

Supplementary material:

1. Practical nutrition knowledge measures and scoring (PKB-7)
2. Diet Quality measures and scoring
3. Socio-demographic characteristics and mean differences in practical nutrition knowledge scores (0-7) and diet quality scores (0-120)
4. Adjusted mediation models
5. Mean differences between included and excluded respondents

Supplement 1. Practical Knowledge about Balanced meals (PKB-7) scale (Mötteli et al., 2016) and scoring (incorrect or don't know = 0, correct answer = 1)

Q1. Which of these two take-away products has a healthier balance of foods?

- ☐ Hot-dog (bread roll with sausage and tomato sauce)
- ☒ Kebab (flat bread with meat and salad)
- ☐ Both similar
- ☐ Don't know

Q2. Which of the following beverages counts as one serving of fruit?

- ☐ 1 glass of apple juice mixed with sparkling water
- ☒ 1 glass strawberry smoothie
- ☐ None of these beverages
- ☐ Don't know

Q3. Does a mango sorbet count as a serving of fruit?

- ☐ Yes
- ☒ No
- ☐ Don't know

Q4. Does a portion of spinach and ricotta ravioli with basil pesto contain the recommended serving of vegetables per meal?

- ☐ Yes
- ☒ No
- ☐ Don't know

Q5. Please indicate whether the following statement is true or false. A lunch composed of a tuna sandwich and a fruit yogurt is a balanced meal.

- ☐ True
- ☒ False
- ☐ Don't know

Q6. Which one of these salads is more filling?

- ☐ Pasta salad
- ☒ Lentil salad
- ☐ Both similar
- ☐ Don't know

Q7. Which of the following pictures shows the most balanced selection of food groups?

- ☐ Fish, rice and carrots



- ☐ Sausage, pasta and beans



- ☒ Chicken, fries and beans



- ☐ Don't know

Supplement 2. Diet Quality scale and scoring

1: How many serves of vegetables do you eat on a usual day? One serve of vegetables is equivalent to half a cup of cooked vegetables or one cup of salad vegetables.

1. Never	0
2. 1	2
3. 2	4
4. 3	6
5. 4	8
6. 5	10
7. 6	10
8. 7	10
9. 8	10
10. 9	10
11. >10	10

2: How many serves of fruit do you eat on a usual day? One serve is equivalent to a large fruit like an apple or banana or 8 strawberries or 20 grapes or 20 cherries or 2 smaller fruits such as kiwi fruit, apricots, plums or 1/2 cup of juice or 4 dried apricots or 1 1/2 tablespoon of sultanas or 1 cup of canned fruit.

1. 0	0
2. 1	5
3. 2	10
4. 3	10
5. 4	10
6. 5	10
7. 6	10
8. 7	10
9. 8	10
10. 9	10
11. >10	10

3: On average, how many times per week do you drink softdrinks (including flavoured or mineral water)?

1. Never drink softdrink	10
2. Less than once a week	10
3. 1	9
4. 2	8
5. 3	7
6. 4	6
7. 5	5
8. 6	4
9. 7	3
10. 8	2
11. 9	1
12. >10	0

4: In an average week how many times would you eat something from a fast-food restaurant like McDonald's, Hungry Jacks, KFC, etc. This also includes other fast-food and takeaway such as fish and chips, chinese food and pizza for example.

1. Never eat these foods	10
2. Less than once a week	10
3. 1	9
4. 2	8
5. 3	7

6. 4	6
7. 5	5
8. 6	4
9. 7	3
10. 8	2
11. 9	1
12. >10	0

5: How often do you eat biscuits, cakes, chocolate, lollies, ice cream or crisps?

1. Never eat these foods	10
2. Less than once a week	10
3. Once a week	5
4. Twice a week	5
5. Three times a week	5
6. Four times a week	5
7. Five times a week	5
8. Six times a week	5
9. Once a day	0
10. Twice a day	0
11. Three or more times a day	0

6: What type of bread do you usually eat?

1. I don't eat bread	0
2. High fibre white bread	5
3. White bread	0
4. Wholemeal bread	10
5. Rye bread	10
6. Wholegrain or multi-grain bread	10
7. Gluten/wheat free bread	0

7: What type of rice, pasta or noodles do you mainly choose?

1. I do not eat rice, pasta or noodles	0
2. White	0
3. Brown/wholemeal/wholegrain	10
4. Gluten/wheat free	0

8: What type of milk do you mainly choose?

1. I do not consume milk	0
2. Full cream milk (including lactose free)	0
3. Reduced fat milk (including lactose free)	8
4. Skim milk (including lactose free)	10
5. Soy/rice milk	10

9: What types of fish do you usually choose to eat?

1. I do not eat fish	0
2. White (cod, hoki, whiting, etc.)	5
3. Oily (salmon, sardines, tuna, mackerel, trevally)	10

10: On average, how many times per week do you eat red meat? (Beef, lamb, liver and kidney but not pork, or ham). This includes all minimally processed forms of red meat such as chops, steaks, roasts, rissoles, mince, stir fries and casseroles.

1. Never	10
2. Less than once a week	10
3. 1	9
4. 2	8

5. 3	7
6. 4	6
7. 5	5
8. 6	4
9. 7	3
10. 8	2
11. 9	1
12. >10	0

11: On average, how many times per week do you eat meat products? (such as sausages, frankfurter, Devon, fritz, salami, meat pies, bacon or ham)?

1. Never	10
2. Less than once a week	10
3. 1	9
4. 2	8
5. 3	7
6. 4	6
7. 5	5
8. 6	4
9. 7	3
10. 8	2
11. 9	1
12. >10	0

12: How often do you add salt to your food during or after it is cooked?

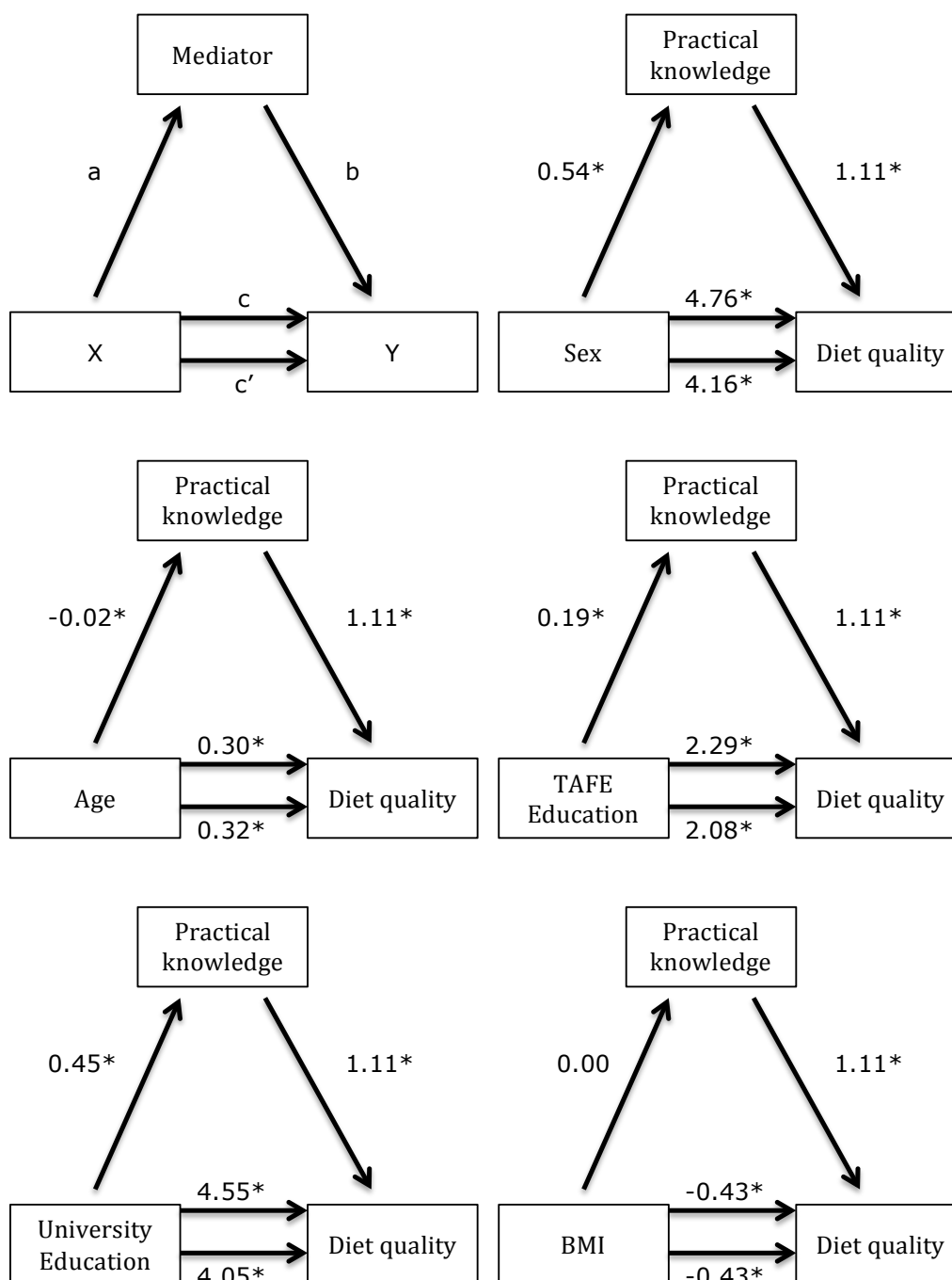
1. Never	10
2. Rarely	6
3. Sometimes	3
4. Almost always	0
5. Always	0

Supplement 3. Socio-demographic characteristics and mean differences in practical nutrition knowledge scores (0-7) and diet quality scores (0-120)

	n (%)	Knowledge	Diet quality
		<i>M (SD) p (η^2)^a</i>	
Whole sample	8161	3.6 (1.4)	82.0 (15.2)
Sex		<0.001 (0.424)	< 0.001 (0.246)
Male	2093 (25.6%)	3.1 (1.5)	79.2 (15.7)
Female	6068 (74.4%)	3.7 (1.4)	83.0 (14.9)
Age (years)		<0.001 ^f (0.022)	<0.001 ^f (0.040)
18-44	2233 (27.4%)	3.9 ^b (1.4)	78.0 ^b (15.9)
45-54	2467 (30.2%)	3.6 ^c (1.4)	81.0 ^c (14.8)
≥ 55	3461 (42.4%)	3.4 ^c (1.4)	85.3 ^c (14.2)
Education		<0.001 ^e (0.018)	<0.001 ^e (0.011)
≤Secondary school	1083 (13.3%)	3.2 ^b (1.5)	79.0 ^b (16.0)
TAFE	1966 (24.1%)	3.4 ^c (1.4)	80.6 ^c (15.3)
≥University	5112 (62.6%)	3.7 ^c (1.4)	83.2 ^c (15.0)
BMI ^g (kg/m ²)		0.003 ^e (0.001)	<0.001 ^f (0.023)
<25	3055 (37.4%)	3.6 ^b (1.4)	84.1 ^b (14.7)
25-<30	2770 (33.9%)	3.5 ^c (1.4)	82.6 ^c (14.8)
≥30	2336 (28.6%)	3.5 (1.4)	78.5 ^c (15.8)

Note: ^aOne way ANOVA (effect size η^2) for multicategorical variables and t-test (effect size Cohen's *d*) for dichotomous variables. ^{b,c,d}Mean values within one socio-demographic characteristic with unlike superscript letters were significantly different using the Tukey^e or Games-Howell^f test ($p < 0.05$). ^gBMI=body mass index.

Supplement 4. Path analyses for the adjusted mediation models



Note: Each model is adjusted for the other 3 socio-demographic variables. a =association of independent factor and potential mediator, b =association of potential mediator and dependent factor, c =association between dependent and independent factor (total effect= $c'+a*b$), c' =association between dependent and independent factor adjusted for potential mediator (direct effect). *Significant at $p<0.001$.

Indicator coding was used for the multi-categorical variable education. Therefore, the results presented are to be considered as relative effects with subjects with a secondary school education level as the reference group.

Supplement 5. Mean differences between included and excluded respondents

Characteristic	Included	Excluded	<i>p</i> ^a
Sex	N=8161	N=3106	<0.001
Male	2093 (25.6%)	916 (29.5%)	
Female	6068 (74.4%)	2190 (70.5%)	
Age mean (SD)	N=8161	N=3105	<0.001
	50.77 (11.59)	47.58 (12.24)	
Education	N=8161	N=3012	0.002
Secondary school	1083 (13.3%)	476 (15.8%)	
TAFE	1966 (24.1%)	718 (23.8%)	
University	5112 (62.6%)	1818 (60.4%)	
BMI mean (SD)	N=8161	N=1782	0.949
	27.62 (5.66)	27.63 (5.49)	
Practical Nutrition Knowledge mean (SD)	N=8161	N=238	<0.001
	3.56 (1.43)	3.00 (1.55)	
Diet Quality mean (SD)	N=8161	N=750	0.017
	82.00 (15.23)	80.61 (15.73)	

Note: ^aChi square tests for the categorical variables and independent t-tests for the continuous variables were conducted.