

Does a modified popular Diabetes NZ booklet aimed at preventing excess weight gain in pregnancy meet the needs of pregnant women?

Results from a citizens jury.



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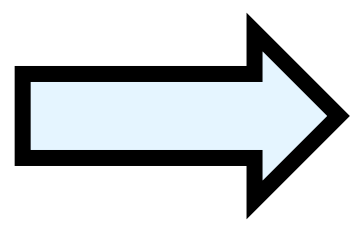
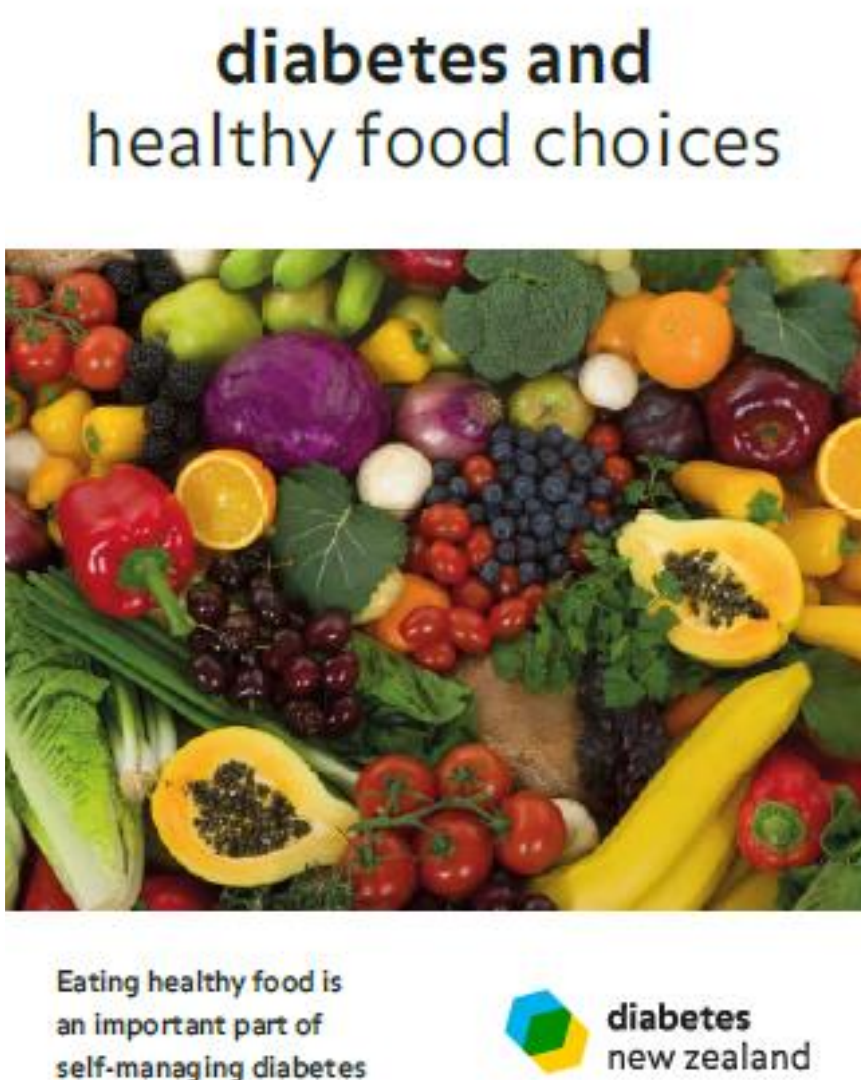
Introduction

- ❖ Obesity in pregnancy is a contemporary health issue.
- ❖ Healthy weight gain during pregnancy is essential for mother's wellbeing, and normal foetal development and growth.
- ❖ High pre-pregnancy body mass index (BMI) and excessive gestational weight gain (GWG) as defined by the Institute of Medicine (IOM) are independently associated with adverse outcomes. The IOM recommendations for total and average rate of weight gain during pregnancy, by pre-pregnancy BMI are:

Pre-pregnancy BMI (kg/m ²)	Total weight gain range (kg)	Rates of weight gain 2nd and 3rd trimester (mean range in kg/week) ¹
Underweight (< 18.5)	12.5–18	0.51 (0.44–0.58)
Healthy weight (18.5–24.9)	11.5–16	0.42 (0.35–0.50)
Overweight (25.0–29.9)	7–11.5	0.28 (0.23–0.33)
Obese (≥ 30.0)	5–9	0.22 (0.17–0.27)

¹ Calculations assume a 0.5–2 kg weight gain in the first trimester.
Source: IOM (Institute of Medicine) and NRC (National Research Council) 2009.

- ❖ Suitable resources for nutritional advice in pregnancy are limited in NZ
- ❖ We modified, with permission, a popular Diabetes NZ resource to meet what we considered to be the needs of pregnant women



"We did really like the traffic light scene, the what we should eat, what we should avoid and then what we don't eat."

Use the traffic lights to help you make healthy food choices
Avoid eating these foods
Eat some but not too much of these foods
Eat lots of these foods

Study Aim

To determine if a modified Diabetes NZ resource was deemed to be a good nutrition resource for pregnant women and their family/whānau by undertaking a citizens jury.

Methods

"A Citizens Jury provides the opportunity for citizens to learn about an issue, deliberate together with a diverse group of their peers, and develop well-informed solutions to challenging public issues."¹

- ❖ **Prior to Jury Day:**
 - Eight first-time pregnant women who did not require specialist care were recruited through Lead Maternity Carers in Southland, NZ
 - Women were provided with a copy of the draft written resource one week prior to the 'jury day'
- ❖ **Jury Day:**
 - Five 'experts' presented evidence – diabetes physician, public health physician, obstetrician & gynaecologist, dietitian, midwife
 - The 'jury' adjourned to a separate room with an independent facilitator, and 'deliberated' as to whether the resource was suitable or not. They were asked to deliver a verdict – 'YES' or 'NO'
 - The 'jury' was asked to also provide recommendations for improving the resource.
 - The verdict, and subsequent discussions were audio-recorded.
- ❖ **Data Analysis:**
 - The audio-recording was transcribed, read multiple times and discussed among investigators
 - Data were analysed thematically using a general inductive approach

The University of Otago Human Ethics Committee (Health) approved the study (H16/047)

¹ <https://jefferson-center.org/citizens-jury/>

Results

- ❖ **Participant profiles (n=8):**
 - Age (years): 30, 25, 19, 20, 34, 30, 35, 29
 - Ethnicity: NZ European (x6), Maori (x1), Filipino (x1)
 - Household income (\$NZ): \$20,001-25,000 (x2), \$25,001-30,000 (x2), \$40,001-50,000 (x2), \$50,001-70,000 (x1), \$70,001-100,000 (x1)
 - No or first level secondary school qualification: 4
 - Positive family history of diabetes: 2
 - Sources of nutritional information accessed during *this* pregnancy:
Midwife (x3), General practitioner (x1), Practice nurse (x0), Antenatal group (x0), Internet (x4), Pregnancy books (x3), Pregnancy-specific magazines (x1), Other magazines (x1), Other (x6) - 'friends that have already been pregnant before', 'family members', 'dietitian', 'word of mouth', 'Bounty book', 'observations & discussions with relatives who are doctors & nurses.'



Verdict: YES

- ❖ **Emergent themes and sub-themes**
 - 1. Communication of information**
 - Presentation of health information
 - Stylistic and design features
 - 2. Resource content – food guidelines**
 - Portion control
 - Rationale for advice
 - Additional healthy eating support tools
 - Breastfeeding and postpartum weight loss
 - 3. Harm reduction in pregnancy**
 - Avoidance of alcohol
 - Safe eating in pregnancy

".. just really easy.....it's better 'cause it's visual rather than just written..."

"... really liked that kind of plate diagram, this one here that says this much of your plate should be vegetables, this much should be meat and so yeah, again just clear about what am I supposed to eat..... and how much..."

"..have..... alcohol's not recommended.."



- ❖ **Recommended changes to the booklet**
 - **Presentation of information**
 - Shorten title & remove Diabetes NZ logo
 - Increase font size of main headings, food safety messages and tips, and explanation of importance of healthy weight gain in pregnancy
 - Add image examples of 3 different foods containing 200 calories
 - **Content**
 - Add statement that whole family can eat the same healthy food
 - Add explanations as to why some foods like hummus are not to be eaten in pregnancy
 - Add examples of safe foods that could be bought when eating out
 - Add separate sections on postpartum weight loss, and food and fluids to consume when breastfeeding
 - Remove alcohol consumption recommendations for non-pregnant women and non-breastfeeding women, and for men

"Yeah, a shame we can't keep these, they're good"

Conclusions

- ❖ The citizens jury method was an ideal method to answer our question and seek the views, opinions and recommendations of a diverse group of end-users
- ❖ Our modified Diabetes NZ resource was deemed to be a good nutrition resource for pregnant women
- ❖ We are currently using this resource (with the recommended changes) as part of a midwife-delivered nutrition intervention for optimal weight gain in pregnancy feasibility study - the DOT study

Acknowledgements

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