

Title	Targeting the perinatal diet to modulate the gut microbiota increases dietary variety and prebiotic and probiotic food intakes: results from a randomised controlled trial
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Appendix 1. DGI-13 component score calculations

To calculate the DGI-13 component scores⁽¹⁾, daily servings for each food group were calculated by mapping individual food items on the Dietary Questionnaire for Epidemiological Studies, version 2 $(DQES)^{(2)}$ to their food group and dividing the total g/day consumed for each food group by the grams per serve advice in the Australian Dietary Guidelines $(ADG)^{(3)}$. Criteria for scoring limiting saturated fat (rule 9a), and limiting salt (rule 11) were modified because the DQES did not survey meat preparation nor added table salt. Instead, for rule 9a, five points were given if unsaturated oils or spreads were used instead of saturated oils. For rule 11, 10-points were given if less than 120mg of salt per 100g of food was consumed (as per the $ADG^{(3)}$). The DQES did not measure water intake, hence water consumption (ml/day) from the Simple Dietary Questionnaire (SDQ)⁽⁴⁾ was used to score rule 7. To score water consumption as a proportion of total fluid intake (7b), the total fluid intake was the sum of the drinks surveyed in the DQES (including alcohol), plus a custom cordial and soft drink (ml/day) measurement.

References

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- 4. Parletta N, Zarnowiecki D, Cho J, et al. (2019) A Mediterranean-style dietary intervention supplemented with fish oil improves diet quality and mental health in people with depression: A randomized controlled trial (HELFIMED). *Nutr. Neurosci.* 22, 474–487.

Appendix 2. Intervention participation and engagement

Activity	Program element	Duration	Gestation	Participants		
		(minutes)	week	exposed (%)		
Workshop	Teaching, practical activities, action	160	26 - 29	22 (100%)		
activities	planning, food demonstration					
	Set SMART dietary goals	20	26 - 29	22 (100%)		
Monitoring	Questionnaires: dietary intake, motivation	15-25	31	20 (90%)		
	and readiness to change					
		15-25	36	21 (95%)		
Monitoring	Telephone calls with scripted questions for	10-20	31	22 (100%)		
and support	goal adherence and re-evaluation	10-20	36	21 (95%)		

Sup	plementary	y table 1	: Ex	posure and	partici	pation	rates	for 1	the	interv	rention	prog	gram
	-	/											-

Appendix 3. Participant-reported dietary advice received

Reported advice	No (%)	Yes (%)	Doctor	Obstetrician	Midwife	Others*
	12	10				
Control	(66.7%)	(38.5%)	3	4	3	2
	6	16				
Intervention	(33.3%)	(61.6%)	13	5	9	1
Total	18	26	16	9	12	3

Supplementary Table 1. Reported dietary advice received by practitioner type.

*Others included naturopath, nurse or diabetes educator

Supplementary Table 2. Frequency of dietary advice messages received by group

Dietary advice topic area		Doctor		Obs.		Midwife		Dietician		her	
Group	С	I	С	I	С	I	С	I	С	I	Total
Food safety	2	9	3	2	0	6	0	0	0	0	22
Alcohol avoidance	0	5	0	0	0	2	0	0	0	0	7
Maintain a balanced diet (general advice)	0	2	1	0	0	3	0	0	0	0	6
Increase dietary variety	0	1	0	2	1	1	0	0	0	0	5
Caffeine avoidance	1	1	0	1	0	1	0	0	0	0	4
Iron-rich foods	0	1	1	0	1	1	0	0	0	0	4
Protein increase intake	0	1	1	0	1	0	1	0	0	0	4
Diabetes-related advice	0	2	0	1	0	0	0	0	0	0	3
Handout pregnancy dietary recommendations	0	1	0	1	0	1	0	0	0	0	3
Reduce sugar	1	0	0	0	1	0	0	0	0	1	3
Calcium-rich foods	0	1	0	1	0	0	0	0	0	0	2
Carbohydrate intake times	0	0	0	0	0	0	0	0	0	2	2
Increased fibre, water	0	0	0	2	0	0	0	0	0	0	2
Caffeine safe	0	1	0	0	0	0	0	0	0	0	1
Carbohydrate increase intake	0	0	0	0	0	1	0	0	0	0	1
Carbohydrate reduce intake	0	0	0	0	0	0	0	0	0	1	1
Drinks increase intake	0	0	0	0	0	0	1	0	0	0	1
Eat low GI foods	0	0	0	0	1	0	0	0	0	0	1
Eat often	0	0	0	1	0	0	0	0	0	0	1
Exercise	0	0	0	0	1	0	0	0	0	0	1
Magnesium containing foods	0	1	0	0	0	0	0	0	0	0	1
Pregnancy dietary recommendations (detailed											
advice)	0	0	0	0	0	0	1	0	0	0	1
Reflux-specific advice	0	1	0	0	0	0	0	0	0	0	1
Vitamin D sources	0	1	0	0	0	0	0	0	0	0	1
Total	4	28	6	11	6	16	3	0	0	1	78

C, Control group; I, Intervention group; Obs., Obstetrician; Other includes Naturopath/ Diabetes educator/ diabetes nurse.