|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Supplemental Table 8.** Multivariable adjusteda semen parameters (95% Confidence interval) in relation to subgroups of meat categories. Murcia Young Men’s Study (n=206) | | | | | | | | | | | | | |
| **Meat intake (servings/day); range** | | **Volume**\* | | **Sperm concentration**\* | | **Total sperm count**\* | | **Motile spermb** | | **Progressive motilityb** | | **Morphologically normal sperm**\* | |
|  | n | ml | 95% CI | 106/ml | 95% CI | 106 | 95% CI | 106 | 95% CI | 106 | 95% CI | % | 95% CI |
| Processed red meat intakec | | |  |  |  |  |  |  |  |  |  |  |  |
| T1 (0-0.50) | 70 | 2.7 | 2.3-3.2 | 35.1 | 27.3-45.1 | 95.6 | 72.2-126.5 | 55.8 | 53.2-58.3 | 46.9 | 44.3-49.6 | 8.3 | 7.0-9.7 |
| T2 (>0.50-0.80) | 66 | 2.7 | 2.3-3.2 | 41.2 | 32.1-52.9 | 111.9 | 84.8-147.7 | 55.2 | 52.7-57.7 | 46.1 | 43.5-48.8 | 9.5 | 8.1-11.1 |
| T3 (>0.80-3.75) | 70 | 2.9 | 2.4-3.4 | 37.6 | 29.0-48.7 | 107.8 | 80.8-143.6 | 59.8 | 57.2-62.5‡ | 51.1 | 48.4-53.9 | 8.5 | 7.2-10.1 |
| Ptrend |  | 0.72 |  | 0.68 |  | 0.55 |  | 0.06 |  | 0.06 |  | 0.73 |  |
| Unprocessed red meat intaked | | | |  |  |  |  |  |  |  |  |  |  |
| Low (0-0.14) | 106 | 2.9 | 2.5-3.3 | 42.4 | 34.6-51.9 | 122.7 | 97.8-154.0 | 57.3 | 55.2-59.3 | 48.6 | 46.4-50.7 | 8.9 | 7.8-10.2 |
| High (>0.14-2.50) | 100 | 2.7 | 2.3-3.0 | 33.5 | 27.2-41.3 | 88.9 | 70.5-112.1 | 56.6 | 54.4-58.8 | 47.6 | 45.4-49.8 | 8.6 | 7.5-9.8 |
| Ptrend |  | 0.37 |  | 0.14 |  | 0.07 |  | 0.68 |  | 0.58 |  | 0.68 |  |
| Organ meat intakee | |  |  |  |  |  |  |  |  |  |  |  |  |
| None (0) | 124 | 2.7 | 2.4-3.1 | 39.6 | 32.9-47.5 | 109.2 | 89.1-133.9 | 58.7 | 56.9-60.6‡ | 50.2 | 48.3-52.1‡ | 8.7 | 7.7-9.7 |
| Any (>0-0.79) | 82 | 2.7 | 2.4-3.2 | 35.2 | 28-44.2 | 98.2 | 76.1-126.7 | 54.1 | 51.7-56.4‡ | 44.8 | 42.4-47.2‡ | 8.7 | 7.6-10.1 |
| Ptrend |  | 0.95 |  | 0.45 |  | 0.54 |  | 0.004 |  | 0.001 |  | 0.92 |  |
| White fish meat intakef | | |  |  |  |  |  |  |  |  |  |  |  |
| Q1 (0-0.13) | 68 | 3.0 | 2.6-3.5 | 37.5 | 29.1-48.4 | 112.5 | 85.2-148.6 | 57.9 | 55.3-60.5 | 49.4 | 46.7-52.5 | 8.5 | 7.2-10.0 |
| Q2 (>0.13-0.21) | 52 | 2.9 | 2.4-3.4 | 30.6 | 23.3-40.2 | 87.4 | 64.7-117.9 | 56.0 | 53.2-58.8 | 47.0 | 44.1-49.9 | 8.4 | 7.0-10.0 |
| Q3 (>0.21-0.29) | 36 | 2.2 | 1.7-2.7 | 32.8 | 23.5-45.6 | 70.5 | 49.2-101.2 | 57.6 | 54.1-61.0 | 49.1 | 45.5-52.7 | 9.3 | 7.4-11.6 |
| Q4 (>0.29-1.22) | 50 | 2.9 | 2.4-3.5 | 52.6 | 38.4-72.2 | 152.0 | 107.7-214.6 | 56.2 | 52.9-59.5 | 46.8 | 43.4-50.2 | 9.1 | 7.4-11.2 |
| P-trend |  | 0.26 |  | 0.21 |  | 0.62 |  | 0.63 |  | 0.43 |  | 0.47 |  |
| Dark fish meat intakeg | | |  |  |  |  |  |  |  |  |  |  |  |
| Q1 (0-0.26) | 54 | 2.5 | 2.1-3.0 | 45.5 | 33.7-61.4 | 114.0 | 81.7-159.0 | 57.7 | 54.6-60.7 | 49.0 | 45.8-52.1 | 8.3 | 6.9-10.1 |
| Q2 (>0.26-0.40) | 48 | 2.3 | 1.9-2.8 | 37.2 | 27.6-50.2 | 87.3 | 62.6-121.6 | 57.4 | 54.3-60.5 | 48.2 | 45.0-51.4 | 8.7 | 7.2-10.5 |
| Q3 (>0.40-0.71) | 52 | 3.4 | 2.8-4.1 | 31.7 | 24.0-42.0 | 107.2 | 78.3-146.8 | 56.8 | 53.9-59.7 | 48.1 | 45.1-51.1 | 7.8 | 6.5-9.3 |
| Q4 (>0.71-2.57) | 52 | 2.9 | 2.4-3.6 | 37.6 | 27.2-52.1 | 110.5 | 77.0-158.5 | 56.0 | 52.6-59.3 | 47.2 | 43.7-50.6 | 10.4 | 8.4-12.7 |
| P-trend |  | 0.07 |  | 0.28 |  | 0.95 |  | 0.48 |  | 0.51 |  | 0.37 |  |
| Shellfish intakeh | | |  |  |  |  |  |  |  |  |  |  |  |
| Q1 (0-0.04) | 52 | 3.2 | 2.7-3.9 | 35.3 | 26.2-47.6 | 113.9 | 82.1-157.7 | 54.5 | 51.5-57.5 | 45.2 | 42.1-48.3 | 8.9 | 7.3-10.7 |
| Q2 (>0.04-0.12) | 33 | 2.1 | 1.6-2.6 | 32.1 | 22.3-46.3 | 66.6 | 44.7-99.2 | 51.8 | 48.1-55.5 | 42.0 | 38.2-45.7 | 8.1 | 6.4-10.2 |
| Q3 (>0.12-0.14) | 70 | 2.8 | 2.43.3 | 41.9 | 33.0-53.2 | 118.7 | 91.5154.2 | 58.6 | 56.2-61.1‡ | 49.4 | 46.9-51.8‡ | 9.2 | 7.9-10.7 |
| Q4 (>0.14-1.23) | 51 | 2.8 | 2.3-3.4 | 38.8 | 28.5-52.8 | 106.1 | 75.5-149.2 | 60.4 | 57.2-63.5‡ | 53.2 | 50.0-56.4‡ | 8.4 | 6.9-10.2 |
| P-trend |  | 0.67 |  | 0.42 |  | 0.66 |  | 0.001 |  | <0.001 |  | 0.98 |  |
| CI, confidence interval  aAdjusted for calories intake, intakes of the remaining meats, dietary patterns, age, body mass index, smoking, physical activity, TV watching and abstinence time  bAditionally adjusted for time to start semen analysis (minutes)  dincludes hamburguer, sausages, bacon, other processed meats (e,g, ham, mortadella, salami), and pate and foie-gras; cincludes beef, pork, lamb  eincludes beef, calf, pork, chicken, turkey liver, and other organs (e,g, brains, sweetbread)  fincludes hake, golden, sole (boiled, grilled or fried)  gincludes salmon, anchovies, tuna, emperor, bonito, sardines, mackerel (boiled, grilled, canned, salted, smoked);  hincludes clams, mussels, oysters, squid, cuttlefish, octopus, prawns, crabs, lobsters  \*Back-transformed to original scale  ‡Significantly different to mean in the lowest quartile of intake at 0.05 | | | | | | | | | | | | | |