

Supplementary materials

Nutritional, Health and Lifestyle Status of a Highly Physically Active and Health-Conscious Long-Term Vegan Man: A Case Report from Slovenia

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Table S1. Body fat distribution and topographic BMD.

| Parameter | AF (%) | GF (%) | A/G ratio | BMD legs (g/cm ²) | BMD pelvis (g/cm ²) | BMD spine (g/cm ²) | BMD arms (g/cm ²) | BMD head (g/cm ²) |
|-----------|-----------|-----------|--------------|----------------------------------|------------------------------------|-----------------------------------|----------------------------------|----------------------------------|
| Result | 11.9 | 15.2 | 0.8 | 1.6 | 1.25 | 1.1 | 1.3 | 2.6 |

AF: android fat. GF: gynoid fat. A/G ratio: android/gynoid. BMD: bone mineral density.

Table S2. Intake of food groups.

| 7-day DR | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Average |
|-------------------------------------|------------------|-------|-------|-------|-------|-------|-------|---------|
| <i>Conventional Food groups (g)</i> | | | | | | | | |
| Grains - all | 381 | 523 | 528 | 554 | 447 | 654 | 550 | 520 |
| Grains - oat flakes | 200 | 363 | 405 | 216 | 238 | 373 | 165 | 280 |
| Fruits - all | 522 | 539 | 523 | 322 | 456 | 614 | 341 | 474 |
| Fruits - berries | 95 | 95 | 95 | 125 | 131 | 147 | 111 | 114 |
| Legumes - all [†] | 165 | 155 | 0 | 256 | 316 | 272 | 133 | 185 |
| Legumes - soy [†] | 75 | 55 | 0 | 42 | 200 | 25 | 0 | 57 |
| Soy milk | 0 | 0 | 500 | 300 | 300 | 500 | 200 | 260 |
| Vegetables - all | 390 | 354 | 309 | 339 | 532 | 313 | 238 | 354 |
| Veg. - cruciferous & green leafy | 230 | 321 | 0 | 156 | 296 | 279 | 172 | 208 |
| Potatoes/tubers | 860 | 150 | 508 | 120 | 577 | 0 | 120 | 336 |
| Seeds - all | 59 | 59 | 76 | 60 | 66 | 67 | 81 | 67 |
| Seeds - flaxseeds | 50 | 50 | 58 | 49 | 48 | 49 | 58 | 52 |
| Nuts - all ^{††} | 32 ^{††} | 63 | 58 | 38 | 62 | 45 | 49 | 50 |
| Nuts - walnuts | 30 | 30 | 28 | 38 | 31 | 18 | 28 | 29 |
| Spices/herbs ^{††} | 18 | 13 | 21 | 60 | 72 | 40 | 36 | 37 |
| High-fat foods [‡] | 0 | 12 | 12 | 12 | 21 | 27 | 115 | 28 |
| Mushrooms | 0 | 130 | 0 | 0 | 0 | 0 | 0 | 19 |
| Iodized salt | 4.1 | 4.1 | 2.7 | 4.6 | 4.1 | 3.4 | 3.9 | 3.8 |
| <i>Supplementations</i> | | | | | | | | |
| Vegan MR | 32 | 64 | 64 | 32 | 64 | 64 | 64 | 55 |
| Vitamin B ₁₂ (1000 µg/d) | 1 | 0 | 0 | 1 | 0 | 0 | 1 | - |
| Omega-3 (EPA and DHA) | 0.625 | 0.625 | 0.625 | 0.625 | 0.625 | 0.625 | 0.625 | 0.625 |
| Vitamin D ₃ (4000 IU/d) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

| | | | | | | | | |
|------------------------------------|---|---|---|-----|-----|---|-----|-----|
| Fiber supplements (g/d) | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Multivitamins (tablets/d) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Herbal tea (dL) [†] | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| Sport drink (portion) [‡] | 1 | 0 | 0 | 0.5 | 0.5 | 0 | 0.5 | 0.5 |

[†]Soy milk excluded. [‡]Brazil nut (2 g). [‡]E.g., low-fat cocoa powder or avocado. [‡]Dry and raw. [†]Filter and as tea extract. [‡]Portion size (27 g).

Table S3. Example of meal plan and lifestyle.

| Meal plan and lifestyle | WEEKDAY | Meal plan and lifestyle | WEEKEND |
|----------------------------------|---|-------------------------------|---|
| Wake up (5:00) | 4000 IU vitamin D3 1.7 g herbal tea extracts | Wake up (7:20) | 4000 IU vitamin D3 1.7 g herbal tea extracts |
| BREAKFAST (6:00) | <i>Shake mix</i> water + 32 g MR + 197 g oat flakes + 48 g flaxseeds + 11 g unshelled sesame seeds + 9 g paddy millet + 62 g blueberries + 42 g raspberries + 39 g dates + 2 g brasil nut + herbs/spices (2.7 g curcumin + 0.7 g ginger + 0.9 g cinnamon + 0.3 g cayenne pepper) 1 tbl multivitamin, 625 mg EPA + DHA + 1000 µg vitamin B12 | BREAKFAST (7:40) | <i>Shake mix</i> water + 32 g MR + 155 g oat flakes + 48 g flaxseeds + 13 g unshelled sesame seeds + 10 g paddy millet + 56 g blueberries, 44 g strawberries + 39 g dates + 2 g brasil nut + herbs/spices (2.7 g curcumin + 0.7 g ginger + 0.9 g cinnamon + 0.3 g cayenne pepper) 1 tbl multivitamin + 625 mg EPA + DHA |
| Hydration (7:00, 9:00) | 2dL thyme and 3 dL peppermint tea | Hydration (10:00) | 2 dL thyme and 3 dL peppermint tea |
| MORNING SNACK (10:00) | <i>Pasta with lentil</i> 170 g raw wheat whole grain pasta + 110 g raw red lentil + 95 g raw broccoli + 20 g soy medallions + herbs/spices (0.6 g curcumin + 0.3 g cayenne pepper + 0.3 g basil + 0.3 g chili + 10 g parsley) + 2 g nori algae + 2 g iodized salt | Uphill hiking (10:00-12:00) | i.e., 400 m differences in altitude average speed 5.9 km/h |
| Hydration (10:30, 12:30) | 2 dL thyme and 3 dL peppermint 1.7 g herbal tea extracts | Hydration (12:00, 14:00) | 2 dL thyme and 3dL peppermint 1.7 g herbal tea |
| BEFORE WORKOUT MEAL (14:30) | <i>"Brownie"</i> 152 g raw beans + 42 g apple + 37 g dried dates + 20 g raw oat flakes + 18 g raw raspberries 12 g low-fat cocoa powder + 0.2 dL unsweetened soy milk 14 g sport drink + 3 dL water | LATE (RECOVERY) SNACK (12:15) | <i>Mixed salad</i> 75 g potatoes + 70 g endive + 80 g broccoli + 60 g tofu + 65 g tomato + 30 g walnut + 10 g red onion + 15 g vinegar + 2.1 g iodized salt <i>pancakes</i> 105 g spelt whole-grain flour + 75 g dates + 190 g apple + 12 g low-fat cocoa powder + 0.5 g iodized salt |
| Resistance workout (16:00-17:00) | free weight, own body weight, stretching | Hydration (16:00) | Herbal tea |
| AFTER WORKOUT MEAL (17:15) | <i>Shake</i> water + 32 g MR | LATE LUNCH (16.50) | <i>Buckwheat porridge with mushrooms</i> |

| | | | |
|--|--|--|------------------|
| <i>Mixed salad</i> | | 170 g buckwheat + 130 g mushroom + 100 g peas + 60 g soya tofu + 33 g non-oiled and non-salted raw peanut + 10 g red onion + 2 g nori algae + herbs/spices (1.2 g curcumin + 0.4 g cayenne pepper + 0.1 g chili + 10 g parsley) + 2 g iodized salt | |
| 860 g raw potatoes + 65 g endive + 75 g raw broccoli + 100 g tofu (55 g roasted) + 70 g tomato + 30 g walnut + 5 g red onion + herbs/spices (0.9 g curcumin + 0.2 g basil + 0.1 g chili) + 20 g vinegar + 2.1 g iodized salt | | 121 g beetroot salad | |
| <hr/> | | | |
| DINNER (18:40) | <i>Broccoli soup with buckwheat porridge</i> | Hydration (19:00) | 3 dL water |
| | 200 g raw broccoli + 160 g raw buckwheat porridge + 75 g tomato + herbs/spices (5 g red onion + 2 g garlic + 0.8 g rosemary + 10 g parsley, 0.7 g curcumin + 0.3 g cayenne pepper + 0.1 g chili) | | |
| <hr/> | | | |
| Hydration (20:00) | 3 dL water | DINNER (19:30) | <i>Shake mix</i> |
| | | 32 g MR + 2 dL unsweetened soya milk + 200 g oat flakes + 10 g flaxseeds + 5 g unshelled sesame seeds + 8 g paddy millet | |
| Sleep (21:30-4:00) | | Sleep (21:30-5:50) | |
| Energy and macronu- trients (foods only) | Energy: 4338 kcal, CHO: 691 (64%), fiber: 118 g (5%), fat: 90 g (19%), protein: 132 g (12%) | Energy: 4355 kcal, CHO: 622 (57%), fiber: 135 g (6%), fat: 105 g (22%), protein: 163 g (15%) | |

*SMR = dietary supplements and (vegan) meal replacement. IU = international units. tbl = tablet. Raw = raw weighted. Cooked = cooked weighted. Breakfast (i.e., shake mix) and mixed salad was prepared raw (except potatoes and tofu (roasted)). Macronutrients content of SMR: MR (32 g): energy: 127 kcal, carbohydrate (CHO): 11 g, fiber: 5.8 g, fat: 3 g, protein: 11 g, EPK + DHK = 6 g, sport drink (14 g): energy: 48 kcal, CHO: 12 g, herbal tea extracts: energy: 6 kcal, CHO: 1.5 g. Habitual PA (e.g., housework) in low, moderate or vigorous-intensity are not included in the table.