

Supplementary Material

Table S1: Criteria for calculating Nutrient Rich Foods Index (NRFI)

Positive Nutrient Rich Foods Component	Nutrient Reference Value	Minimum Percentage Adherence	Maximum Percentage Adherence
Protein	RDI: 46 g/d	0	Capped at 100
Fiber	AI: 25 g/d	0	Capped at 100
Vitamin A	RDI: 700 µg/d	0	Capped at 100
Vitamin C	RDI: 45 mg/d	0	Capped at 100
Vitamin E	AI: 7 mg/d	0	Capped at 100
Calcium	RDI: 1300 mg/d	0	Capped at 100
Iron	RDI: 8 mg/d	0	Capped at 100
Potassium	RDI: 2800 mg/d	0	Capped at 100
Magnesium	RDI: 320 mg/d	0	Capped at 100
Negative Nutrient Rich Foods Component	Nutrient Reference Value	Minimum Percentage Adherence	Maximum Percentage Adherence
Sodium	UL: 2300 mg/d	0	May exceed 100
Saturated Fat	Daily Intake Guide: 24 g/d	0	May exceed 100
Sugar	Daily Intake Guide: 90 g/d	0	May exceed 100

Diet Nutrient Density Score = (Sum of percentage adherence to positive nutrients) – (Sum of percentage adherence to negative nutrients)

NRFI = (Diet Nutrient Density Score, standardized per 1000 kJ of energy intake)

RDI: Recommended Daily Intake; AI: Adequate Intake; UL: Upper Limit

Table S2. Criteria for calculating the Australian Recommended Food Score (ARFS)

ARFS sub-group	DQSE item	Level of Intake	Scoring
Vegetables (max score=22)	How many serves of vegetables/d	> 4 serves /d	1
		≤ 4 serves/d	0
	Potato	>1 serve/wk	1
		≤1 serve/wk	0
	Tomato sauce	>1 serve/wk	1
		≤1 serve/wk	0
	Fresh/tinned tomato	>1 serve/wk	1
		≤1 serve/wk	0
	Capsicum	>1 serve/wk	1
		≤1 serve/wk	0
	Lettuce/salad greens	>1 serve/wk	1
		≤1 serve/wk	0
	Cucumber	>1 serve/wk	1
		≤1 serve/wk	0
	Celery	>1 serve/wk	1
		≤1 serve/wk	0
	Beetroot	>1 serve/wk	1
		≤1 serve/wk	0
	Carrot	>1 serve/wk	1
		≤1 serve/wk	0
	Cabbage/ Brussel sprouts	>1 serve/wk	1
		≤1 serve/wk	0
	Cauliflower	>1 serve/wk	1
		≤1 serve/wk	0
	Broccoli	>1 serve/wk	1
		≤1 serve/wk	0
	Spinach	>1 serve/wk	1
		≤1 serve/wk	0
	Peas	>1 serve/wk	1
		≤1 serve/wk	0
	Green Beans	>1 serve/wk	1
		≤1 serve/wk	0
	Beans/Bean spouts	>1 serve/wk	1
		≤1 serve/wk	0
	Pumpkin	>1 serve/wk	1
		≤1 serve/wk	0
	Onions	>1 serve/wk	1
		≤1 serve/wk	0
	Garlic	>1 serve/wk	1
		≤1 serve/wk	0
	Mushrooms	>1 serve/wk	1
		≤1 serve/wk	0
	Zucchini	>1 serve/wk	1
		≤1 serve/wk	0
Fruit (max score=14)	How many serves of fruit/d	> 2 serves /d	1
		≤ 2 serves/d	0
	Fruit Juice	>1 serve/wk	1
		≤1 serve/wk	0
	Tinned/frozen fruit	>1 serve/wk	1
		≤1 serve/wk	0
	Oranges	>1 serve/wk	1
		≤1 serve/wk	0

	Apples	>1 serve/wk	1
		≤1 serve/wk	0
	Pears	>1 serve/wk	1
		≤1 serve/wk	0
	Banana	>1 serve/wk	1
		≤1 serve/wk	0
	Melon	>1 serve/wk	1
		≤1 serve/wk	0
	Pineapple	>1 serve/wk	1
		≤1 serve/wk	0
	Strawberries	>1 serve/wk	1
		≤1 serve/wk	0
	Apricots	>1 serve/wk	1
		≤1 serve/wk	0
	Peaches	>1 serve/wk	1
		≤1 serve/wk	0
	Mango	>1 serve/wk	1
		≤1 serve/wk	0
	Avocado	>1 serve/wk	1
		≤1 serve/wk	0
Grains (max score=14)	Consume high fiber white bread	Yes	1
		No	0
	Consume wholemeal bread	Yes	1
		No	0
	Consume rye bread	Yes	1
		No	0
	Consume multi-grain bread	Yes	1
		No	0
	How many slices of bread/d	≥4 slices/d	1
		<4 slices/d	0
	All bran	>1 serve/wk	1
		≤1 serve/wk	0
	Sultana bran	>1 serve/wk	1
		≤1 serve/wk	0
	Weetbix	>1 serve/wk	1
		≤1 serve/wk	0
	Rice	>1 serve/wk	1
		≤1 serve/wk	0
	Pasta/Noodles	>1 serve/wk	1
		≤1 serve/wk	0
Dairy (max score=7)	Vegemite	>1 serve/wk	1
		≤1 serve/wk	0
	Cornflakes	>1 serve/wk	1
		≤1 serve/wk	0
	Porridge	>1 serve/wk	1
		≤1 serve/wk	0
	Muesli	>1 serve/wk	1
		≤1 serve/wk	0
	Consume reduced fat or skim milk	Yes	1
		No	0
	Consume soy milk	Yes	1
		No	0
	Consume low fat cheese	Yes	1
		No	0
	How much milk/d	>500 ml/d	1
		≤500 ml/d	0

Nuts/beans/soy/egg (max score=7)	Cheese	<1 serve/wk	1
		≥1 serve/wk	0
	Ice-cream	<1 serve/wk	1
		≥1 serve/wk	0
	Yoghurt	>1 serve/wk	1
		≤1 serve/wk	0
	Nuts	>1 serve/wk	1
		≤1 serve/wk	0
	Peanut Butter	>1 serve/wk	1
		≤1 serve/wk	0
	Baked beans	>1 serve/wk	1
		≤1 serve/wk	0
	Soy/tofu	>1 serve/wk	1
		≤1 serve/wk	0
Meat (max score=5)	Soy milk	Yes	1
		No	0
	Other Beans	>1 serve/wk	1
		≤1 serve/wk	0
	Eggs	1-5 eggs/wk	1
		<1 or >5 eggs/wk	0
	Beef	1-4 serves/wk	1
		<1 or >4 serves/wk	0
	Veal	1-4 serves/wk	1
		<1 or >4 serves/wk	0
	Lamb	1-4 serves/wk	1
		<1 or >4 serves/wk	0
	Pork	1-4 serves/wk	1
		<1 or >4 serves/wk	0
Fish (max score=2)	Chicken	1-4 serves/wk	1
		<1 or >4 serves/wk	0
	Fish	1-4 serves/wk	1
		<1 or >4 serves/wk	0
Fat (max score=1)	Tinned Fish	1-4 serves/wk	1
		<1 or >4 serves/wk	0
	Consume Poly-unsaturated, Mono-unsaturated spread or do not use spread	Yes	1
		No	0
Alcohol (max score=2)	How often is alcohol consumed	1-4 days/wk	1
		<1 or >4 days/wk	0
	How many when alcohol is consumed	1-2 standard drinks	1
		<1 or >2 standard drinks	0

Table S3. Criteria for calculating the Mediterranean Diet Score (MDS)

Food Group	Level of Intake	Scoring
Vegetables	>250 gm/d	2
	100-250 gm/d	1
	<100 gm/d	0
Fruit and Nuts	>300 gm/d	2
	150-300 gm/d	1
	<150 gm/d	0
Legumes	>140 gm/d	2
	70-140 gm/d	1
	<70 gm/d	0
Grains	>195 gm/d	2
	130-195 gm/d	1
	<130 gm/d	0
Meat	>120 gm/d	0
	80-120 gm/d	1
	<80 gm/d	2
Fish	>250 gm/d	2
	100-250 gm/d	1
	<100 gm/d	0
Dairy	>270 gm/d	1
	180-270 gm/d	2
	<180 gm/d	0
Alcohol	>24 gm/d	0
	12-24 gm/d	2
	<12 gm/d	1
Use Mono-unsaturated fat	Yes	1
	No	0

Table S4. Summary of Diet Quality Scores their Component Scores and additional key Macro and Mico-nutrient intake data

	FFQ data 2001 (Women 50-55 yr)		FFQ data 2013 (Women 62-67 yr)		Change over time	
ARFS and sub-scale component scores	Median (IQR)	Mean (95% CI)	Median (IQR)	Mean (95% CI)	Median (IQR)	Mean change
Total ARFS (max 74)‡	33 (11)	32.4 (32.2-32.6)	33 (12)	32.8 (32.6-33.0)	0 (9)	+0.5
ARFS vegetable sub-scale (max 22)†	14 (6)	13.7 (13.6-13.8)	14 (6)	13.8 (13.7-13.9)	0 (5)	+0.1
ARFS fruit sub-scale (max 14)	6 (5)	5.6 (5.5-5.7)	6 (5)	5.7 (5.6-5.7)	0 (4)	+0.03
ARFS grain Sub-score (max 14)‡	4 (2)	4.1 (4.1-4.1)	4 (2)	3.8 (3.8-3.9)	0 (3)	-0.3
ARFS dairy Sub-scale (max 7)‡	2 (2)	2.1 (2.1-2.1)	2 (1)	2.2 (2.2-2.2)	0 (2)	+0.01
ARFS nuts/beans/soy/eggs Sub-scale (max 7)‡	2 (2)	2.0 (2.0-2.0)	2 (2)	2.3 (2.2-2.3)	0 (1)	+0.2
ARFS meat Sub-scale (max 5)‡	2 (1)	2.4 (2.4-2.4)	3 (1)	2.5 (2.4-2.5)	0 (2)	+0.09
ARFS fish Sub-scale (max 2)‡	1 (2)	0.9 (0.8-0.9)	1 (2)	1.0 (1.0-1.0)	0 (1)	+0.1
ARFS alcohol Sub-scale (max 2)‡	1 (2)	0.9 (0.2-0.9)	1 (2)	1.1 (1.1-1.1)	0 (1)	+0.2
MDS and sub-score component scores	Median (IQR)	Mean (95% CI)	Median (IQR)	Mean (95% CI)	Median (IQR)	Mean change
Total MDS (max 17)‡	7 (2)	6.7 (6.6-6.8)	7 (3)	6.6 (6.6-6.6)	0 (2)	-0.12
MDS Vegetable component (max 2)‡	1 (0)	0.9 (0.9-1.0)	1 (0)	1.0 (1.0-1.0)	0 (0)	+0.03
MDS Fruit and Nuts component (max 2)‡	1 (1)	1.2 (1.2-1.2)	1 (2)	1.1 (1.1-1.1)	0 (1)	-0.1
MDS Legumes component (max 2)*	0 (0)	0.0 (0.0-0.0)	0 (0)	0.0 (0.0-0.0)	0 (0)	+0.003
MDS Grains (max 2)‡	1 (1)	1.2 (1.2-1.3)	1 (2)	1.1 (1.1-1.1)	0 (1)	-0.2

MDS Meat (max 2)‡	1 (2)	1.2 (1.2-1.2)	2 (1)	1.4 (1.3-1.4)	0 (1)	+0.1
MDS Fish (max 2)	0 (0)	0.0 (0.0-0.0)	0 (0)	0.0 (0.0-0.0)	0 (0)	0.0
MDS Dairy (max 2)†	0 (1)	0.4 (0.4-0.4)	0 (1)	0.4 (0.4-0.4)	0 (0)	-0.02
MDS Alcohol (max 2)‡	2 (1)	1.6 (1.6-1.6)	2 (1)	1.6 (1.6-1.6)	0 (0)	+0.03
MDS fat (max 1)‡	0 (0)	0.1 (0.1-0.1)	0 (0)	0.1 (0.1-0.1)	0 (0)	-0.02
NFR Index and Components	Median (IQR)	Mean (95% CI)	Median (IQR)	Mean (95% CI)	Median (IQR)	Mean change
Total NRF Index‡	77.6 (33.5)	78.4 (77.8-78.9)	85.8 (36.0)	86.8 (86.2-87.4)	7.7 (32)	+8.4
% adherence to protein RDI‡	100 (0)	98.9 (98.8- 99.0)	100 (0)	98.5 (98.4- 98.6)	0 (0)	-0.4
% adherence to fiber AI†	76.5 (39.0)	75.2 (74.7- 75.6)	74.9 (36.8)	73.9 (73.4- 74.3)	0 (25.9)	-1.3
% adherence to vitamin A RDI	99.2 (24.1)	86.7 (86.3- 87.1)	100 (23.5)	87.1 (86.7- 87.4)	0 (15.3)	+0.3
% adherence to vitamin C RDI	100 (0)	98.9 (98.8-99.0)	100 (0)	98.1 (98.7- 99.0)	0 (0)	-0.1
% adherence to vitamin E AI‡	75.1 (39.2)	74.2 (73.7- 74.6)	76.9 (39.7)	75.5 (75.0 – 75.9)	0 (25.9)	+1.3
% adherence to calcium RDI†	63.8 (30.6)	64.7 (64.2- 65.1)	62.1 (28.8)	63.3 (62.9- 63.7)	-0.6 (26)	-1.4
% adherence to iron RDI‡	100 (0)	95.5 (95.3- 95.7)	100 (2.6)	94.4 (94.2-94.7)	0 (0)	-1.1
% adherence to potassium RDI‡	90.3 (26.6)	84.9 (84.5- 85.3)	87.8 (28.6)	83.5 (83.2- 83.9)	0 (18.7)	-1.4
% adherence to magnesium RDI*	78.4 (36.2)	77.4 (76.9- 77.8)	77.6 (35.2)	76.4 (76.0- 76.8)	0 (23.8)	-1.0
% adherence to sodium UL‡	86.9 (41.5)	93.0 (92.2-93.9)	76.7 (41.8)	82.2 (81.4-83.0)	-9.3 (37)	-10.8
% adherence to saturated fat daily intake guide	95.1 (59.4)	104.6 (103.5- 105.7)	94.6 (54.4)	102.3 (101.2- 103.3)	-0.3 (51.9)	-2.3

% adherence to sugar daily intake guide‡	85.8 (44.5)	89.9 (89.1- 90.6)	79.2 (40.5)	83.3 (82.6-84.0)	-5.3 (39.8)	-6.5
Nutrients	Median (IQR)	Mean (95% CI)	Median (IQR)	Mean (95% CI)	Median (IQR)	Mean change
Energy (kJ/d)‡	6331.5 (2736.8)	6687.9 (6634.8-6741.0)	5862.1 (2631.2)	6197.8 (6146.9-6248.6)	-394.5 (2465.4)	-490.1
Protein (g/d)‡	76.7 (34.0)	82.3 (81.6-83.1)	72.6 (32.3)	77.3 (76.6-78.0)	-3.3 (31.2)	-5.0
Fibre (g/d)‡	19.1 (9.8)	20.4 (20.2-20.5)	18.7 (9.2)	19.7 (19.6-19.9)	-0.4 (9.0)	-0.6
Retinol Equivalents (µg/d)	694.5 (357.7)	732.1 (725.9-738.3)	686.5 (342.7)	725.9 (720.1-731.8)	+3.2 (334.2)	-6.2
Vitamin C (mg/d)‡	103.9 (74.7)	117.4 (116.0-118.8)	96.2 (59.8)	105.4 (104.3-106.5)	-6.8 (65.6)	-12.0
Vitamin E (mg/d)‡	5.3 (2.8)	5.6 (5.6-5.6)	5.4 (2.8)	5.7 (5.7-5.8)	+0.1 (2.6)	+0.1
Calcium (mg/d)†	829.4 (398.4)	859.0 (852.2-865.7)	806.7 (375.0)	836.5 (830.1-842.9)	-13.9 (364.1)	-22.4
Iron (mg/d)‡	10.8 (5.8)	11.8 (11.6-11.9)	10.2 (5.5)	11.0 (10.9-11.1)	-0.5 (5.5)	-0.7
Potassium (mg/d)‡	2528.8 (1059.1)	2646.4 (2627.3-2665.5)	2459.3 (1001.5)	2552.3 (2534.3-2570.4)	-58.8 (970.5)	-94.1
Magnesium (mg/d)*	250.9 (115.5)	266.8 (264.6-268.9)	248.4 (112.9)	261.1 (259.0-263.2)	-2.6 (106.7)	-5.7
Sodium (mg/d)‡	1998.1 (954.0)	2139.8 (2120.9-2158.6)	1764.2 (871.4)	1890.4 (1872.4-1908.5)	-214.1 (852.7)	-249.4
Saturated Fat (g/d)	22.8 (14.2)	25.1 (24.8-25.4)	22.7 (13.1)	24.6 (24.3-24.8)	-0.1 (12.5)	-0.6
Total sugar (g/d)‡	77.2 (40.1)	80.9 (80.2-81.6)	71.3 (36.5)	75.0 (74.4-75.6)	-4.7 (35.8)	-5.9
% Energy Contribution from Protein‡	20.4 (4.1)	20.6 (20.6-20.7)	20.7 (4.2)	21.0 (20.9-21.1)	+0.4 (4.2)	+0.4
% Energy Contribution from Carbohydrates‡	44.4 (8.0)	44.4 (44.4-44.6)	42.2 (7.5)	42.1 (41.9-42.2)	-2.1 (8.7)	-2.4
% Energy Contribution from Total Fat‡	35.8 (8.1)	35.1 (35.0-35.3)	37.3 (6.8)	37.1 (37.0-37.3)	+1.6 (8.1)	+2.0

Monounsaturated Fat g/d*	20.6 (11.6)	22.3 (22.1-22.5)	20.8 (11.0)	22.3 (22.1-22.6)	+0.2 (10.8)	0.0
Polyunsaturated Fat g/d ‡	9.1 (6.6)	9.9 (9.8-10.1)	8.5 (5.6)	9.3 (9.2-9.4)	-0.5 (5.8)	-0.7

‡ P-value for change over time was <0.0001; † P-value for change over time was <0.001;

*P-value for change over time was <0.05.