## Supplement to:

# Intake of various food groups among girls and boys with different utilisation of school meals 

Results from EsKiMo II

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| Age group | $6-11$ years ( $\mathrm{n}=1,094$ ) |  |  | $12-17$ years ( $\mathrm{n}=1,299$ ) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | n | \% unweighted | \% weighted | n | \% unweighted | \% weighted |
| sex |  |  |  |  |  |  |
| girls | 542 | 49.5 | 49.0 | 694 | 53.4 | 48.0 |
| boys | 552 | 50.5 | 51.1 | 605 | 46.6 | 52.0 |
| socioeconomic status of the family ${ }^{\text {a }}$ |  |  |  |  |  |  |
| low | 89 | 8.2 | 17.2 | 116 | 9.1 | 17.9 |
| medium | 645 | 59.5 | 61.7 | 825 | 64.4 | 63.7 |
| high | 351 | 32.4 | 21.1 | 340 | 26.5 | 18.4 |
| region of residence |  |  |  |  |  |  |
| former West Germany | 731 | 66.8 | 82.2 | 854 | 65.7 | 83.8 |
| former East Germany | 363 | 33.2 | 17.8 | 445 | 34.3 | 16.2 |
| school meals |  |  |  |  |  |  |
| $\geq 3$ times per week | 463 | 42.3 | 36.0 | 224 | 17.2 | 12.9 |
| < 3 times per week | 631 | 57.7 | 64.0 | 1,075 | 82.8 | 87.1 |

## Tab. 1: Selected characteristics of the study population

${ }^{\text {a }}$ The variable "socioeconomic status of the family" contains some missing values ( $\mathrm{n}=9$ for 6 - to 11 -year-olds; $\mathrm{n}=18$ for 12 - to 17 -year-olds).

| Girls | School meals $\geq 3$ times per week n = 238 |  |  |  | School meals < 3 times per week n = 304 |  |  |  | Significance level |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Food intake |  |  | OMD achieved | Food intake |  |  | OMD achieved | Difference OMD achieved |
|  | Median | 1st quartile | 3rd quartile | \% | Median | 1st quartile | 3rd quartile | \% | p-value |
| beverages (g/day) | 816.0 | 617.5 | 1,086.1 | 45.8 | 904.0 | 703.0 | 1,221.3 | 55.1 | 0.1287 |
| fruit (g/day) | 111.8 | 50.1 | 165.5 | 11.8 | 89.3 | 42.5 | 175.9 | 9.2 | 0.5064 |
| vegetables (g/day) | 94.4 | 54.4 | 124.9 | 1.8 | 68.8 | 40.1 | 128.0 | 0.7 | 0.1311 |
| carbohydrate-rich foods (g/day) | 216.4 | 181.4 | 265.0 | 13.2 | 208.1 | 163.5 | 268.2 | 15.9 | 0.5531 |
| meat (g/day) | 59.0 | 33.7 | 83.9 | 66.9 | 58.8 | 34.2 | 86.0 | 65.8 | 0.8578 |
| fish (g/day) | 0.0 | 0.0 | 14.5 | 25.3 | 0.0 | 0.0 | 14.3 | 24.2 | 0.8126 |
| eggs (g/day) | 5.9 | 0.9 | 18.7 | 21.8 | 3.8 | 0.0 | 15.0 | 18.5 | 0.5129 |
| fat ${ }^{\text {a }}$ (g/day) | 11.8 | 8.1 | 17.8 | 9.2 | 11.5 | 6.6 | 16.5 | 6.6 | 0.4297 |
| dairy products ${ }^{\text {b }}$ (g/day) | 223.8 | 150.0 | 366.6 | 10.2 | 229.0 | 129.1 | 322.2 | 7.1 | 0.3064 |
| tolerated foods ${ }^{\text {c }}$ (kcal/day) | 343.8 | 246.3 | 487.1 | 10.3 | 410.9 | 266.4 | 569.4 | 5.8 | 0.1337 |
| Boys | School meals $\geq 3$ times per week $\mathrm{n}=225$ |  |  |  | School meals < 3 times per week n= 327 |  |  |  | Significance level |
|  | Food intake |  |  | OMD achieved | Food intake |  |  | OMD achieved | Difference OMD achieved |
|  | Median | 1st quartile | 3rd quartile | \% | Median | 1st quartile | 3rd quartile | \% | p-value |
| beverages (g/day) | 983.0 | 767.8 | 1,294.0 | 60.4 | 1,025.3 | 829.4 | 1,282.9 | 68.6 | 0.1375 |
| fruit (g/day) | 105.3 | 61.0 | 171.3 | 11.6 | 87.3 | 35.5 | 156.3 | 4.2 | 0.0147* |
| vegetables (g/day) | 76.5 | 46.1 | 126.0 | 2.4 | 75.4 | 45.5 | 117.0 | 1.5 | 0.4297 |
| carbohydrate-rich foods (g/day) | 244.7 | 199.6 | 300.5 | 23.5 | 234.0 | 193.6 | 285.2 | 17.2 | 0.2059 |
| meat (g/day) | 64.9 | 46.2 | 105.8 | 78.7 | 72.1 | 47.3 | 102.4 | 80.2 | 0.7679 |
| fish (g/day) | 0.0 | 0.0 | 21.0 | 31.5 | 0.0 | 0.0 | 18.2 | 30.6 | 0.8627 |
| eggs (g/day) | 4.9 | 0.9 | 18.0 | 23.3 | 3.9 | 0.0 | 17.4 | 21.4 | 0.6930 |
| fat ${ }^{\text {a }}$ (g/day) | 13.1 | 7.0 | 20.1 | 11.7 | 11.1 | 6.7 | 17.2 | 7.8 | 0.2091 |
| dairy products ${ }^{\text {b }}$ (g/day) | 304.9 | 210.6 | 429.5 | 12.9 | 241.3 | 141.9 | 376.8 | 11.9 | 0.7925 |
| tolerated foods ${ }^{\text {c }}$ (kcal/day) | 482.0 | 331.1 | 628.8 | 5.9 | 438.1 | 289.7 | 613.7 | 9.1 | 0.3952 |

Tab. 2: Distribution of intake of food groups (in g or kcal/day) and percentage of participants who achieved the recommended intakes according to the Optimised Mixed Diet (OMD) (in \%) by frequency of utilisation of school meals in 6- to 11-year-olds in the EsKiMo II study ( $\mathrm{n}=1,094$ )
${ }^{\text {a }}$ fats/oils used for cooking or spreads
${ }^{\mathrm{b}}$ quantity calculated as milk equivalent
${ }^{\text {c }}$ OMD achieved if intake is under the maximum value

* statistically significant differences in the percentage of people who achieved the OMD recommendation (a statistically significant difference is assumed for $p<0.05$ )

| Girls | School meals $\geq 3$ times per week n = 109 |  |  |  | School meals < 3 times per week $\mathrm{n}=585$ |  |  |  | Significance level |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Food intake |  |  | OMD achieved | Food intake |  |  | OMD achieved | Difference OMD achieved |
|  | Median | 1st quartile | 3rd quartile | \% | Median | 1st quartile | 3rd quartile | \% | p-value |
| beverages (g/day) | 1,393.6 | 997.6 | 1,845.3 | 73.2 | 1,546.4 | 1,128.4 | 2,144.2 | 80.1 | 0.2002 |
| fruit (g/day) | 135.5 | 82.3 | 214.8 | 13.2 | 124.3 | 63.4 | 239.8 | 16.1 | 0.6353 |
| vegetables (g/day) | 172.7 | 110.5 | 314.5 | 21.0 | 170.8 | 107.3 | 275.6 | 17.9 | 0.6144 |
| carbohydrate-rich foods (g/day) | 310.5 | 231.1 | 399.2 | 29.5 | 270.1 | 209.6 | 345.8 | 20.6 | 0.1734 |
| meat (g/day) | 78.8 | 37.8 | 128.4 | 62.4 | 71.8 | 40.2 | 111.5 | 65.4 | 0.6629 |
| fish (g/day) | 6.3 | 0.0 | 13.9 | 23.2 | 3.5 | 0.0 | 11.9 | 20.0 | 0.6177 |
| eggs (g/day) | 16.1 | 5.0 | 25.8 | 36.3 | 9.9 | 4.3 | 19.8 | 19.4 | 0.0081* |
| $\mathrm{fat}^{\text {a }}$ (g/day) | 28.4 | 17.4 | 36.0 | 45.1 | 20.2 | 13.5 | 30.5 | 26.3 | 0.0042* |
| dairy products ${ }^{\text {b }}$ (g/day) | 302.0 | 202.7 | 443.2 | 15.0 | 235.5 | 125.7 | 386.1 | 16.7 | 0.7485 |
| tolerated foods ${ }^{\text {c }}$ (kcal/day) | 351.9 | 213.6 | 579.1 | 17.6 | 314.5 | 174.1 | 538.1 | 27.4 | 0.1175 |
| Boys | School meals $\geq 3$ times per week $\mathrm{n}=115$ |  |  |  | School meals < 3 times per week $\mathrm{n}=490$ |  |  |  | Significance level |
|  | Food intake |  |  | OMD achieved | Food intake |  |  | OMD achieved | Difference <br> OMD <br> achieved |
|  | Median | 1st quartile | 3rd quartile | \% | Median | 1st quartile | 3rd quartile | \% | p-value |
| beverages (g/day) | 1,602.9 | 1,206.2 | 2,267.9 | 77.3 | 1,887.1 | 1,359.8 | 2,540.8 | 83.9 | 0.2069 |
| fruit (g/day) | 118.2 | 72.9 | 180.9 | 6.1 | 90.7 | 39.9 | 169.3 | 6.7 | 0.8121 |
| vegetables (g/day) | 159.0 | 79.2 | 268.9 | 13.6 | 141.4 | 78.5 | 251.6 | 6.7 | 0.0563 |
| carbohydrate-rich foods (g/day) | 350.3 | 265.6 | 412.9 | 23.4 | 336.7 | 250.3 | 417.9 | 19.4 | 0.4607 |
| meat (g/day) | 127.4 | 77.9 | 165.8 | 86.8 | 113.8 | 72.2 | 158.6 | 82.3 | 0.3812 |
| fish (g/day) | 9.9 | 2.2 | 21.2 | 41.0 | 5.9 | 0.0 | 15.7 | 27.9 | 0.0257* |
| eggs (g/day) | 14.2 | 6.1 | 27.0 | 25.4 | 14.3 | 7.5 | 27.2 | 25.0 | 0.9582 |
| fat ${ }^{\text {a }}$ (g/day) | 28.8 | 16.4 | 45.9 | 35.1 | 23.3 | 13.3 | 40.4 | 25.3 | 0.0780 |
| dairy products ${ }^{\text {b }}$ (g/day) | 342.1 | 183.8 | 563.4 | 18.7 | 329.6 | 205.0 | 519.5 | 18.5 | 0.9698 |
| tolerated foods ${ }^{\text {c }}$ (kcal/day) | 537.3 | 266.4 | 843.5 | 18.9 | 461.4 | 262.2 | 723.4 | 20.8 | 0.7504 |

Tab. 4: Distribution of intake of food groups (in g or kcal/day) and percentage of participants who achieved the recommended intakes according to the Optimised Mixed Diet (OMD) (in \%) by frequency of utilisation of school meals in 12- to 17-year-olds in the EsKiMo II study ( $n=1,299$ )
${ }^{\text {a }}$ fats/oils used for cooking or spreads
${ }^{\mathrm{b}}$ quantity calculated as milk equivalent
c OMD achieved if intake is under the maximum value

* statistically significant differences in the percentage of people who achieved the OMD recommendation (a statistically significant difference is assumed for $\mathrm{p}<0.05$ )

