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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Supplemental Table 9.** Multivariable adjusteda reproductive hormone levels (95% Confidence interval) in relation to subgroups of meat categories. Murcia Young Men’s Study (n=206) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Meat intake (servings/day); range** | | | **LH** | | | | | | **FSH\*** | | | | | | **Estradiol\*** | | | | | | **Free Testosterone** | | | | **Total testosterone** | | | **Inhibin B** | | | **SHBG** | | | |
|  | n | | | IU/L | | 95% CI | | | | IU/L | 95% CI | | | | pmol/L | | 95% CI | | | | nmol/L | | 95% CI | | nmol/L | 95% CI | | pg/mL | 95% CI | | nmol/L | 95% CI | | |
| Processed red meat intakeb | | | | |  | |  | |  | |  | |  | |  | |  | | |  |  | |  |  |  |  |  |  |  |  |  |  |  | |
| T1 (0-0.50) | | 70 | 4.4 | | 3.9 | | -4.8 | | 2.3 | | 2.0 | -2.6 | | | | 76.0 | | 70.8 | -81.6 | | | 14.5 | 13.2 | -15.7 | 22.6 | 20.9 | -24.2 | 207.2 | 188.1 | -226.4 | 32.5 | 29.9 | -35.0 | |
| T2 (>0.50-0.80) | | 66 | 4.1 | | 3.7 | | -4.5 | | 2.2 | | 1.9 | -2.5 | | | | 71.1 | | 66.2 | -76.2 | | | 13.6 | 12.4 | -14.8 | 20.6 | 18.9 | -22.2 | 217.6 | 198.6 | -236.5 | 30.6 | 28.1 | -33.2 | |
| T3 (>0.80-3.75) | | 70 | 4.2 | | 3.8 | | -4.7 | | 2.4 | | 2.1 | -2.8 | | | | 80.1 | | 74.4 | -86.1 | | | 14.7 | 13.4 | -15.9 | 22.3 | 20.5 | -24.0 | 184.4 | 164.6 | -204.2 | 31.4 | 28.7 | -34.0 | |
| Ptrend | |  | 0.59 | |  | |  | | 0.59 | |  |  | | | | 0.43 | |  |  | | | 0.89 |  |  | 0.73 |  |  | 0.16 |  |  | 0.54 |  |  | |
| Unprocessed red meat intakec | | | | |  | |  | |  | |  |  | | | |  | |  |  | | |  |  |  |  |  |  |  |  |  |  |  |  | |
| Low (0-0.14) | 106 | | 3.9 | | 3.6 | | -4.3 | | 2.2 | | 2.0 | -2.5 | | | | 75.2 | | 68.6 | -82.4 | | | 14.2 | 13.3 | -15.2 | 21.0 | 19.7 | -22.3 | 210.0 | 194.4 | -225.5 | 28.9 | 26.9 | -30.9 | |
| High (>0.14-2.50) | 100 | | 4.6 | | 4.2 | | -4,9‡ | | 2.4 | | 2.1 | -2.7 | | | | 78.5 | | 72.4 | -85.2 | | | 14.2 | 13.2 | -15.3 | 22.7 | 21.3 | -24.1 | 195.2 | 179.2 | -211.2 | 34.2 | 32.2 | -36.3‡ | |
| Ptrend |  | | 0.02 | |  | |  | | 0.33 | |  |  | | | | 0.11 | |  |  | | | 0.99 |  |  | 0.10 |  |  | 0.22 |  |  | 0.001 |  |  | |
| Organ meat intaked | | |  | |  | |  | |  | |  |  | | | |  | |  |  | | |  |  |  |  |  |  |  |  |  |  |  |  | |
| None (0) | 124 | | | 4.0 | | 3.7 | | -4.3 | | 2.4 | 2.2 | -2.6 | | | | 75.4 | 71.6 | | | -79.4 | 13.8 | | 12.9 | -14.7 | 21.3 | 20.1 | -22.5 | 199.5 | 185.7 | -213.4 | 31.6 | 29.7 | -33.5 | |
| Any (>0-0.79) | 82 | | | 4.6 | | 4.2 | | -4.9‡ | | 2.1 | 1.9 | -2.4 | | | | 76.2 | 71.5 | | | -81.3 | 14.9 | | 13.8 | -16.0 | 22.7 | 21.2 | -24.2 | 207.7 | 190.5 | -224.9 | 31.4 | 29.1 | -33.6 | |
| Ptrend |  | | | 0.03 | |  | |  | | 0.20 |  | | |  | | 0.80 |  | | |  | 0.12 | |  |  | 0.15 |  |  | 0.48 |  |  | 0.87 |  |  | |
| White fish meat intakee | | | | | |  | |  | |  |  | | |  | |  |  | | |  |  | |  |  |  |  |  |  |  |  |  |  |  | |
| Q1 (0-0.13) | 68 | | | 4.1 | | 3.7 | | -4.6 | | 2.1 | 1.8 | | | -2.4 | | 77.2 | 71.9 | | | -83.0 | 14.5 | | 13.3 | -15.7 | 22.2 | 20.5 | -23.9 | 212.2 | 193.0 | -231.4 | 32.3 | 29.7 | -34.8 | |
| Q2 (>0.13-0.21) | 52 | | | 4.4 | | 3.9 | | -4.9 | | 2.8 | 2.4 | | | -3.2 | | 72.2 | 66.8 | | | -78.3 | 13.1 | | 11.8 | -14.5 | 21.3 | 19.5 | -23.2 | 201.7 | 180.6 | -222.9 | 33.8 | 31.0 | -36.6 | |
| Q3 (>0.21-0.29) | 36 | | | 4.5 | | 3.9 | | -5.0 | | 2.1 | 1.8 | | | -2.6 | | 78.9 | 71.7 | | | -86.7 | 14.7 | | 13.1 | -16.3 | 21.9 | 19.7 | -24.2 | 179.8 | 154.6 | -205.1 | 29.4 | 26.1 | -32.8 | |
| Q4 (>0.29-1.22) | 50 | | | 4.0 | | 3.5 | | -4.6 | | 2.2 | 1.9 | | | -2.6 | | 75.1 | 68.6 | | | -82.2 | 14.7 | | 13.2 | -16.2 | 21.7 | 19.6 | -23.8 | 207.8 | 183.9 | -231.7 | 29.6 | 26.4 | -32.8 | |
| P-trend |  | | | 0.99 | |  | |  | | 0.94 |  | | |  | | 0.96 |  | | |  | 0.63 | |  |  | 0.83 |  |  | 0.39 |  |  | 0.09 |  |  | |
| Dark fish meat intakef | | | |  | |  | |  | |  |  | | |  | |  |  | | |  |  | |  |  |  |  |  |  |  |  |  |  |  | |
| Q1 (0-0.26) | 54 | | | 4.3 | | 3.8 | | -4.8 | | 2.2 | 1.9 | | | -2.6 | | 75.2 | 69.3 | | | -81.6 | 14.4 | | 13.0 | -15.8 | 21.7 | 19.9 | -23.6 | 198.6 | 177.3 | -219.8 | 30.5 | 27.6 | -33.4 | |
| Q2 (>0.26-0.40) | 48 | | | 4.5 | | 4.0 | | -5.0 | | 2.6 | 2.2 | | | -3.0 | | 77.1 | 70.8 | | | -83.9 | 14.8 | | 13.4 | -16.2 | 23.0 | 21.1 | -25.0 | 190.7 | 168.6 | -212.9 | 33.3 | 30.2 | -36.3 | |
| Q3 (>0.40-0.71) | 52 | | | 4.3 | | 3.8 | | -4.8 | | 2.6 | 2.2 | | | -3.0 | | 76.2 | 70.3 | | | -82.5 | 13.7 | | 12.3 | -15.1 | 21.5 | 19.7 | -23.4 | 198.8 | 168.9 | -210.7 | 32.7 | 29.9 | -35.6 | |
| Q4 (>0.71-2.57) | 52 | | | 3.8 | | 3.3 | | -4.4 | | 1.9 | 1.6 | | | -2.2 | | 74.6 | 68.2 | | | -81.6 | 14.1 | | 14.1 | -15.6 | 21.1 | 19.0 | -23.2 | 231.3 | 207.9 | -254.7 | 29.7 | 26.5 | -32.9 | |
| P-trend |  | | | 0.27 | |  | |  | | 0.38 |  | | |  | | 0.92 |  | | |  | 0.57 | |  |  | 0.54 |  |  | 0.14 |  |  | 0.88 |  |  | |
| Shellfish intakeg |  | | |  | |  | |  | |  |  | | |  | |  |  | | |  |  | |  |  |  |  |  |  |  |  |  |  |  | |
| Q1 (0-0.04) | 52 | | | 4.2 | | 3.7 | | -4.7 | | 2.3 | 1.9 | | | -2.6 | | 77.2 | 71.5 | | | -83.5 | 14.6 | | 13.2 | -15.9 | 22.5 | 20.7 | -24.3 | 187.0 | 165.7 | -208.4 | 31.9 | 29.0 | -34.7 | |
| Q2 (>0.04-0.12) | 33 | | | 4.1 | | 3.5 | | -4.8 | | 1.9 | 1.6 | | | -2.3 | | 86.6 | 78.3 | | | -95.7 | 14.5 | | 12.7 | -16.3 | 22.1 | 19.7 | -24.5 | 197.0 | 169.4 | -224.6 | 30.8 | 27.0 | -34.5 | |
| Q3 (>0.12-0.14) | 70 | | | 4.4 | | 4.0 | | -4.8 | | 2.3 | 2.0 | | | -2.0 | | 76.1 | 71.2 | | | -81.3 | 14.6 | | 13.5 | -15.8 | 22.5 | 20.9 | -24.1 | 209.5 | 191.4 | -227.5 | 32.2 | 29.7 | -34.6 | |
| Q4 (>0.14-1.23) | 51 | | | 4.1 | | 3.6 | | -4.6 | | 2.5 | 2.1 | | | -2.1 | | 67.8 | 62.5 | | | -73.6‡ | 13.2 | | 11.8 | -14.6 | 20.0 | 18.1 | -22.0 | 213.4 | 190.9 | -235.9 | 30.7 | 27.6 | -33.7 | |
| P-trend |  | | | 0.98 | |  | |  | | 0.26 |  | | |  | | 0.02 |  | | |  | 0.29 | |  |  | 0.15 |  |  | 0.07 |  |  | 0.76 |  |  | |
| LH, luteinizing hormone; FSH, follicle-stimulating hormone; SHBG, sex hormone-binding globulin; CI, confidence interval;aAdjusted for calories intake, intakes of the remaining meats, dietary patterns, age, body mass index, smoking, physical activity, TV watching and time of blood draw | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| bincludes hamburguer, sausages, bacon, other processed meats (e,g, ham, mortadella, salami), and pate and foie-gras | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| cincludes beef, pork, lamb | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| dincludes beef, calf, pork, chicken, turkey liver, and other organs (e,g, brains, sweetbread) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| eincludes hake, golden, sole (boiled, grilled or fried) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| fincludes salmon, anchovies, tuna, emperor, bonito, sardines, mackerel (boiled, grilled, canned, salted, smoked) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| gincludes 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |