

Supplement:

Nutritional intake and biomarker status in strict raw food eaters

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Supplemental Table S1. Nutrient intake based on 3-day weighed food records in women and men of raw food eaters, RBVD vegans and RBVD omnivores

	Women			Men			Reference Values
	Raw food (n=5)	Vegan (n=18)	Omnivore (n=14)	Raw food (n=10)	Vegan (n=14)	Omnivore (n=13)	D-A-CH*
Energy (J/d)	5.6 (4.0-6.5) ^{a,b,c}	8.1 (7.1-9.9) ^{a,b}	9.1 (8.1-10.0) ^{a,c}	9.6 (8.1-13.0)	10.7 (9.6-13.2)	10.2 (9.1-12.1)	
Fiber (g/d)	39 (35-43) ^a	42 (34-55) ^{a,d}	23 (18-31) ^{a,d}	62 (53-79) ^{a,c}	52 (43-62) ^{a,d}	26 (23-30) ^{a,c,d}	≥30 mg/d
Protein (g/d)	38 (27-65) ^{a,c}	61 (49-86) ^a	79 (69-90) ^{a,c}	79 (38-109)	94 (71-128)	106 (72-127)	
Carbohydrate (g/d)	119 (93-153) ^{a,b}	231 (208-270) ^{a,b}	205 (186-229) ^a	210 (186-297) ^a	351 (270-400) ^{a,d}	231 (212-282) ^{a,d}	
Saccharose (g/d)	35 (30-49)	48 (36-58)	45 (38-54)	77 (53-105) ^{a,c}	59 (39-79) ^a	35 (29-56) ^{a,c}	
Fat (g/d)	31 (22-74) ^{a,c}	80 (62-109) ^a	98 (89-112) ^{a,c}	116 (76-154)	95 (83-107)	129 (90-155)	30% Energy
Retinol equ. (µg/d)	1538 (958-3432)	2126 (1336-2674)	1455 (1052-1728)	3849 (1656-5052) ^{a,b,c}	1204 (806-2002) ^{a,b}	1340 (1101-2091) ^{a,c}	F: 700; M: 850
Vitamin B12 (µg/d)	0.01 (0.00-0.10) ^{a,c}	0.21 (0.10-0.34) ^{a,d}	4.83 (4.03-5.77) ^{a,c,d}	1.78 (0.07-7.96) ^a	0.48 (0.16-0.95) ^{a,d}	7.72 (5.08-9.96) ^{a,d}	4.0
Vitamin D (µg/d)	0.65 (0.29-2.99)	0.97 (0.34-1.42)	2.08 (1.07-2.51)	6.03 (3.02-12.11) ^{a,b}	0.87 (0.21-1.95) ^{a,b,d}	3.05 (2.19-4.61) ^{a,d}	20
Folic acid (µg/d)	396 (272-412) ^a	440 (309-602) ^{a,d}	294 (244-341) ^{a,d}	553 (474-1168) ^{a,c}	473 (354-682) ^a	326 (260-370) ^{a,c}	300
Vitamin B1 (mg/d)	1.08 (0.82-1.18)	1.74 (1.10-2.01)	1.13 (0.98-1.45)	1.89 (1.28-3.05)	1.77 (1.51-2.27)	1.54 (1.22-1.90)	F: 1.0; M: 1.2-1.3
Vitamin B2 (mg/d)	1.19 (0.97-1.33)	1.27 (0.94-1.93)	1.87 (1.55-2.01)	1.89 (1.64-3.08)	1.84 (1.19-2.21)	2.15 (1.87-2.40)	F: 1.0-1.1; M: 1.3-1.4
Niacin equ. (mg/d)	10.5 (5.4-16.3) ^{a,c}	13.2 (10.9-18.4) ^a	17.5 (15.1-22.3) ^{a,c}	23.3 (15.7-29.2)	14.6 (13.1-20.8)	18.9 (15.0-34.3)	F: 11-13; M: 15-16
Vitamin B6 (mg/d)	2.05 (1.08-2.25)	2.07 (1.64-2.69)	1.63 (1.29-1.77)	3.33 (2.85-5.43) ^{a,b,c}	2.37 (2.14-2.99) ^{a,b}	2.04 (1.55-2.44) ^{a,c}	F: 1.4; M: 1.6
Vitamin C (mg/d)	315 (220-320)	173 (120-276)	131 (98-217)	401 (273-481) ^{a,b,c}	218 (108-317) ^{a,b}	145 (120-176) ^{a,c}	F: 95; M: 110
Vitamin E (mg/d)	17.5 (9.0-24.2) ^a	24.1 (15.0-37.2) ^{a,d}	12.4 (10.9-17.1) ^{a,d}	27.7 (16.5-40.9) ^a	26.6 (17.5-41.0) ^{a,d}	13.9 (11.4-18.8) ^{a,d}	F: 12; M: 13-15
Vitamin K (µg/d)	167 (72-227) ^a	265 (171-390) ^{a,d}	96 (67-338) ^{a,d}	250 (188-336) ^{a,c}	250 (149-473) ^{a,d}	129 (77-175) ^{a,c,d}	F: 60-65; M: 70-80
Panthothenic acid (mg/d)	3.99 (3.65-6.37)	4.35 (3.64-5.07)	4.92 (4.17-7.17)	9.83 (5.92-15.83) ^{a,b,c}	4.51 (4.15-6.30) ^{a,b}	5.38 (4.48-7.58) ^{a,c}	5
Potassium (g/d)	3.56 (3.41-4.33)	4.06 (3.17-4.94)	3.17 (2.87-3.53)	6.69 (5.20-8.44) ^{a,b,c}	4.79 (3.64-6.22) ^{a,b}	3.36 (3.08-4.26) ^{a,c}	4
Calcium (mg/d)	561 (365-632) ^{a,c}	852 (652-1127) ^a	973 (803-1259) ^{a,c}	710 (653-1032)	1156 (707-1439)	1179 (835-1461)	1000
Magnesium (g/d)	407 (289-512) ^a	619 (470-661) ^{a,d}	367 (306-443) ^{a,d}	742 (466-931) ^a	714 (606-904) ^{a,d}	486 (373-536) ^{a,d}	F: 300; M: 350
Zinc (mg/d)	4.5 (2.8-6.8) ^{a,b,c}	10.0 (7.4-12.5) ^{a,b}	11.6 (9.8-12.8) ^{a,c}	13.1 (7.5-18.7)	11.8 (10.7-14.5)	15.3 (12.2-19.3)	F: 7-10; M: 11-16
Iodine (µg/d)	49.6 (37.4-64.6) ^{a,c}	74.8 (48.9-124.6) ^a	100.5 (76.5-142.6) ^{a,c}	78.9 (51.7-106.0) ^a	88.0 (41.6-104.5) ^{a,d}	165.9 (106.2-181.5) ^{a,d}	F: 150; M: 180-200
Iron (mg/d)	10.0 (9.5-15.1) ^a	20.7 (15.4-23.9) ^{a,d}	13.2 (11.6-17.3) ^{a,d}	22.4 (15.8-29.7) ^a	25.0 (19.0-30.2) ^{a,d}	14.8 (13.7-21.5) ^{a,d}	F: 10-15; M: 10

Data presented as median (Q1–Q3). Values sharing a common superscript letter were significantly different from each other. ANOVA with post hoc analysis ($p < 0.05$): a) significant differences within sex strata; b)–d): significant differences between type of diet.

* D-A-CH reference values: common reference values of the nutrition societies of the three D-A-CH countries (Germany [D], Austria [A], and Switzerland [CH]). F: women; M: men [17]

Supplement Table S2. Intake of selected food groups based on 3-day weighed food records in women and men of raw food eaters, RBVD vegans and RBVD omnivores

Food group	Women			Men		
	Raw food (n=5) (g/d)	Vegan (n=18) (g/d)	Omnivore (n=14) (g/d)	Raw food (n=10) (g/d)	Vegan (n=14) (g/d)	Omnivore (n=13) (g/d)
Raw vegetables	310 (292-482)	217 (94-426)	108 (60-145)	566 (227-671) ^{a,b,c}	119 (75-255) ^{a,b}	81 (41-193) ^{a,c}
Cabbage family	0.0 (0.0-51.7)	9.8 (0.0 -36.7)	0.0 (0.0-23.0)	8.8 (0.0-26.0)	48.2 (0.0-83.7)	0.0 (0.0-56.3)
Mushrooms	8.7 (0.0-31.0)	0.0 (0.0-21.3)	0.0 (0.0-0.0)	0.0 (0.0-0.0)	0.0 (0.0-6.7)	0.0 (0.0-12.3)
Germinated cereals/legumes*	0.0 (0.0-4.0)	.	.	0.0 (0.0-173)	.	.
Seaweed / Algae*	0.7 (0.0-1.7)	.	.	0.0 (0.0-1.0)	.	.
Fresh fruit	409 (365-425) ^{a,c}	202 (103-315) ^a	133 (41-215) ^{a,c}	906 (587-1268) ^{a,b,c}	154 (69-191) ^{a,b}	50 (0-211) ^{a,c}
Dried fruits	10.0 (0.0-21.0)	1.2 (0.0-8.0)	0.0 (0.0-0.0)	38.0 (0.0-149.7) ^{a,c}	5.8 (0.0-28.7) ^{a,d}	0.0 (0.0-0.0) ^{a,c,d}
Fruit juice	37.7 (0.0-40.0)	32.8 (1.3-125.3)	27.8 (0.0-115.3)	19.2 (0.0-79.7)	11.2 (0.0-103.7)	76.7 (0.0-162.7)
Nuts/Seeds	32.3 (13.3-56.7)	15.3 (4.3-39.0)	4.7 (0.0-23.7)	64.8 (0.0- 218.3)	20.3 (1.3-37.3)	0.7 (0.0-19.0)
Fat (plant based)	9.0 (0.7-20.7)	16.2 (11.7-26.0)	11.5 (7.7-14.0)	0.0 (0.0-49.0)	23.2 (8.0-34.0)	10.0 (8.7-17.7)
Fat (animal based)	0.0 (0.0-0.0) ^{a,c}	0.0 (0.0-0.0) ^{a,d}	15.0 (5.3-22.7) ^{a,c,d}	0.0 (0.0-0.0) ^a	0.0 (0.0-0.0) ^{a,d}	16.0 (0.0-25.0) ^{a,d}
Meat	0.0 (0.0-0.0) ^{a,c}	0.0 (0.0-0.0) ^{a,d}	83.8 (42.0-131.3) ^{a,c,d}	2.3 (0.0-56.7) ^{a,b}	0.0 (0.0-0.0) ^{a,b,d}	72.3 (0.0-132.7) ^{a,d}
Fish	0.0 (0.0-0.0)	0.0 (0.0-0.0)	0.0 (0.0-0.0)	0.0 (0.0-0.0) ^a	0.0 (0.0-0.0) ^{a,d}	0.0 (0.0-40.3) ^{a,d}
Eggs	0.0 (0.0-0.0) ^{a,c}	0.0 (0.0-0.0) ^{a,d}	17.2 (6.3-27.3) ^{a,c,d}	0.0 (0.0-0.0) ^a	0.0 (0.0-0.0) ^{a,d}	22.7 (8.7-55.3) ^{a,d}
Low-fat dairy products	0.0 (0.0-0.0) ^{a,c}	0.0 (0.0-0.0) ^{a,d}	239.2 (119.0-328.3) ^{a,c,d}	0.0 (0.0-0.0) ^a	0.0 (0.0-0.0) ^{a,d}	259.3 (164.3-429.0) ^{a,d}
Cooked vegetables**	.	178 (134-241)	152 (71-211)	.	178 (81-283)	91 (51-177)
Cooked legumes**	.	51 (4-104) ^a	0 (0-14) ^a	.	51 (0-88) ^a	0 (0-8) ^a
Bread**	.	73 (36-111)	88 (72-119)	.	107 (56-149)	140 (70-175)
Pasta, rice, grain**	.	70 (23-162)	48 (0-117)	.	114 (73-268)	83 (0-130)

Data presented as median with interquartile range (Q1-Q3). Values sharing a common superscript letter were significantly different from each other. ANOVA with post hoc analysis ($p < 0.05$): a) significant differences within sex strata; b)-d): significant differences between type of diet.

Food groups marked with * were not assessed in the RBVD study or with ** were not consumed by the raw food eaters.