Supplementary Material

No changes in dietary intake after quitting smoking; a prospective study in Switzerland

**Pollyanna Patriota1, Idris Guessous2, \*Pedro Marques-Vidal3**

1 Department of Nutrition, Institute of Health Sciences, Federal University of Triangulo Mineiro, Brazil

2 Division of primary care medicine, Department of primary care medicine, Geneva university hospitals, Geneva, Switzerland

3 Department of medicine, internal medicine, Lausanne university hospital (CHUV), rue du Bugnon,46, 1011 Lausanne, Switzerland

**\* Correspondence:**Pedro Marques-Vidal  
[Pedro-Manuel.Marques-Vidal@chuv.ch](mailto:Pedro-Manuel.Marques-Vidal@chuv.ch)

# Supplementary figure 1 legend

Selection procedure.

Other smoking categories include former smokers at both follow-ups and former smokers or never smokers who started smoking between first and second follow-ups.

# Supplementary Data

**Supplementary table 1**: food consumption guidelines of the Swiss society of nutrition

|  |  |
| --- | --- |
| **Food item** | **Recommendation** |
| Fruits | ≥2 portions/day |
| Vegetables | ≥3 portions/day |
| Meat (all types) | ≤5 portions/week |
| Fish | ≥1 portions/week |
| Dairy products | ≥3 portions/day |

**Supplementary table 2**. Characteristics of included and excluded participants, CoLaus study, Lausanne, Switzerland.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Included** | **Excluded** | **P-value** |
| Sample size | 128 | 41 |  |
| Women (%) | 56 (43.8) | 24 (58.5) | 0.099 |
| Age (years) | 56.0 ± 10.0 | 55.5 ± 10.8 | 0.778 |
| Age groups (%) |  |  | 0.755 |
| [40-50[ | 43 (33.6) | 15 (36.6) |  |
| [50-60[ | 46 (35.9) | 14 (34.2) |  |
| [60-70[ | 26 (20.3) | 6 (14.6) |  |
| [70+] | 13 (10.2) | 6 (14.6) |  |
| Married (%) | 68 (53.1) | 22 (53.7) | 0.952 |
| **Before quitting** |  |  |  |
| Weight (kg) | 72.3 ± 15.8 | 69.4 ± 14.5 | 0.309 |
| Body mass index (kg/m2) § | 25.0 ± 4.4 | 25.4 ± 3.9 | 0.550 |
| Body mass index groups (%) |  |  | 0.451 |
| Normal | 69 (55.2) | 18 (43.9) |  |
| Overweight | 42 (33.6) | 17 (41.5) |  |
| Obese | 14 (11.2) | 6 (14.6) |  |
| **After quitting** |  |  |  |
| Weight (kg) | 74.3 ± 16.6 | 72.7 ± 16.0 | 0.581 |
| Body mass index (kg/m2) § | 25.9 ± 4.7 | 26.8 ± 4.9 | 0.308 |

§ N=122 included participants. Results are expressed as number of participants (column percentage) for categorical variables and as average±standard deviation for continuous variables. Between-group comparisons were performed using chi-square test for categorical variables and student’s t-test for continuous variables

**Supplementary table 3.** Anthropometric, physical activity and dietary data before and after quitting, CoLaus study, Lausanne, Switzerland, women.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Before** | **After** | **P-value** |
| Sample size | **56** | **56** |  |
| **Anthropometry** ‡ |  |  |  |
| Weight (kg) | 61.6 ± 10.3 | 63.0 ± 11.2 | 0.010 \* |
| Body mass index (kg/m2) | 23.4 ± 3.7 | 24.1 ± 4.1 | <0.001 \* |
| **Physical activity †** |  |  |  |
| Energy expenditure | 2266 [2030 ; 2522] | 2249 [2037 ; 2524] | 0.797 |
| Sedentarity (%) | 23 (53.5) | 23 (53.5) | 1.000 |
| Total energy intake (kcal) | 1534 [1218 ; 1959] | 1520 [1141 ; 1970] | 0.619 |
| **Macronutrients (g/d)** |  |  |  |
| Total protein | 58 [46 ; 74] | 57 [47 ; 78] | 0.312 |
| Vegetable protein | 18 [14 ; 24] | 18 [13 ; 25] | 0.659 |
| Animal protein | 39 [28 ; 51] | 38 [29 ; 56] | 0.176 |
| Carbohydrates | 180 [140 ; 251] | 175 [123 ; 236] | 0.201 |
| Disaccharides | 91 [66 ; 118] | 86 [59 ; 113] | 0.261 |
| Polysaccharides | 81 [57 ; 107] | 76 [54 ; 115] | 0.429 |
| Total fat | 59 [46 ; 79] | 55 [43 ; 77] | 0.887 |
| SFA | 22 [17 ; 30] | 19 [14 ; 29] | 0.401 |
| MUFA | 24 [19 ; 31] | 25 [18 ; 33] | 0.768 |
| PUFA | 8 [6 ; 10] | 7 [6 ; 10] | 0.454 |
| Alcohol | 3 [0 ; 7] | 3 [0 ; 7] | 0.642 |
| Fibre | 15 [10 ; 20] | 14 [10 ; 20] | 0.781 |
| **Macronutrients (% TEI)** |  |  |  |
| Total protein | 14.5 [13.3 ; 16.5] | 15.3 [13.8 ; 18.5] | 0.007 |
| Vegetable protein | 4.6 [4.0 ; 5.5] | 4.7 [4.1 ; 5.6] | 0.755 |
| Animal protein | 9.6 [8.0 ; 11.8] | 10.7 [8.6 ; 13.5] | 0.025 |
| Carbohydrates | 47.0 [40.9 ; 54.0] | 44.1 [39.9 ; 51.7] | 0.198 |
| Disaccharides | 22.2 [16.4 ; 29.9] | 23.4 [17.3 ; 26.1] | 0.379 |
| Polysaccharides | 21.6 [15.7 ; 24.7] | 20.6 [16.9 ; 24.6] | 0.677 |
| Total fat | 35.0 [28.5 ; 40.0] | 35.1 [31.2 ; 40.4] | 0.755 |
| SFA | 12.6 [9.6 ; 15.0] | 11.8 [9.7 ; 14.3] | 0.636 |
| MUFA | 13.5 [11.3 ; 16.4] | 14.7 [11.7 ; 17.1] | 0.401 |
| PUFA | 4.8 [3.6 ; 5.9] | 4.9 [3.7 ; 5.6] | 0.958 |
| Alcohol |  |  | 0.572 |
| **Micronutrients** |  |  |  |
| Cholesterol (mg/d) | 247 [165 ; 305] | 241 [186 ; 347] | 0.108 |
| Calcium (mg/d) | 836 [625 ; 1183] | 696 [520 ; 1249] | 0.370 |
| Iron (mg/d) | 9.7 [6.8 ; 11.3] | 9.2 [7.3 ; 11.7] | 0.585 |
| Vitamin D | 2 [1.3 ; 2.8] | 2.4 [1.4 ; 4.4] | 0.037 |
| **Foods (g/day)** |  |  |  |
| Dairy | 157 [97 ; 298] | 156 [56 ; 261] | 0.032 |
| Red meat | 24 [13 ; 41] | 30 [17 ; 44] | 0.526 |
| Processed meat | 5 [3 ; 12] | 5 [0 ; 12] | 0.841 |
| Wholegrain | 40 [11 ; 77] | 51 [10 ; 76] | 0.870 |
| Fresh fruits | 204 [76 ; 345] | 200 [83 ; 281] | 0.701 |
| Fresh fruits + fresh juice | 243 [103 ; 386] | 261 [135 ; 371] | 0.900 |
| Any fruit and fruit juice | 322 [134 ; 524] | 324 [167 ; 414] | 0.505 |
| Vegetables | 158 [94 ; 222] | 167 [114 ; 263] | 0.031 |
| Fish, excluding fried | 24 [11 ; 38] | 32 [13 ; 47] | 0.035 |
| Fish, all | 29 [16 ; 46] | 39 [16 ; 58] | 0.053 |
| Ultraprocessed foods | 38 [8 ; 107] | 28 [5 ; 125] | 0.137 |
| **Compliance to guidelines (%)** |  |  |  |
| Fruits ≥2/day | 27 (48.2) | 32 (57.1) | 0.359 |
| Vegetables ≥3/day | 6 (10.7) | 6 (10.7) | 1.000 |
| Meat ≤5/week | 43 (76.8) | 41 (73.2) | 0.754 |
| Fish ≥1/week a | 38 (67.9) | 38 (67.9) | 1.000 |
| Fish ≥1/week b | 26 (46.4) | 29 (51.8) | 0.467 |
| Dairy ≥3/day | 8 (14.3) | 7 (12.5) | 1.000 |

a, excluding fried fish; b, all fish; ‡ on 53 participants; † on 43 participants

SFA, saturated fatty acids; MUFA, monounsaturated fatty acids; PUFA, polyunsaturated fatty acids; TEI, total energy intake.

Results are expressed as number of participants (column percentage) for categorical variables and as average±standard deviation or as median [interquartile range] for continuous variables. Between-group comparisons were performed using McNemar’s test for categorical variables and student’s t-test (\*) or Wilcoxon’s sign test for continuous variables.

**Supplementary table 4.** Anthropometric, physical activity and dietary data before and after quitting, CoLaus study, Lausanne, Switzerland, men.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Before** | **After** | **P-value** |
| Sample size | **72** | **72** |  |
| **Anthropometry** ‡ |  |  |  |
| Weight (kg) | 80.5 ± 14.4 | 83.2 ± 14.5 | <0.001 \* |
| Body mass index (kg/m2) | 26.2 ± 4.6 | 27.2 ± 4.7 | <0.001 \* |
| **Physical activity †** |  |  |  |
| Energy expenditure | 3010 [2652 ; 3552] | 3054 [2603 ; 3640] | 0.523 |
| Sedentarity (%) | 24 (42.1) | 25 (43.9) | 1.000 |
| Total energy intake (kcal) | 2000 [1586 - 2414] | 1909 [1533 - 2375] | 0.186 |
| **Macronutrients (g/d)** |  |  |  |
| Total protein | 72 [57 ; 89] | 71 [57 ; 88] | 0.361 |
| Vegetable protein | 22 [16 ; 29] | 18 [14 ; 27] | 0.220 |
| Animal protein | 50 [37 ; 66] | 50 [38 ; 62] | 0.594 |
| Carbohydrates | 220 [161 ; 286] | 199 [157 ; 265] | 0.327 |
| Disaccharides | 92 [66 ; 133] | 90 [69 ; 119] | 0.953 |
| Polysaccharides | 119 [82 ; 157] | 94 [70 ; 148] | 0.156 |
| Total fat | 76 [58 ; 96] | 72 [51 ; 87] | 0.156 |
| SFA | 31 [22 ; 40] | 26 [19 ; 33] | 0.005 |
| MUFA | 28 [22 ; 37] | 27 [19 ; 35] | 0.417 |
| PUFA | 10 [7 ; 14] | 10 [7 ; 13] | 0.044 |
| Alcohol | 15 [5 ; 28] | 12 [3 ; 27] | 0.742 |
| Fibre | 13 [9 - 20] | 12 [9 - 19] | 0.761 |
| **Macronutrients (% TEI)** |  |  |  |
| Total protein | 14.3 [12.9 - 16.3] | 14.9 [13.1 - 17.6] | 0.228 |
| Vegetable protein | 4.5 [3.7 - 5.0] | 4.3 [3.5 - 5.1] | 0.404 |
| Animal protein | 9.7 [8.0 - 12.3] | 11.0 [8.5 - 13.5] | 0.127 |
| Carbohydrates | 44.0 [38.0 - 49.1] | 43.6 [37.1 - 49.8] | 0.900 |
| Disaccharides | 18.9 [15 - 23.1] | 18.8 [15.1 - 24.3] | 0.087 |
| Polysaccharides | 25.1 [18.1 - 28.6] | 21.7 [16.4 - 29.4] | 0.176 |
| Total fat | 34.1 [29.6 - 37.9] | 33.9 [29.3 - 38.0] | 0.953 |
| SFA | 13.2 [11.2 - 15.4] | 12.8 [10.8 - 14.3] | 0.026 |
| MUFA | 12.7 [10.9 - 15.3] | 13.7 [11.1 - 16.2] | 0.244 |
| PUFA | 4.5 [3.8 - 5.3] | 4.5 [3.8 - 5.5] | 0.900 |
| Alcohol | 4.6 [2.2 - 9.4] | 5.1 [1.0 - 8.9] | 0.309 |
| **Micronutrients** |  |  |  |
| Cholesterol (mg/d) | 322 [264 - 404] | 296 [233 - 395] | 0.184 |
| Calcium (mg/d) | 1069 [725 - 1380] | 836 [610 - 1273] | 0.039 |
| Iron (mg/d) | 10.9 [8.6 - 13.7] | 11.1 [8.5 - 13.3] | 0.740 |
| Vitamin D | 1.9 [1.5 - 2.7] | 2.1 [1.3 - 3.4] | 0.586 |
| **Foods (g/day)** |  |  |  |
| Dairy | 187 [88 - 285] | 149 [93 - 232] | 0.129 |
| Red meat | 46 [28 - 72] | 50 [27 - 74] | 0.534 |
| Processed meat | 15 [7 - 23] | 12 [7 - 19] | 0.215 |
| Wholegrain | 23 [2 - 62] | 16 [4 - 50] | 0.972 |
| Fresh fruits | 96 [45 - 192] | 129 [57 - 223] | 0.140 |
| Fresh fruits + fresh juice | 110 [58 - 213] | 138 [65 - 269] | 0.021 |
| Any fruit and fruit juice | 181 [76 - 309] | 201 [124 - 337] | 0.005 |
| Vegetables | 114 [74 - 165] | 111 [73 - 156] | 0.699 |
| Fish, excluding fried | 18 [13 - 32] | 27 [15 - 40] | 0.109 |
| Fish, all | 26 [18 - 41] | 35 [19 - 52] | 0.137 |
| Ultraprocessed foods | 78 [24 - 167] | 72 [26 - 188] | 0.452 |
| **Compliance to guidelines (%)** ‖ |  |  |  |
| Fruits ≥2/day | 14 (20) | 19 (27.1) | 0.359 |
| Vegetables ≥3/day | 1 (1.4) | 2 (2.9) | 1.000 |
| Meat ≤5/week | 37 (52.9) | 32 (45.7) | 0.458 |
| Fish ≥1/week a | 44 (62.9) | 51 (72.9) | 0.210 |
| Fish ≥1/week b | 18 (25.7) | 29 (41.4) | 0.035 |
| Dairy ≥3/day | 3 (4.3) | 4 (5.7) | 1.000 |

a, excluding fried fish; b, all fish; ‡ on 69 participants; †, on 57 participants; ‖, on 70 participants.

SFA, saturated fatty acids; MUFA, monounsaturated fatty acids; PUFA, polyunsaturated fatty acids; TEI, total energy intake.

Results are expressed as number of participants (column percentage) for categorical variables and as average±standard deviation or as median [interquartile range] for continuous variables. Between-group comparisons were performed using McNemar’s test for categorical variables and student’s t-test (\*) or Wilcoxon’s sign test for continuous variables.

**Supplementary table 5.** Anthropometric, physical activity and dietary data before and after quitting, CoLaus study, Lausanne, Switzerland, normal weight participants.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Before** | **After** | **P-value** |
| Sample size | **69** | **69** |  |
| **Anthropometry** ‡ |  |  |  |
| Weight (kg) | 62.2 ± 9.1 | 64.2 ± 9.9 | <0.001 \* |
| Body mass index (kg/m2) | 22.0 ± 1.9 | 22.9 ± 2.2 | <0.001 |
| **Physical activity †** |  |  |  |
| Energy expenditure | 2449 [2061 ; 2833] | 2421 [2142 ; 2943] | 0.370 |
| Sedentarity (%) | 24 (45.3) | 25 (47.2) | 1.000 |
| Total energy intake (kcal) | 1648 [1361 ; 2207] | 1626 [1347 ; 2261] | 0.717 |
| **Macronutrients (g/d)** |  |  |  |
| Total protein | 62 [50 ; 88] | 64 [49 ; 90] | 0.238 |
| Vegetable protein | 19 [14 ; 27] | 19 [15 ; 27] | 0.817 |
| Animal protein | 43 [33 ; 60] | 46 [31 ; 61] | 0.165 |
| Carbohydrates | 199 [153 ; 271] | 186 [148 ; 250] | 0.329 |
| Disaccharides | 91 [68 ; 118] | 89 [61 ; 114] | 0.476 |
| Polysaccharides | 94 [66 ; 138] | 91 [67 ; 140] | 0.560 |
| Total fat | 62 [50 ; 85] | 67 [49 ; 89] | 0.708 |
| SFA | 23 [18 ; 33] | 23 [17 ; 30] | 0.353 |
| MUFA | 25 [20 ; 34] | 27 [19 ; 36] | 0.461 |
| PUFA | 9 [7 ; 11] | 9 [7 ; 12] | 0.835 |
| Alcohol | 5 [1 ; 16] | 5 [1 ; 13] | 0.715 |
| Fibre | 14 [10 ; 20] | 14 [10 ; 19] | 0.896 |
| **Macronutrients (% cal)** |  |  |  |
| Total protein | 14.4 [13.3 ; 16.8] | 15.3 [13.5 ; 18.6] | 0.022 |
| Vegetable protein | 4.7 [4.0 ; 5.3] | 4.6 [4 ; 5.4] | 0.576 |
| Animal protein | 9.6 [8.4 ; 12.3] | 10.8 [8.5 ; 14.2] | 0.035 |
| Carbohydrates | 45.5 [40.6 ; 51.7] | 44.1 [40.1 ; 50.4] | 0.115 |
| Disaccharides | 19.5 [15.4 ; 28.5] | 20.8 [15.5 ; 24.8] | 0.704 |
| Polysaccharides | 23.2 [18.8 ; 27.0] | 22.5 [17.5 ; 27.6] | 0.905 |
| Total fat | 35.2 [28.7 ; 38.4] | 35.0 [30.6 ; 40.0] | 0.312 |
| SFA | 13 [10.8 ; 15.4] | 12.5 [11 ; 14.3] | 0.436 |
| MUFA | 13.3 [11.1 ; 15.6] | 14.5 [11.6 ; 16.5] | 0.102 |
| PUFA | 4.3 [3.6 ; 5.4] | 4.6 [3.7 ; 5.5] | 0.258 |
| Alcohol | 2.0 [0.5 ; 6.0] | 2.2 [0.4 ; 5.6] | 0.699 |
| **Micronutrients** |  |  |  |
| Cholesterol (mg/d) | 288 [219 ; 357] | 285 [208 ; 409] | 0.233 |
| Calcium (mg/d) | 916 [705 ; 1251] | 760 [584 ; 1259] | 0.200 |
| Iron (mg/d) | 10.0 [7.4 ; 11.6] | 10.3 [7.4 ; 12.9] | 0.356 |
| Vitamin D | 2.1 [1.3 ; 2.7] | 2.2 [1.4 ; 3.6] | 0.070 |
| **Foods (g/day)** |  |  |  |
| Dairy | 146 [83 ; 282] | 146 [69 ; 258] | 0.048 |
| Red meat | 36 [15 ; 62] | 34 [19 ; 55] | 0.857 |
| Processed meat | 7 [3 ; 14] | 7 [2 ; 12] | 0.654 |
| Wholegrain | 37 [13 ; 90] | 45 [13 ; 81] | 0.809 |
| Fresh fruits | 130 [56 ; 280] | 147 [78 ; 246] | 0.566 |
| Fresh fruits + fresh juice | 159 [74 ; 301] | 170 [94 ; 324] | 0.263 |
| Any fruit and fruit juice | 215 [95 ; 387] | 232 [135 ; 368] | 0.509 |
| Vegetables | 134 [84 ; 211] | 147 [89 ; 258] | 0.040 |
| Fish, excluding fried | 24 [13 ; 38] | 31 [13 ; 46] | 0.027 |
| Fish, all | 30 [16 ; 47] | 38 [16 ; 53] | 0.058 |
| Ultraprocessed foods | 45 [11 ; 120] | 38 [7 ; 144] | 0.147 |
| **Compliance to guidelines (%)** |  |  |  |
| Fruits ≥2/day | 22 (31.9) | 28 (40.6) | 0.238 |
| Vegetables ≥3/day | 5 (7.3) | 8 (11.6) | 0.508 |
| Meat ≤5/week | 48 (69.6) | 42 (60.9) | 0.210 |
| Fish ≥1/week a | 45 (65.2) | 47 (68.1) | 0.791 |
| Fish ≥1/week b | 28 (40.6) | 34 (49.3) | 0.238 |
| Dairy ≥3/day | 9 (13.0) | 8 (11.6) | 1.000 |

a, excluding fried fish; b, all fish; ‡ on 68 participants; **†** on 53 participants.

SFA, saturated fatty acids; MUFA, monounsaturated fatty acids; PUFA, polyunsaturated fatty acids; TEI, total energy intake.

Results are expressed as number of participants (column percentage) for categorical variables and as average±standard deviation or as median [interquartile range] for continuous variables. Between-group comparisons were performed using McNemar’s test for categorical variables and student’s t-test (\*) or Wilcoxon’s sign test for continuous variables.

**Supplementary table 6.** Anthropometric, physical activity and dietary data before and after quitting, CoLaus study, Lausanne, Switzerland, overweight participants.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Before** | **After** | **P-value** |
| Sample size | 42 | 42 |  |
| **Anthropometry** ‡ |  |  |  |
| Weight (kg) | 81.4 ± 7.8 | 83.3 ± 9.6 | 0.019 \* |
| Body mass index (kg/m2) | 26.9 ± 1.4 | 27.7 ± 1.7 | 0.003 \* |
| **Physical activity †** |  |  |  |
| Energy expenditure | 2897 [2556 ; 3463] | 2836 [2472 ; 3640] | 0.326 |
| Sedentarity (%) | 15 (44.1) | 14 (41.2) | 1.000 |
| Total energy intake (kcal) | 1962 [1639 ; 2345] | 1774 [1438 ; 2149] | 0.119 |
| **Macronutrients (g/d)** |  |  |  |
| Total protein | 72 [58 ; 88] | 65 [54 ; 84] | 0.116 |
| Vegetable protein | 22 [15 ; 28] | 17 [13 ; 26] | 0.122 |
| Animal protein | 49 [35 ; 65] | 46 [35 ; 58] | 0.263 |
| Carbohydrates | 217 [163 ; 259] | 195 [156 ; 261] | 0.243 |
| Disaccharides | 97 [70 ; 126] | 90 [77 ; 116] | 0.814 |
| Polysaccharides | 104 [75 ; 150] | 84 [62 ; 137] | 0.060 |
| Total fat | 73 [61 ; 94] | 70 [49 ; 81] | 0.029 |
| SFA | 30 [23 ; 36] | 25 [16 ; 32] | 0.012 |
| MUFA | 28 [23 ; 36] | 26 [20 ; 35] | 0.141 |
| PUFA | 11 [8 ; 15] | 9 [6 ; 12] | 0.002 |
| Alcohol | 11 [3 ; 22] | 8 [2 ; 19] | 0.643 |
| Fibre | 14 [10 ; 20] | 12 [9 ; 19] | 0.243 |
| **Macronutrients (% TEI)** |  |  |  |
| Total protein | 14.2 [12.7 ; 15.8] | 15 [13.2 ; 17.4] | 0.163 |
| Vegetable protein | 4.5 [3.7 ; 5.1] | 4.3 [3.4 ; 5.3] | 0.738 |
| Animal protein | 9.8 [8.1 ; 11.3] | 11.0 [8.6 ; 13.1] | 0.285 |
| Carbohydrates | 45.1 [38 ; 50] | 44.6 [37.9 ; 51.8] | 0.738 |
| Disaccharides | 20.2 [15.3 ; 23.1] | 20.3 [15.3 ; 25.3] | 0.102 |
| Polysaccharides | 22.8 [17.5 ; 28.5] | 19.7 [16.2 ; 29.4] | 0.274 |
| Total fat | 34.1 [30.8 ; 39.2] | 34.2 [28.1 ; 39] | 0.442 |
| SFA | 13.2 [11.7 ; 15.2] | 12.5 [10.6 ; 15.7] | 0.087 |
| MUFA | 12.8 [11.4 ; 15.6] | 14 [11.1 ; 16.2] | 0.892 |
| PUFA | 4.8 [3.9 ; 5.8] | 4.5 [3.8 ; 5.8] | 0.097 |
| Alcohol | 4.3 [1.4 ; 8.5] | 3.4 [0.9 ; 7.9] | 0.781 |
| **Micronutrients** |  |  |  |
| Cholesterol (mg/d) | 308 [253 ; 376] | 274 [210 ; 368] | 0.109 |
| Calcium (mg/d) | 978 [725 ; 1400] | 843 [547 ; 1200] | 0.097 |
| Iron (mg/d) | 10.7 [8.6 ; 13.5] | 10.1 [8.1 ; 12.9] | 0.248 |
| Vitamin D | 1.8 [1.5 ; 2.7] | 2.3 [1.4 ; 3.4] | 0.285 |
| **Foods (g/day)** |  |  |  |
| Dairy | 195 [106 ; 280] | 148 [93 ; 226] | 0.163 |
| Red meat | 38 [26 ; 63] | 43 [27 ; 66] | 0.484 |
| Processed meat | 16 [8 ; 23] | 12 [5 ; 17] | 0.049 |
| Wholegrain | 34 [4 ; 63] | 12 [3 ; 54] | 0.353 |
| Fresh fruits | 127 [60 ; 251] | 136 [55 ; 226] | 0.713 |
| Fresh fruits + fresh juice | 176 [65 ; 269] | 156 [69 ; 284] | 0.944 |
| Any fruit and fruit juice | 222 [103 ; 400] | 226 [138 ; 340] | 0.426 |
| Vegetables | 130 [73 ; 191] | 125 [94 ; 157] | 0.325 |
| Fish, excluding fried | 20 [13 ; 32] | 27 [15 ; 46] | 0.272 |
| Fish, all | 26 [18 ; 40] | 37 [21 ; 55] | 0.172 |
| Ultraprocessed foods | 80 [43 ; 188] | 90 [29 ; 198] | 0.705 |
| **Compliance to guidelines (%)** ‖ |  |  |  |
| Fruits ≥2/day | 14 (34.2) | 14 (34.2) | 1.000 |
| Vegetables ≥3/day | 1 (2.4) | 0 (0) | 1.000 |
| Meat ≤5/week | 23 (56.1) | 23 (56.1) | 1.000 |
| Fish ≥1/week a | 28 (68.3) | 31 (75.6) | 0.581 |
| Fish ≥1/week b | 11 (26.8) | 18 (43.9) | 0.119 |
| Dairy ≥3/day | 1 (2.4) | 3 (7.3) | 0.625 |

a, excluding fried fish; b, all fish; ‡ on 40 participants; † on 34 participants; **‖**, on 41 participants.

SFA, saturated fatty acids; MUFA, monounsaturated fatty acids; PUFA, polyunsaturated fatty acids; TEI, total energy intake.

Results are expressed as number of participants (column percentage) for categorical variables and as average±standard deviation or as median [interquartile range] for continuous variables. Between-group comparisons were performed using McNemar’s test for categorical variables and student’s t-test (\*) or Wilcoxon’s sign test for continuous variables.

**Supplementary table 7.** Anthropometric, physical activity and dietary data before and after quitting, CoLaus study, Lausanne, Switzerland, obese participants.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Before** | **After** | **P-value** |
| Sample size | **14** | **14** |  |
| **Anthropometry** |  |  |  |
| Weight (kg) | 95.5 ± 18.9 | 98.3 ± 19 | 0.071 \* |
| Body mass index (kg/m2) | 33.8 ± 4.4 | 35.2 ± 4.5 | 0.020 \* |
| **Physical activity †** |  |  |  |
| Energy expenditure | 2713 [2533 ; 3795] | 2666 [2252 ; 3200] | 0.110 |
| Sedentarity (%) | 8 (61.5) | 9 (69.2) | 1.000 |
| Total energy intake (kcal) | 1838 [1116 ; 2401] | 1614 [1149 ; 2251] | 0.463 |
| **Macronutrients (g/d)** |  |  |  |
| Total protein | 69 [46 ; 88] | 58 [50 ; 85] | 0.426 |
| Vegetable protein | 17 [12 ; 26] | 15 [10 ; 25] | 0.670 |
| Animal protein | 49 [37 ; 53] | 46 [33 ; 57] | 0.502 |
| Carbohydrates | 153 [133 ; 307] | 175 [103 ; 255] | 0.502 |
| Disaccharides | 86 [57 ; 152] | 80 [63 ; 117] | 0.761 |
| Polysaccharides | 71 [61 ; 139] | 69 [43 ; 136] | 0.715 |
| Total fat | 71 [52 ; 95] | 55 [47 ; 82] | 0.463 |
| SFA | 31 [14 ; 38] | 20 [15 ; 29] | 0.153 |
| MUFA | 27 [20 ; 38] | 22 [17 ; 37] | 0.670 |
| PUFA | 9 [6 ; 13] | 9 [5 ; 11] | 0.326 |
| Alcohol | 10 [1 ; 17] | 8 [1 ; 27] | 0.658 |
| Fibre | 12 [9 ; 17] | 11 [7 ; 23] | 0.715 |
| **Macronutrients (% TEI)** |  |  |  |
| Total protein | 14.9 [13.3 ; 16.5] | 15.0 [13.5 ; 18.3] | 0.903 |
| Vegetable protein | 4.2 [3.0 ; 4.9] | 4.0 [3.6 ; 4.4] | 0.426 |
| Animal protein | 10.8 [7.9 ; 13.9] | 10.6 [9.1 ; 14.5] | 0.502 |
| Carbohydrates | 40.9 [34.7 ; 54.0] | 41.3 [38.5 ; 44.1] | 0.855 |
| Disaccharides | 22.4 [18.1 ; 28.9] | 23.3 [17.7 ; 30.1] | 0.761 |
| Polysaccharides | 19.0 [15.2 ; 26.8] | 18.3 [13.8 ; 22.0] | 0.326 |
| Total fat | 33.8 [29.6 ; 42.0] | 35.7 [31.5 ; 43.7] | 1.000 |
| SFA | 12.7 [9.8 ; 17.8] | 12.3 [10.7 ; 14.3] | 0.241 |
| MUFA | 14.6 [11.3 ; 18.3] | 14.6 [12.4 ; 16.9] | 0.670 |
| PUFA | 4.9 [4.3 ; 5.8] | 4.7 [4.0 ; 5.4] | 0.903 |
| Alcohol | 3.5 [0.8 ; 7.0] | 3.6 [0.6 ; 10.8] | 0.761 |
| **Micronutrients** |  |  |  |
| Cholesterol (mg/d) | 269 [146 ; 409] | 247 [198 ; 340] | 0.855 |
| Calcium (mg/d) | 1121 [539 ; 1688] | 898 [627 ; 1417] | 0.542 |
| Iron (mg/d) | 10.6 [6.9 ; 12.3] | 9.6 [6.3 ; 12.8] | 1.000 |
| Vitamin D | 1.9 [1.4 ; 3.7] | 1.9 [1.0 ; 3.0] | 0.583 |
| **Foods (g/day)** |  |  |  |
| Dairy | 206 [57 ; 478] | 211 [71 ; 305] | 0.414 |
| Red meat | 36 [19 ; 71] | 47 [30 ; 61] | 1.000 |
| Processed meat | 15 [3 ; 28] | 18 [10 ; 22] | 0.636 |
| Wholegrain | 19 [0 ; 51] | 13 [5 ; 44] | 0.581 |
| Fresh fruits | 190 [83 ; 320] | 250 [31 ; 370] | 0.326 |
| Fresh fruits + fresh juice | 190 [125 ; 320] | 341 [210 ; 370] | 0.040 |
| Any fruit and fruit juice | 300 [171 ; 380] | 352 [228 ; 553] | 0.110 |
| Vegetables | 114 [84 ; 178] | 106 [75 ; 181] | 0.952 |
| Fish, excluding fried | 19 [9 ; 26] | 19 [15 ; 32] | 0.542 |
| Fish, all | 23 [14 ; 39] | 32 [19 ; 46] | 0.853 |
| Ultraprocessed foods | 56 [7 ; 157] | 26 [11 ; 75] | 0.564 |
| **Compliance to guidelines (%)** |  |  |  |
| Fruits ≥2/day | 4 (30.8) | 8 (61.5) | 0.219 |
| Vegetables ≥3/day | 0 (0) | 0 (0) | NC |
| Meat ≤5/week | 6 (46.2) | 7 (53.9) | 1.000 |
| Fish ≥1/week a | 7 (53.9) | 9 (69.2) | 0.625 |
| Fish ≥1/week b | 4 (30.8) | 4 (30.8) | 1.000 |
| Dairy ≥3/day | 1 (7.7) | 0 (0) | 1.000 |

a, excluding fried fish; b, all fish; †, on 13 participants.

SFA, saturated fatty acids; MUFA, monounsaturated fatty acids; PUFA, polyunsaturated fatty acids; TEI, total energy intake.

Results are expressed as number of participants (column percentage) for categorical variables and as average±standard deviation or as median [interquartile range] for continuous variables. Between-group comparisons were performed using McNemar’s test for categorical variables and student’s t-test (\*) or Wilcoxon’s sign test for continuous variables.

**Supplementary table 8.** Changes between baseline and follow-up in anthropometry, physical activity and dietary intake between quitters and maintainers, and between quitters and never smokers, matched for gender and age, CoLaus study, Lausanne, Switzerland, women.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Quitters** | **Maintainers** | **Never smokers** | **P-value §** | **P-value ǂ** |
| Sample size | **56** | **56** | **56** |  |  |
| **Anthropometry** ‡ |  |  |  |  |  |
| Weight (kg) | 1.4 ± 3.7 | 0.8 ± 4.7 | -1.0 ± 5.0 | 0.517 \* | 0.008 \* |
| Body mass index (kg/m2) | 0.8 ± 1.4 | 0.5 ± 1.7 | -0.1 ± 2.0 | 0.429 \* | 0.011 \* |
| Energy expenditure (kcal) | -31 [-148 ; 132] | -36 [-207 ; 175] | -49 [-243 ; 137] | 0.808 | 0.370 |
| Total energy intake (kcal) | -31 [-351 ; 308] | 30 [-234 ; 373] | -56 [-513 ; 312] | 0.630 | 0.489 |
| **Macronutrients (g/d)** |  |  |  |  |  |
| Total protein | 3 [-10 ; 17] | 6 [-8 ; 16] | -4 [-19 ; 12] | 0.630 | 0.034 |
| Vegetable protein | 0 [-5 ; 4] | 1 [-3 ; 5] | -2 [-7 ; 4] | 0.454 | 0.198 |
| Animal protein | 4 [-6 ; 14] | 5 [-7 ; 14] | -5 [-9 ; 7] | 0.596 | 0.046 |
| Carbohydrates | -16 [-63 ; 38] | 3 [-34 ; 40] | -1 [-76 ; 52] | 0.607 | 0.780 |
| Disaccharides | -8 [-32 ; 26] | 0 [-30 ; 15] | 1 [-29 ; 24] | 0.997 | 0.509 |
| Polysaccharides | -6 [-30 ; 20] | 4 [-17 ; 33] | -2 [-56 ; 18] | 0.275 | 0.089 |
| Total fat | -1 [-16 ; 11] | 4 [-10 ; 20] | -2 [-15 ; 15] | 0.473 | 0.713 |
| SFA | -1 [-7 ; 5] | 2 [-3 ; 7] | -1 [-6 ; 7] | 0.244 | 0.619 |
| MUFA | 1 [-7 ; 7] | 2 [-4 ; 11] | -1 [-7 ; 6] | 0.439 | 0.499 |
| PUFA | 0 [-2 ; 2] | 0 [-1 ; 3] | -1 [-2 ; 1] | 0.546 | 0.286 |
| Alcohol | 0 [-1 ; 2] | 0 [-2 ; 3] | 0 [-1 ; 1] | 0.587 | 0.603 |
| Fibre | 0 [-3 ; 3] | 0 [-3 ; 4] | -1 [-6 ; 4] | 0.894 | 0.624 |
| **Macronutrients (% TEI)** |  |  |  |  |  |
| Total protein | 0.7 [-0.5 ; 2.9] | 0.6 [-1.4 ; 2.8] | -0.7 [-2.0 ; 1.3] | 0.568 | 0.007 |
| Vegetable protein | 0 [-0.6 ; 0.7] | 0 [-0.8 ; 0.9] | -0.2 [-1.0 ; 0.9] | 0.805 | 0.297 |
| Animal protein | 0.5 [-0.8 ; 3.2] | 0.9 [-1.8 ; 3.2] | -0.3 [-2.2 ; 2.2] | 0.805 | 0.041 |
| Carbohydrates | -2.9 [-7.3 ; 5.4] | -1.6 [-8.9 ; 0.8] | -2.6 [-7.8 ; 5.7] | 0.264 | 0.843 |
| Disaccharides | -1.0 [-6.3 ; 3.8] | -3.1 [-7.0 ; 0.4] | 1.3 [-4.2 ; 6.3] | 0.088 | 0.158 |
| Polysaccharides | -0.7 [-4.6 ; 4.4] | 1.2 [-4.9 ; 6.3] | -1.5 [-8.5 ; 4.8] | 0.671 | 0.131 |
| Total fat | 1.1 [-6.3 ; 6.7] | 1.8 [-3.0 ; 7.2] | 2.3 [-3.9 ; 6.8] | 0.086 | 0.392 |
| SFA | 0 [-2.7 ; 2.1] | 0.6 [-1.2 ; 3.5] | 0.7 [-2.0 ; 3.1] | 0.029 | 0.104 |
| MUFA | 0.4 [-2.9 ; 3.5] | 1.3 [-1.5 ; 4.2] | 0.8 [-1.8 ; 3.2] | 0.271 | 0.837 |
| PUFA | 0.1 [-0.7 ; 0.8] | 0.1 [-0.7 ; 1.3] | -0.2 [-1.2 ; 0.8] | 0.406 | 0.613 |
| Alcohol | 0 [-0.5 ; 1.1] | 0 [-1.0 ; 0.6] | 0 [-0.3 ; 0.4] | 0.796 | 0.587 |
| **Micronutrients** |  |  |  |  |  |
| Cholesterol (mg/d) | 27 [-46 ; 97] | 54 [-16 ; 116] | -11 [-71 ; 57] | 0.473 | 0.058 |
| Calcium (mg/d) | -49 [-285 ; 201] | 50 [-205 ; 288] | -1 [-236 ; 332] | 0.590 | 0.659 |
| Iron (mg/d) | 0.4 [-1.9 ; 2.2] | 0.6 [-1.4 ; 2.0] | -0.8 [-3.2 ; 1.6] | 0.818 | 0.036 |
| Vitamin D | 0.2 [-0.4 ; 1.2] | 0.1 [-0.6 ; 0.7] | -0.1 [-0.5 ; 0.8] | 0.055 | 0.357 |
| **Foods (g/day)** |  |  |  |  |  |
| Dairy | -40 [-81 ; 25] | 13 [-89 ; 66] | -4 [-83 ; 61] | 0.301 | 0.380 |
| Red meat | 0 [-9 ; 14] | 7 [-7 ; 23] | -8 [-23 ; 6] | 0.382 | 0.073 |
| Processed meat | 0 [-3 ; 2] | 0 [-4 ; 5] | 0 [-4 ; 4] | 0.693 | 0.504 |
| Wholegrain | 0 [-21 ; 22] | 0 [-16 ; 20] | 0 [-41 ; 16] | 0.786 | 0.590 |
| Fresh fruits | -3 [-122 ; 106] | -8 [-144 ; 42] | -4 [-119 ; 59] | 0.383 | 0.856 |
| Fresh fruits + fresh juice | 3 [-155 ; 143] | -7 [-144 ; 46] | 0 [-108 ; 147] | 0.264 | 0.724 |
| Any fruit and fruit juice | 1 [-193 ; 124] | -36 [-144 ; 38] | 13 [-143 ; 170] | 0.624 | 0.383 |
| Vegetables | 32 [-31 ; 85] | 7 [-43 ; 95] | -3 [-71 ; 69] | 0.958 | 0.142 |
| Fish, excluding fried | 2 [-3 ; 16] | 2 [-10 ; 14] | 0 [-10 ; 7] | 0.388 | 0.086 |
| Fish, all | 2 [-8 ; 16] | 2 [-10 ; 13] | 0 [-16 ; 12] | 0.383 | 0.061 |
| Ultraprocessed foods | -4 [-25 ; 5] | 1 [-35 ; 30] | 0 [-46 ; 15] | 0.894 | 0.521 |

‡ on 53 participants; §, comparing quitters to maintainers; **ǂ** comparing quitters to never smokers.

SFA, saturated fatty acids; MUFA, monounsaturated fatty acids; PUFA, polyunsaturated fatty acids; TEI, total energy intake.

For each participant, the difference between data collected in 2014-2017 and data collected in 2009-2012 were computed. Results are expressed as average±standard deviation or as median [interquartile range]. Between-group comparisons were performed using student’s t-test (\*) or Wilcoxon sign test for continuous variables.

**Supplementary table 9.** Changes between baseline and follow-up in anthropometry, physical activity and dietary intake between quitters and maintainers, and between quitters and never smokers, matched for gender and age, CoLaus study, Lausanne, Switzerland, men.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Quitters** | **Maintainers** | **Never smokers** | **P-value §** | **P-value ǂ** |
| Sample size | **72** | **72** | **72** |  |  |
| **Anthropometry** ‡ |  |  |  |  |  |
| Weight (kg) | 2.7 ± 4.5 | -0.5 ± 4.8 | 0.2 ± 4.9 | <0.001 \* | 0.003 \* |
| Body mass index (kg/m2) | 1.0 ± 1.4 | 0 ± 1.6 | 0.2 ± 1.5 | <0.001 \* | 0.002 \* |
| Energy expenditure (kcal) | -67 [-402 ; 370] | 12 [-279 ; 308] | -121 [-429 ; 131] | 0.324 | 0.351 |
| Total energy intake (kcal) | -114 [-497 ; 335] | 150 [-308 ; 450] | -35 [-423 ; 310] | 0.080 | 0.598 |
| **Macronutrients (g/d)** |  |  |  |  |  |
| Total protein | -4 [-15 ; 13] | 2 [-15 ; 17] | -4 [-17 ; 13] | 0.480 | 0.358 |
| Vegetable protein | -2 [-7 ; 5] | 0 [-3 ; 5] | 0 [-7 ; 4] | 0.176 | 0.757 |
| Animal protein | -2 [-15 ; 10] | 2 [-15 ; 17] | 1 [-10 ; 12] | 0.723 | 0.189 |
| Carbohydrates | -10 [-62 ; 42] | 10 [-35 ; 51] | -10 [-61 ; 40] | 0.272 | 0.834 |
| Disaccharides | 0 [-26 ; 27] | 6 [-24 ; 27] | -2 [-27 ; 22] | 0.327 | 0.993 |
| Polysaccharides | -9 [-40 ; 25] | 5 [-23 ; 26] | 0 [-35 ; 27] | 0.148 | 0.641 |
| Total fat | -6 [-20 ; 16] | 2 [-11 ; 17] | -1 [-16 ; 12] | 0.067 | 0.182 |
| SFA | -3 [-10 ; 3] | -1 [-7 ; 7] | -1 [-9 ; 5] | 0.027 | 0.130 |
| MUFA | -2 [-7 ; 8] | 1 [-4 ; 7] | -2 [-5 ; 6] | 0.182 | 0.426 |
| PUFA | -1 [-3 ; 1] | 0 [-2 ; 4] | 0 [-3 ; 3] | 0.052 | 0.100 |
| Alcohol | 1 [-7 ; 4] | 0 [-4 ; 7] | 0 [-2 ; 3] | 0.537 | 0.530 |
| Fibre | 0 [-4 ; 4] | 1 [-2 ; 5] | -1 [-4 ; 2] | 0.180 | 0.962 |
| **Macronutrients (% TEI)** |  |  |  |  |  |
| Total protein | 0.1 [-1.8 ; 2.5] | -0.2 [-2.3 ; 1.7] | 0.5 [-1.4 ; 2.0] | 0.182 | 0.778 |
| Vegetable protein | 0 [-0.9 ; 0.6] | -0.1 [-0.6 ; 0.9] | -0.2 [-0.8 ; 0.7] | 0.508 | 0.694 |
| Animal protein | 0.6 [-1.6 ; 3.5] | -0.6 [-2.7 ; 1.6] | 0.3 [-1.3 ; 2.3] | 0.154 | 0.774 |
| Carbohydrates | -0.1 [-4.5 ; 3.6] | 0.1 [-4.8 ; 5.6] | -1.0 [-5.9 ; 3.7] | 0.727 | 0.401 |
| Disaccharides | 0.7 [-2.1 ; 4.5] | -0.6 [-4.4 ; 4.0] | 0.4 [-3.7 ; 4.3] | 0.171 | 0.308 |
| Polysaccharides | -0.8 [-6.2 ; 3.2] | -0.4 [-5.8 ; 5.2] | -1.5 [-5.9 ; 4.2] | 0.583 | 0.953 |
| Total fat | 0.3 [-3.4 ; 3.5] | -1.6 [-4.7 ; 3.3] | 0.9 [-3.5 ; 5.3] | 0.641 | 0.473 |
| SFA | -0.8 [-2.9 ; 1.4] | -0.9 [-2.5 ; 1.4] | 0.4 [-2.4 ; 1.7] | 0.702 | 0.287 |
| MUFA | 0.3 [-1.1 ; 2.2] | -0.4 [-2.2 ; 2.0] | 0.4 [-1.9 ; 2.9] | 0.473 | 0.657 |
| PUFA | 0 [-0.7 ; 0.8] | 0.1 [-0.7 ; 1.0] | 0.2 [-0.6 ; 1.5] | 0.459 | 0.217 |
| Alcohol | -0.3 [-2.1 ; 1.0] | -0.1 [-2 ; 3.7] | 0.1 [-0.6 ; 1.2] | 0.379 | 0.169 |
| **Micronutrients** |  |  |  |  |  |
| Cholesterol (mg/d) | -34 [-85 ; 70] | 20 [-33 ; 103] | 10 [-66 ; 72] | 0.015 | 0.111 |
| Calcium (mg/d) | -109 [-462 ; 139] | 90 [-321 ; 377] | -72 [-364 ; 214] | 0.041 | 0.426 |
| Iron (mg/d) | -0.3 [-2.3 ; 2] | 0.2 [-2 ; 2.6] | -0.4 [-2.7 ; 2.3] | 0.690 | 0.967 |
| Vitamin D | -0.1 [-0.6 ; 1] | 0.6 [-0.4 ; 1.6] | 0.1 [-0.7 ; 1.7] | 0.099 | 0.456 |
| **Foods (g/day)** |  |  |  |  |  |
| Dairy | -17 [-81 ; 38] | -4 [-58 ; 66] | -6 [-64 ; 53] | 0.392 | 0.372 |
| Red meat | 0 [-17 ; 23] | -6 [-38 ; 17] | 0 [-21 ; 24] | 0.276 | 0.837 |
| Processed meat | -1 [-12 ; 6] | -1 [-11 ; 8] | 2 [-6 ; 7] | 0.526 | 0.256 |
| Wholegrain | 0 [-15 ; 22] | 2 [-7 ; 28] | 0 [-21 ; 6] | 0.284 | 0.859 |
| Fresh fruits | 15 [-31 ; 70] | 18 [-18 ; 126] | -13 [-71 ; 49] | 0.144 | 0.526 |
| Fresh fruits + fresh juice | 32 [-28 ; 80] | 22 [-26 ; 133] | -19 [-83 ; 49] | 0.675 | 0.129 |
| Any fruit and fruit juice | 37 [-25 ; 126] | 6 [-71 ; 123] | -25 [-100 ; 79] | 0.386 | 0.013 |
| Vegetables | -12 [-38 ; 34] | -4 [-39 ; 42] | 10 [-33 ; 57] | 0.883 | 0.321 |
| Fish, excluding fried | 2 [-7 ; 14] | 7 [-4 ; 23] | 0 [-13 ; 13] | 0.276 | 0.140 |
| Fish, all | 2 [-12 ; 17] | 8 [-6 ; 22] | -2 [-15 ; 16] | 0.425 | 0.168 |
| Ultraprocessed foods | -5 [-56 ; 39] | -2 [-50 ; 24] | -4 [-43 ; 33] | 0.825 | 0.847 |

§, comparing quitters to maintainers; **ǂ** comparing quitters to never smokers.

SFA, saturated fatty acids; MUFA, monounsaturated fatty acids; PUFA, polyunsaturated fatty acids; TEI, total energy intake.

For each participant, the difference between data collected in 2014-2017 and data collected in 2009-2012 were computed Results are expressed as average±standard deviation or as median [interquartile range]. ‡ N=69 participants. Between-group comparisons were performed using student’s t-test (\*) or Wilcoxon sign test for continuous variables.

**Supplementary table 10.** Changes between baseline and follow-up in anthropometry, physical activity and dietary intake according to time since quitting, CoLaus study, Lausanne, Switzerland.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **≤1 year** | **>1 and ≤2 years** | **>2 years** | **P-value** |
| Sample size | **18** | **15** | **35** |  |
| **Anthropometry** ‡ |  |  |  |  |
| Weight (kg) | 2.8 ± 4.8 | 3.1 ± 3.4 | 2.3 ± 5.0 | 0.832 \* |
| Body mass index (kg/m2) | 1.3 ± 1.8 | 1.2 ± 1.3 | 1.0 ± 1.5 | 0.753 \* |
| Energy expenditure **†** | -133 [-324 ; 118] | -107 [-462 ; 370] | 105 [-86 ; 390] | 0.146 |
| Total energy intake (kcal) | -211 [-373 ; 27] | 10 [-299 ; 468] | 108 [-528 ; 411] | 0.488 |
| **Macronutrients (g/d)** |  |  |  |  |
| Total protein | 1 [-21 ; 21] | 12 [-4 ; 41] | 2 [-18 ; 18] | 0.177 |
| Vegetable protein | 0 [-4 ; 3] | 1 [-5 ; 5] | 0 [-3 ; 4] | 0.941 |
| Animal protein | 1 [-15 ; 15] | 5 [-2 ; 30] | 0 [-17 ; 13] | 0.182 |
| Carbohydrates | -18 [-57 ; 42] | -8 [-50 ; 57] | 8 [-59 ; 67] | 0.683 |
| Disaccharides | -7 [-24 ; 14] | -5 [-25 ; 24] | 7 [-27 ; 44] | 0.461 |
| Polysaccharides | 3 [-32 ; 32] | -6 [-29 ; 37] | -6 [-27 ; 20] | 0.885 |
| Total fat | -12 [-20 ; -1] | 7 [-7 ; 22] | -6 [-31 ; 23] | 0.202 |
| SFA | -5 [-9 ; 1] | 1 [-4 ; 12] | -4 [-12 ; 5] | 0.163 |
| MUFA | -3 [-7 ; 0] | 3 [-4 ; 10] | -3 [-12 ; 9] | 0.310 |
| PUFA | -2 [-2 ; -1] | 1 [-1 ; 2] | -1 [-4 ; 2] | 0.064 |
| Alcohol | 0 [-3 ; 3] | -2 [-8 ; 1] | 0 [-3 ; 5] | 0.483 |
| Fibre | 0 [-4 ; 2] | 3 [-3 ; 7] | 0 [-2 ; 3] | 0.622 |
| **Macronutrients (% TEI)** |  |  |  |  |
| Total protein | 0.6 [-2.1 ; 4.1] | 1.6 [-0.3 ; 4.8] | 0.5 [-1.5 ; 2.5] | 0.183 |
| Vegetable protein | 0.2 [-0.9 ; 1] | 0 [-1.5 ; 1.3] | 0.2 [-0.5 ; 0.9] | 0.780 |
| Animal protein | 0.7 [-3.2 ; 3.9] | 3.4 [-0.2 ; 5.1] | 0 [-2.0 ; 2.8] | 0.126 |
| Carbohydrates | -0.7 [-5.7 ; 3.4] | -4.4 [-10.3 ; 3.5] | 4.4 [-2.6 ; 7.9] | 0.082 |
| Disaccharides | -0.6 [-4.8 ; 3.7] | -2.2 [-5.9 ; -0.4] | 1.9 [-1.4 ; 8.9] | 0.043 |
| Polysaccharides | 0.4 [-6.9 ; 4.9] | -0.5 [-8.3 ; 7.5] | -0.4 [-3.4 ; 4.9] | 0.908 |
| Total fat | -2.4 [-4.9 ; 4.4] | 3.3 [-3.7 ; 8.6] | -2.6 [-7.6 ; 3.6] | 0.111 |
| SFA | -1.2 [-2.1 ; 0.9] | 2.3 [-1.4 ; 3.9] | -1.3 [-3.7 ; 1.5] | 0.109 |
| MUFA | -0.1 [-1.3 ; 2.2] | 0.6 [-1.8 ; 3.2] | -0.5 [-3.1 ; 1.8] | 0.327 |
| PUFA | -0.3 [-1.1 ; 0.5] | 0 [-0.4 ; 0.8] | 0 [-1.7 ; 0.6] | 0.236 |
| Alcohol | 0.1 [-1.3 ; 2.2] | -1.1 [-3.9 ; 0.3] | 0 [-2.1 ; 1.1] | 0.196 |
| **Micronutrients** |  |  |  |  |
| Cholesterol (mg/d) | -2 [-64 ; 31] | 94 [-60 ; 171] | 0 [-85 ; 83] | 0.179 |
| Calcium (mg/d) | 24 [-462 ; 140] | 66 [-159 ; 113] | -99 [-485 ; 249] | 0.486 |
| Iron (mg/d) | -0.3 [-2.0 ; 2.3] | 1 [-1.5 ; 4.2] | 0.4 [-2.0 ; 2.4] | 0.575 |
| Vitamin D | 0.2 [-0.3 ; 0.5] | 0 [-1.6 ; 0.7] | 0.2 [-0.5 ; 1.4] | 0.310 |
| **Foods (g/day)** |  |  |  |  |
| Dairy | -32 [-74 ; 2] | -1 [-58 ; 20] | -17 [-80 ; 48] | 0.413 |
| Red meat | -5 [-15 ; 30] | 5 [-8 ; 30] | 1 [-24 ; 18] | 0.644 |
| Processed meat | 0 [-4 ; 3] | -1 [-12 ; 1] | 0 [-13 ; 7] | 0.615 |
| Wholegrain | 0 [-17 ; 18] | 0 [-11 ; 19] | 2 [-17 ; 25] | 0.766 |
| Fresh fruits | -10 [-102 ; 29] | 37 [-188 ; 251] | 46 [-4 ; 114] | 0.085 |
| Fresh fruits + fresh juice | -14 [-35 ; 40] | 63 [34 ; 251] | 45 [-10 ; 216] | 0.082 |
| Any fruit and fruit juice | -25 [-102 ; 8] | 34 [-65 ; 158] | 81 [-45 ; 216] | 0.033 |
| Vegetables | 28 [-20 ; 112] | 10 [-32 ; 38] | -17 [-61 ; 42] | 0.229 |
| Fish, excluding fried | -2 [-3 ; 5] | 1 [-7 ; 15] | 3 [-8 ; 16] | 0.590 |
| Fish, all | 2 [-8 ; 13] | 5 [-5 ; 15] | 2 [-12 ; 23] | 0.842 |
| Ultraprocessed foods | -2 [-14 ; 45] | 0 [-50 ; 30] | -4 [-36 ; 59] | 0.786 |

SFA, saturated fatty acids; MUFA, monounsaturated fatty acids; PUFA, polyunsaturated fatty acids; TEI, total energy intake.

‡ for 64 participants (16 / 15 / 33); **†** for 48 participants (14 / 10 / 24).

For each participant, the difference between data collected in 2014-2017 and data collected in 2009-2012 were computed. Results are expressed as average±standard deviation or as median [interquartile range]. Between-group comparisons were performed using analysis of variance (\*) or Kruskal-Wallis test for continuous variables.

**Supplementary table 11.** Correlations between changes between baseline and follow-up in anthropometry and dietary and time since quitting or weight changes, CoLaus study, Lausanne, Switzerland.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Time since quitting** | **P-value** | **Weight changes** | **P-value** |
| Sample size | **68** |  | **122** |  |
| Weight (kg) ‡ | -0.033 | 0.802 | - |  |
| Body mass index (kg/m2) ‡ | -0.026 | 0.844 | - |  |
| Total energy intake (kcal) | 0.040 | 0.748 | -0.033 | 0.797 |
| **Macronutrients (g/d)** |  |  |  |  |
| Total protein | -0.072 | 0.579 | 0.042 | 0.747 |
| Vegetable protein | -0.047 | 0.719 | -0.081 | 0.531 |
| Animal protein | -0.072 | 0.580 | 0.034 | 0.795 |
| Carbohydrates | -0.005 | 0.969 | -0.043 | 0.739 |
| Disaccharides | 0.036 | 0.781 | -0.072 | 0.577 |
| Polysaccharides | -0.075 | 0.561 | -0.045 | 0.727 |
| Total fat | -0.005 | 0.972 | -0.083 | 0.522 |
| SFA | -0.027 | 0.834 | -0.125 | 0.333 |
| MUFA | -0.022 | 0.867 | -0.069 | 0.593 |
| PUFA | 0.062 | 0.633 | 0.019 | 0.883 |
| Alcohol | 0.100 | 0.438 | -0.118 | 0.360 |
| Fibre | -0.049 | 0.704 | -0.127 | 0.327 |
| **Macronutrients (% TEI)** |  |  |  |  |
| Total protein | -0.158 | 0.220 | 0.014 | 0.917 |
| Vegetable protein | 0.006 | 0.965 | 0.027 | 0.835 |
| Animal protein | -0.178 | 0.167 | -0.038 | 0.771 |
| Carbohydrates | 0.131 | 0.310 | 0.108 | 0.404 |
| Disaccharides | 0.120 | 0.351 | -0.040 | 0.760 |
| Polysaccharides | -0.008 | 0.950 | 0.091 | 0.482 |
| Total fat | -0.060 | 0.642 | -0.164 | 0.202 |
| SFA | -0.068 | 0.601 | -0.142 | 0.272 |
| MUFA | -0.068 | 0.599 | -0.122 | 0.344 |
| PUFA | 0.017 | 0.898 | -0.009 | 0.947 |
| Alcohol | 0.003 | 0.980 | -0.010 | 0.940 |
| **Micronutrients** |  |  |  |  |
| Cholesterol (mg/d) | -0.082 | 0.525 | 0.002 | 0.987 |
| Calcium (mg/d) | -0.012 | 0.924 | -0.137 | 0.290 |
| Iron (mg/d) | -0.036 | 0.784 | 0.104 | 0.419 |
| Vitamin D | 0.067 | 0.604 | -0.089 | 0.493 |
| **Foods (g/day)** |  |  |  |  |
| Dairy | 0.109 | 0.399 | -0.086 | 0.508 |
| Red meat | -0.060 | 0.646 | 0.182 | 0.156 |
| Processed meat | -0.051 | 0.695 | -0.200 | 0.120 |
| Wholegrain | 0.093 | 0.475 | -0.070 | 0.590 |
| Fresh fruits | 0.135 | 0.296 | -0.181 | 0.159 |
| Fresh fruits + fresh juice | 0.066 | 0.611 | -0.068 | 0.602 |
| Any fruit and fruit juice | 0.171 | 0.185 | 0.041 | 0.752 |
| Vegetables | -0.207 | 0.107 | -0.173 | 0.179 |
| Fish, excluding fried | 0.013 | 0.918 | 0.033 | 0.801 |
| Fish, all | -0.062 | 0.631 | 0.009 | 0.942 |
| Ultraprocessed foods | -0.077 | 0.554 | 0.090 | 0.489 |

‡ for 64 participants. Results are expressed as Spearman correlation coefficient.