

Developing and piloting a novel ranking system to assess popular dietary patterns and healthy eating principles

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Supplementary information

Table S1: Nutrition Profile of diets

Table S2: Ranking System Outline & Categories

Table S1. Summary of nutrition profile of popular weight loss diets and healthy eating principles

Nutrients	Keto	Paleo	IF	8WW	Optifast	MedDiet WL	AGHE WL
Energy (avMJ/day)	8.9	6.7	6.5	7.3	5.0	6.9	6.1
%en from protein	22	23	24	56	26	20	20
%en from CHO	6	23	36	11	48	31	47
%en from Fat	70	51	35	29	19	40	28
%en MUFA	27	26	16	10	9	22	12
%en PUFA	10	7	6	3	3	8	5
%en SFA	29	18	10	11	4	8	9
%en alcohol	nil	0.1	0.1	nil	0.6	4.0	0.3
Fibre (g/day)	20	25	34	21	43	29	27
Vit C (mg/day)	90	242	166	193	630	215	135
Vit E(mg/day)	29	26	15	14	21	23	11
Vit A (µg/day)	831	1363	983	992	2095	1005	1246
Folate (µg/day)	355	283	446	483	943	451	555
VitB12 (µg/day)	5.4	3.0	4.0	15	3.0	3.4	3.9
Vit B1 (mg/day)	1.0	0.8	1.2	0.9	2.0	1.1	1.0
Niacin (mg/day)	50	40	34	111	40	35	30
Magnesium (mg/day)	398	350	446	448	451	339	355
Iodine (µg/day)	98	54	142	123	138	112	152
Phosphorous (mg/day)	1926	1242	1672	2647	1457	1350	1299
Selenium (µg/day)	103	78.9	86.1	228	69.9	71.9	75.5
Sodium (mg/day)	2922	1820	3272	1786	3903	1214	1727
Potassium (mg/day)	2802	3310	3730	5261	5776	3716	3059
Calcium (mg/day)	1249	366	1368	898	1203	782	953
Iron (mg/day)	12	11	12	16	19	11	8.7
Zinc	13	11	10	24	13	9.7	9.1

Serves/Day							
Fruit	0.2	1.4	0.9	0.2	2.3	1.0	2.0
Vegetables	2.5	5.9	5.9	6.5	12	8.3	4.2
Breads and cereals	0.5	0.8	4.5	0.4	0.7	3.2	4.8
Dairy foods	2.3	nil	2.8	1.9	1.2	1.3	0.9
Meat/meat alt.	6.1	5.0	2.4	9.1	0.6	2.8	2.0
Discretionary	3.3	2.1	1.1	0.1	0,3	1.3	0.9

CHO= carbohydrate, PRO= protein, %en = percentage of energy, MUFA= monounsaturated fat,

PUFA= polyunsaturated fat, SFA= saturated fat, IF= intermittent fasting, 8WW = 8 Weeks to Wow

Table S2 Ranking System Outline & Categories

Category: Dietary Quality	Score (points)	Comments
i.Meal plan/diet Accounts for gender?		
Yes	10	
No	0	
Food Groups & Serve Sizes (based on Foodworks data – averages)		
a) Fruit intake		
0 serves/day	0	
1 serve/day	10	
2 serves/day (100%)	20	
b) Vegetable intake		
0 serves/day	0	
1 serve/day	10	
2 serves/day	20	
3 serves/day	30	
4 serves/day	40	
5 serves/day (100% F)	50	
6 serves/day (100% M)	50	
c) Dairy & alternatives*		

0 serves/day	0	
1 serve/day	10	
2 serves/day (100% F)	20	
2.5 serves/day (100% M)	20	
d) Breads, cereals & grains		
0 serves/day	0	
1 serve/day	10	
2 serves/day	20	
3 serves/day (50%)	30	
4 serves/day	40	
5 serves/day	50	
6 serves/day (100% F + M)	60	
e) Lean meats, poultry & alternatives*		
0 serves	0	
1 serve/day	10	
2 serves/day	20	
2.5 serves/day (100% F)	30	
3 serves/day (100% M)	30	
f) Discretionary		Manual calculation from Foodworks
<2.5 (F)	10	
<3 (M)	10	
>3	0	
i. AMDR Range – in the range Y/N?		
CHO (45-65%)	0 to 10	
FAT (20-35%)	0 to 10	
PRO (15-25%)	0 to 10	
Alcohol (as a beverage)		
>20g (2x standard drinks)	-10	
<20g	0	
“Disease prevention”		
g) Limit saturated fat intake (McNaughton) Cholesterol & CHD		

<div><10% energy</div>	10		
<div>10%</div>	0		
<div>>10% energy</div>	-10		
<div>h) Choose foods low in salt (McNaughton) Hypertension</div> <div><1000mg (AI)</div> <div><2000mg (SDT)</div> <div>>2000mg</div>	<div>20</div> <div>10</div> <div>-10</div>	<div>SDT 2,000mg/day</div>	
<div>Micronutrients* based on 19-50 y/o</div>			
<div>Fibre</div> <div>Meets Male AI (30g) (100%)</div> <div>Meets Female AI (25g) (100%)</div> <div><AI</div>	<div>20</div> <div>20</div> <div>0</div>	<div>Males 30g/day Females 25g/day</div>	
<div>Minerals & Trace elements 19-50y/o</div>			
<div>Calcium</div> <div>Meets RDI (100%)</div> <div>Meets EAR (100%)</div> <div><EAR</div>	<div>20</div> <div>10</div> <div>0</div>	<div>RDI</div> <div>Males 1000mg/day</div> <div>Females 1000mg/day</div>	<div>EAR</div> <div>Males 840mg/day</div> <div>Females 840mg/day</div>
<div>Iron</div> <div>Meets RDI (100%) M</div> <div>Meets RDI (100%) F</div> <div>Meets EAR (100%) M</div> <div>Meets EAR (100%) F</div> <div><EAR</div>	<div>20</div> <div>20</div> <div>10</div> <div>10</div> <div>0</div>	<div>RDI</div> <div>Males 8mg/day</div> <div>Females 18mg/day</div>	<div>EAR</div> <div>Males 6mg/day</div> <div>Females 8mg/day</div>
<div>Thiamine</div> <div>Meets RDI (100%)</div> <div>Meets EAR (100%)</div> <div><EAR</div>	<div>20</div> <div>10</div> <div>0</div>	<div>RDI</div> <div>Males 1.2mg/day</div> <div>Females 1.1mg/day</div>	<div>EAR</div> <div>Males 1.0mg/day</div> <div>Females 0.9mg/day</div>
<div>Zinc</div> <div>Meets RDI (100%)</div> <div>Meets EAR (100%)</div> <div><EAR</div>	<div>20</div> <div>10</div> <div>0</div>	<div>RDI</div> <div>Males 14mg/day</div> <div>Females 8mg/day</div>	<div>EAR</div> <div>Males 12mg/day</div> <div>Females 6.5mg/day</div>
<div>Iodine</div> <div>Meets RDI (100%)</div> <div>Meets EAR (100%)</div>	<div>20</div> <div>10</div>	<div>RDI</div> <div>Males 150ug/day</div> <div>Females 150ug/Day</div>	<div>EAR</div> <div>Males 100ug/day</div> <div>Females 100ug/day</div>

<EAR	0		
Magnesium		RDI	EAR
Meets RDI (100%)	20	Males 420mg/day	Males 350mg/day
Meets EAR (100%)	10	Females320mg/day	Females 265mg/day
<EAR	0		
Phosphorus		RDI	EAR
Meets RDI (100%)	20	Males 1,000mg	Males 580 mg/day
Meets EAR (100%)	10	Females 1000mg	Females 580mg/day
<EAR	0		
Selenium		RDI	EAR
Meets RDI (100%)	20	Males 70ug/day	Males 60ug/day
Meets EAR (100%)	10	Females 60mg/day	Females 50ug/day
<EAR	0		
Potassium		AI	
Meets AI (100%)	20	Males 3,800mg/day	
<AI	0	Females 2,800mg/day	
Vitamins			
Vitamin B12		RDI	EAR
Meets RDI (100%)	20	Males 2.4ug/day	Males 2.0ug/day
Meets EAR (100%)	10	Females 2.4ug/day	Females 2.0ug/day
<EAR	0		
Vitamin C		RDI	EAR
Meets RDI (100%)	20	Males 45mg/day	Males 30mg/day
Meets EAR (100%)	10	Females 45mg/day	Females 30mg/day
<EAR	0		
Vitamin E *a-tocopherol equiv		AI	
Meets AI (100%)	20	Males 10mg/day	
<AI	0	Females 7mg/day	
Folate *DFE		RDI	EAR
Meets RDI (100%)	20	Males 400ug/day	Males 320ug/day
Meets EAR (100%)	10	Females 400ug/day	Females 320ug/day
<EAR	0		
Riboflavin		RDI	EAR
Meets RDI (100%)	20	Males 1.3mg/day	Males 1.1mg/day
Meets EAR (100%)	10	Females 1.1mg/day	Females 0.9mg/day

<EAR	0		
Niacin *NE		RDI	EAR
Meets RDI (100%)	20	Males 16mg/day	Males 12mg/day
Meets EAR (100%)	10	Females 14mg/day	Females 11mg/day
<EAR	0		
Vitamin A		RDI	EAR
Meets RDI (100%)	20	Males 900ug/day	Males 625ug/day
Meets EAR (100%)	10	Females 700ug/day	Females 500ug/day
<EAR	0		
Category – Behaviour Change & Sustainability long-term	Score	Comments	
Support & resources i.e. website, group forum	5		
Meal plan	5		
Strategies/help when eating out, bored/comfort eating	5		
Encourage self-monitoring (counting, recording)	5		
Teaches healthy food principles i.e. label and package reading (self-efficacy)	5		
Promote weight cycling – i.e 8 WW Promoted for the short term	- 5		
Does the diet have restrictions i.e. food groups, foods	-5		
Category – Negative effects	Score	Comments	

Headache	-10	Negative cumulative score
Nausea	-10	
Lethargy	-10	
Dizziness	-10	
Diarrhea/constipation	-10	
Category- Cost of diet	Score	Comments
Food Insecurity (average income = \$1,659)		
<30% of average income	10	
>30% of average income	-10	