

Sociodemographic Factors Associated with Adherence to Dietary Guidelines in Women with Gestational Diabetes: A Cohort Study

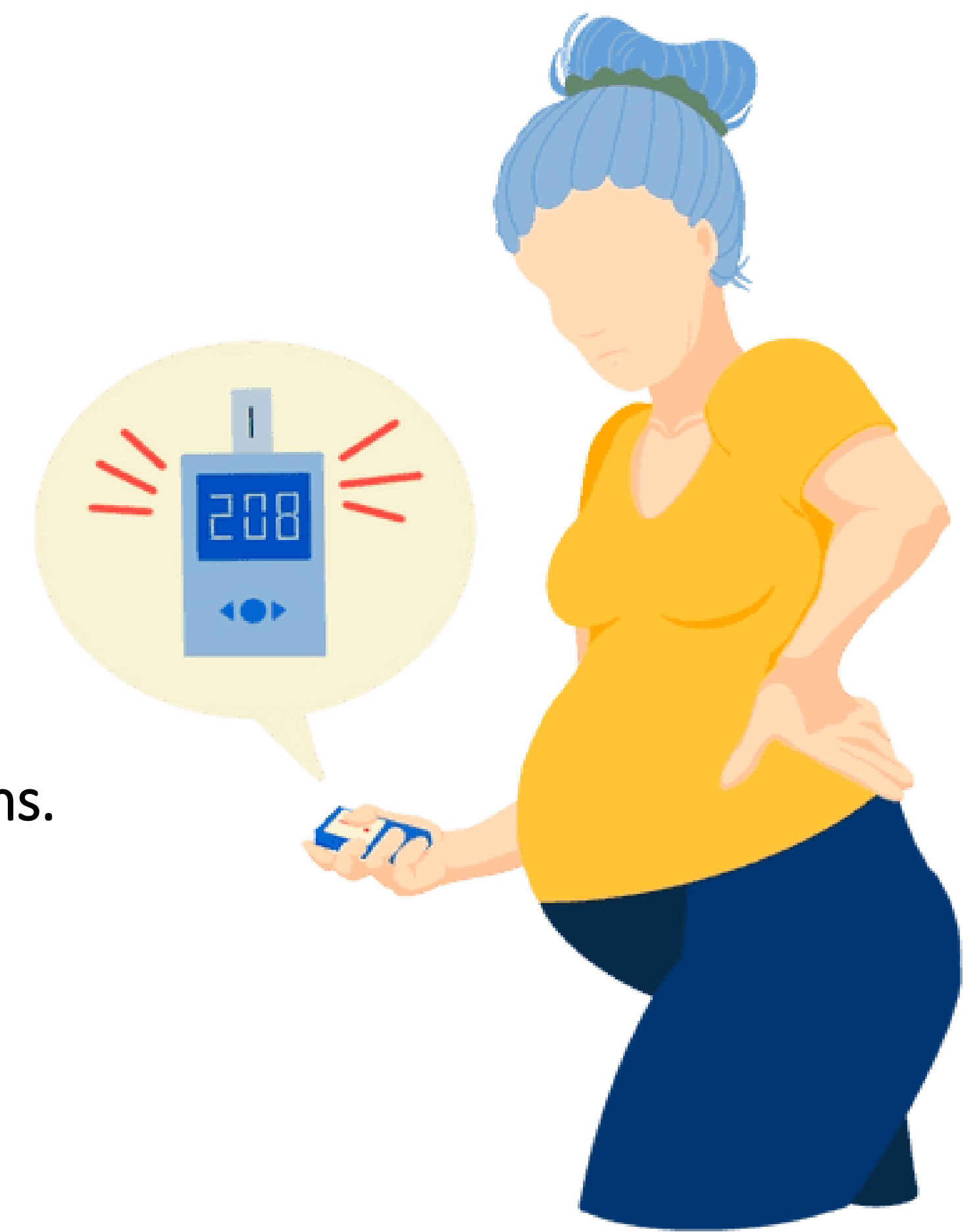
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INTRODUCTION

- Gestational diabetes (GDM) is high blood glucose concentrations first identified mid-pregnancy.
- Dietary advice is the first-line management for GDM.
- Healthcare professionals rely on clinical practice guidelines recommendations to guide treatment.
- It is unknown how well women with GDM in New Zealand adhere to the clinical recommendations.



AIMS

1. To identify the proportion of women with GDM who adhere to the New Zealand dietary recommendations.
2. To assess whether maternal sociodemographic factors are associated with dietary adherence.

METHODS

- Maternal sociodemographic and dietary data at 36 weeks' gestation from the TARGET Trial were used.
- Dietary recommendations for the New Zealand 2006 and 2014 pregnancy guidelines^{1,2} were categorised as food- or non-food-related recommendations.
- Individual dietary adherence scores were calculated as a ratio for each food-related recommendation against maternal dietary intake.
- A possible minimum dietary score of zero and a maximum score of one for each food-related recommendation, and a total maximum score of 10 for all food-related recommendations.

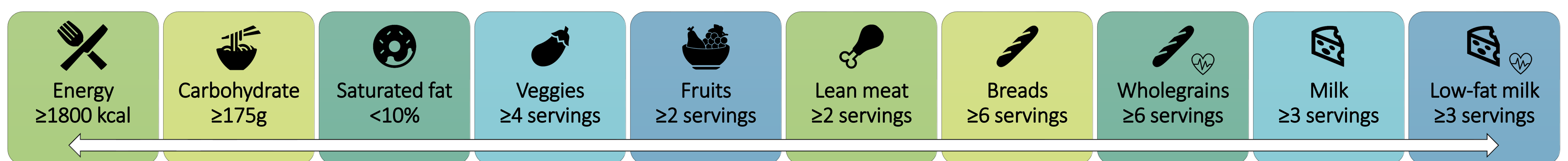


Figure 1. Ten food-related dietary recommendations with serving size recommendations.

- Adherence to the two non-food related recommendations, achieving recommended gestational weight gain and visiting a dietitian, were assessed as either yes or no.
- ANOVA, chi-square, logistic and linear regression to test associations between maternal sociodemographics and dietary adherence.

RESULTS

- From a total of 313 women with GDM, the average dietary score was 6.2/10. No-one adhered to all recommendations (figure 2).

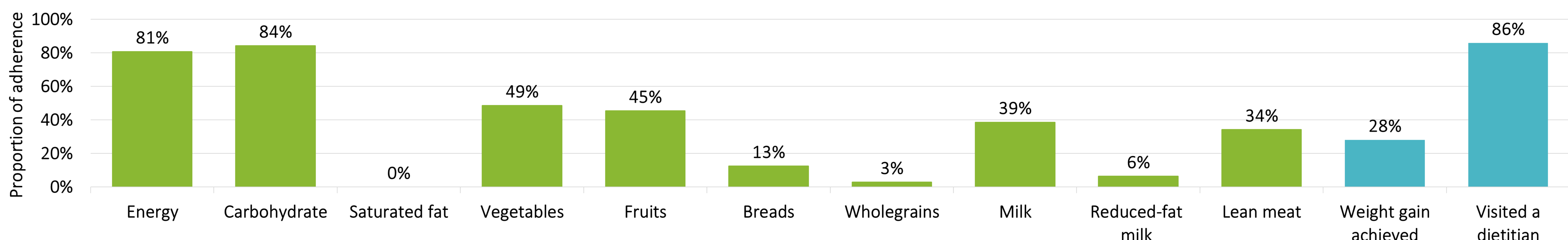


Figure 2. Proportion of women with GDM that adhered to the food- and non-food-related recommendations.

- The association between sociodemographic characteristics and adherence to dietary recommendations is shown in Figure 3. The arrow next to the recommendation indicates whether the corresponding sociodemographic variable was associated with improved or worsened dietary adherence.

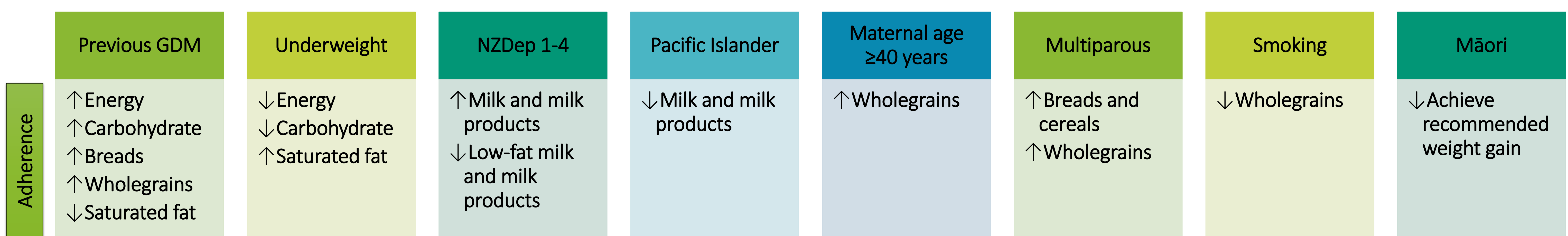


Figure 3. Associations between maternal sociodemographic characteristics and dietary adherence to recommendations.

CONCLUSION

- Dietary adherence for the management of GDM could be improved.
- Sociodemographic factors are associated with dietary adherence among women with GDM.
- Future studies should explore appropriate ways to improve dietary adherence, especially among women at high risk.

REFERENCES

1. Ministry of Health New Zealand. Food and Nutrition Guidelines for Healthy Pregnant and Breastfeeding Women: A background paper. Wellington; 2006.
2. Ministry of Health New Zealand. Screening, Diagnosis and Management of Gestational Diabetes: A Clinical Practice Guideline. Wellington; 2014.