 Lifestyle factors



Macronutrients intake



4 Emotional factors



CONCLUSION

- There were significant associations between **sociodemographic factors (age & gender), lifestyle factors ('fruits', 'sugar-rich foods' & mean fat intake), emotional factors (stress) and body weight changes** during the COVID-19 pandemic among low-income adults in Selangor, Malaysia.

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