

Supplement Table S1. Comparison of the state's economic damage by age groups

| Age groups | N | Mean±SD | (Median) | (Min-Max) (€/year) | p value |
|----------------|-----|-------------|----------|--------------------|---------|
| 1-3 | 37 | 20177±8578 | (10660) | (487-29942) | 0.006 |
| 3-12 | 67 | 22558±16025 | (20663) | (352-75953) | |
| 12< | 15 | 17829±20190 | (10187) | (3410-67664) | |
| Overall | 119 | 18801±15345 | (15834) | (352-75953) | |

Mean ± SD, median and min-max values are given as €/year

Supplement Table S2. Analysis of the state's economic damage in subgroups

| Treatment | Values | BH4 | Phe-free | | Special | | | | Diaper | Overall damage | p value* |
|------------|------------|-------------|------------------|----------|-------------|----------------|-----------------|-------------------|---------|----------------|-------------|
| | | | formula and milk | Test | Examination | Rehabilitation | Hospitalization | Other medications | | | |
| Diet | Mean±SD | | 6859±3895 | 62±38 | 260±114 | 793±392 | 38±38 | 1558±3697 | 316±264 | 7914±4930 | |
| | Median (n) | | 6674 (47) | 52 (50) | 55 (50) | 974 (6) | 25 (5) | 189 (7) | 317 (2) | 7860 (50) | |
| | Min-Max | | 872-20800 | 24-172 | 55-500 | 255-1229 | 4-100 | 31-9941 | 130-504 | 352-23528 | |
| BH4 | Mean±SD | 20177±12505 | | 75±43 | 294±106 | | 38±32 | | | | 20566±12465 |
| | Median (n) | 16163 (44) | | 62 (44) | 300 (44) | | 24 (6) | | | | 16757 (44) |
| | Min-Max | 3776-64652 | | 24-170 | 111-412 | | 12-116 | | | | 4352-64896 |
| BH4 + Diet | Mean±SD | 31208±13537 | 5515±2516 | 73±43 | 379±334 | 777±277 | 44±35 | | | | 37470±14628 |
| | Median (n) | 32326 (25) | 4720 (25) | 64 (25) | 396 (25) | 778 (2) | 44 (2) | | | | 36254 (25) |
| | Min-Max | 11330-64652 | 2325-10893 | 24-213 | 103-1907 | 581-974 | 19-69 | | | | 16704-75953 |
| Overall | Mean±SD | 24174±13859 | 6392±3519 | 69±41 | 297±185 | 789±348 | 39±36 | 1558±3697 | 316±264 | 18801±15345 | <0.001* |
| | Median (n) | 24244 (69) | 5697 (72) | 59 (119) | 300 (119) | 974 (8) | 25 (13) | 189 (7) | 317 (2) | 15834 (119) | |
| | Min-Max | 3776-64652 | 873-20800 | 24-213 | 55-1907 | 255-1229 | 4-116 | 31-9941 | 130-504 | 352-75953 | |

Mean ± SD, median and min-max values are given as €/year.

Supplement Table S3. Non-medical economic damage to the families (excluding food fee)

| Treatment | | Transportation | Out-of-pocket | | Shipping | Day care for | Day care for |
|-------------------|------------------|----------------|---------------|------------|---------------|------------------|--------------|
| | | | in hospital | Parking | | patient with PKU | siblings |
| Diet | Mean±SD (n) | 227±362 (50) | 82±91 (46) | 44±30 (27) | 88±91 (7) | | 2158 |
| | Median (min-max) | 103 (5-2275) | 53 (5-470) | 45 (5-88) | 58 (29-288) | | 2158 |
| BH4 | Mean±SD (n) | 273±305 (42) | 63±77(42) | 46±36 (19) | 108±7 (3) | 1439±1017(2) | |
| | Median (min-max) | 43 (10-1487) | 35 (1-326) | 43 (2-88) | 108 (100-115) | 1439 (719-1439) | |
| BH4 + Diet | Mean±SD (n) | 334±455 (25) | 83±141 (21) | 44±35 (11) | 161 (1) | 2662±3561 (2) | |
| | Median (min-max) | 146 (24-1833) | 882 (2-624) | 32 (3-86) | 161 | 2662 (144-5180) | |
| Overall | Mean±SD (n) | 266±364 (117) | 75±98 (109) | 45±32(57) | 100±74 (11) | 2050±2251 (4) | 2158 |
| | Median (min-max) | 114 (5-2275) | 41 (1-624) | 45 (2-88) | 86 (29-288) | 1439 (144-5180) | 2158 |

Mean ± SD, median and min-max values are given as €/year.

Supplement Table S4. Fees of low-protein foods

| Low-protein food | Diet | | | | BH4 + Diet | | | |
|---------------------------|------|---------|--------|------------|------------|-----------|--------|-----------|
| | n | Mean±SD | Median | Min-max | n | Mean±SD | Median | Min-max |
| Bread | 31 | 2±2.8 | (1) | (0.1-12) | 13 | 0.8±0.7 | (0.6) | (0.2-2.6) |
| Flour | 35 | 1.3±1 | (1.2) | (0.1-4.3) | 20 | 2.6±2.6 | (1.5) | (0.4-9.6) |
| Rice | 27 | 3±3 | (2) | (0.2-11.5) | 14 | 3.2±2.5 | (2.9) | (0.7-11) |
| Pasta | 35 | 4±3.5 | (3) | (0.5-13) | 19 | 3.4±3 | (2) | (0.3-10) |
| Egg | 17 | 1.2±1 | (1) | (0.5-4) | 13 | 1.3±1.5 | (0.6) | (0.2-5) |
| Meat | 26 | 3.1±3 | (2) | (0.5-11.5) | 13 | 4±3.7 | (3) | (0.5-15) |
| Other products | 44 | 10±8.7 | (8) | (0.3-36) | 23 | 11.7±10.7 | (10) | (0.5-44) |

Mean ± SD, median and min-max values are given as €/week.

Supplement Table S5. Fees of normal foods

| Normal foods | Diet | | | | BH4 | | | | BH4 + Diet | | | |
|---------------------|------|---------|--------|------------|-----|---------|--------|------------|------------|---------|--------|-----------|
| | n | Mean±SD | Median | Min-max | n | Mean±SD | Median | Min-max | n | Mean±SD | Median | Min-max |
| Vegetable | 46 | 2.2±1.4 | (2) | (0.5-6.6) | 42 | 1±0.6 | (0.9) | (0.1-2.6) | 25 | 1.8±0.9 | (1.8) | (0.3-3.7) |
| Fruit | 46 | 1.4±0.7 | (1.2) | (0.5-3.4) | 42 | 1±0.7 | (0.9) | (0.1-3) | 25 | 1.4±0.7 | (1.3) | (0.2-3.4) |
| Meat | 2 | 3.6±0 | (3.6) | (3.6) | 38 | 3±2.2 | (2.4) | (0.6-11.7) | 1 | 4±0 | (4) | (4.2) |
| Milk | 14 | 0.6±0.5 | (0.5) | (0.06-1.7) | 41 | 1.7±0.8 | (1.6) | (0.1-4.6) | 12 | 1.2±1.2 | (0.8) | (0.1-4.3) |
| Flour | 9 | 0.5±0.5 | (0.4) | (3±1.6) | 40 | 0.5±0.5 | (0.3) | (0.1-2) | 8 | 0.6±0.6 | (0.3) | (0.1-2) |
| Formula | 2 | 3.7±3.9 | (3.7) | (1-6.5) | 8 | 4.8±8.3 | (2.5) | (0.4-25) | 1 | 0.9±0 | (0.8) | (0.9) |
| Ready-to-eat | 28 | 0.8±0.6 | (0.5) | (0.2-2.4) | 40 | 2±1.8 | (1.4) | (0.1-6) | 16 | 1±0.9 | (1.2) | (0.3-3.6) |
| Other foods | 39 | 2±1.4 | (1.4) | (0.2-5.5) | 41 | 2±1 | (1.9) | (0.3-5) | 20 | 1.5±1.5 | (1) | (0.2-5.9) |

Mean ± SD, median and min-max values are given as €/week.