

Supplementary table 1.1. Associations between the concentrations of 4-hydroxy-benzophenone (4-HBP) and thyroid hormones and growth factors measured in the same serum sample of pregnant women carrying male fetuses.

| Outcome | Exposure | Unadjusted | | | | Adjusted for BMI | | | | Adjusted for Gestational age at amniocentesis | | | | Adjusted for BMI and Gestational age at amniocentesis | | | |
|---------------------|---------------------------|----------------|-------------|------------|--------------|------------------|--------------|------------|--------------|---|-------------|-------------|--------------|---|-------------|------------|-------------|
| | | β -value | 95% CI | | p-value | β -value | 95% CI | | p-value | β -value | 95% CI | | p-value | β -value | 95% CI | | p-value |
| TSH (mU/L) | 4-HBP, continuous (ng/mL) | 0.21 | -0.25 | 0.67 | 0.37 | 0.24 | -0.24 | 0.71 | 0.32 | -0.05 | -0.55 | 0.44 | 0.83 | -0.05 | -0.56 | 0.46 | 0.85 |
| | low | reference | | | | reference | | | | reference | | | | reference | | | |
| | 4-HBP categories | | | | | | | | | | | | | | | | |
| | middle | -0.17 | -0.69 | 0.36 | 0.53 | -0.14 | -0.69 | 0.40 | 0.60 | -0.23 | -0.75 | 0.28 | 0.37 | -0.23 | -0.76 | 0.30 | 0.39 |
| | high | 0.16 | -0.32 | 0.64 | 0.50 | 0.19 | -0.30 | 0.69 | 0.44 | -0.05 | -0.54 | 0.44 | 0.83 | -0.04 | -0.54 | 0.47 | 0.88 |
| | trend | | | | 0.73 | | | | 0.47 | | | | 0.66 | | | | 0.67 |
| T3 (nmol/L) | 4-HBP, continuous (ng/mL) | 0.19 | -0.02 | 0.40 | 0.07 | 0.13 | -0.06 | 0.32 | 0.18 | 0.27 | 0.05 | 0.49 | 0.018 | 0.17 | -0.04 | 0.38 | 0.11 |
| | low | reference | | | | reference | | | | reference | | | | reference | | | |
| | 4-HBP categories | | | | | | | | | | | | | | | | |
| | middle | 0.22 | -0.01 | 0.46 | 0.06 | 0.14 | -0.08 | 0.36 | 0.21 | 0.24 | 0.01 | 0.47 | 0.04 | 0.15 | -0.07 | 0.37 | 0.18 |
| | high | 0.20 | -0.01 | 0.41 | 0.07 | 0.14 | -0.06 | 0.34 | 0.16 | 0.25 | 0.03 | 0.47 | 0.03 | 0.17 | -0.04 | 0.38 | 0.11 |
| | trend | | | | 0.09 | | | | 0.28 | | | | 0.05 | | | | 0.22 |
| fT3 (pmol/L) | 4-HBP, continuous (ng/mL) | 0.02 | -0.22 | 0.25 | 0.89 | -0.05 | -0.28 | 0.18 | 0.66 | 0.18 | -0.07 | 0.43 | 0.15 | 0.09 | -0.15 | 0.33 | 0.46 |
| | low | reference | | | | reference | | | | reference | | | | reference | | | |
| | 4-HBP categories | | | | | | | | | | | | | | | | |
| | middle | -0.03 | -0.30 | 0.24 | 0.83 | -0.12 | -0.38 | 0.14 | 0.36 | 0.01 | -0.25 | 0.27 | 0.93 | -0.08 | -0.33 | 0.17 | 0.53 |
| | high | 0.04 | -0.21 | 0.28 | 0.77 | -0.03 | -0.26 | 0.21 | 0.82 | 0.17 | -0.08 | 0.41 | 0.18 | 0.08 | -0.16 | 0.32 | 0.49 |
| | trend | | | | 0.90 | | | | 0.64 | | | | 0.36 | | | | 0.45 |
| T4 (nmol/L) | 4-HBP, continuous (ng/mL) | 7.14 | -3.31 | 17.6 | 0.18 | 6.17 | -4.53 | 16.9 | 0.26 | 11.9 | 0.66 | 23.1 | 0.04 | 11.0 | -0.59 | 22.7 | 0.06 |
| | low | reference | | | | reference | | | | reference | | | | reference | | | |
| | 4-HBP categories | | | | | | | | | | | | | | | | |
| | middle | 9.34 | -2.56 | 21.2 | 0.12 | 8.28 | -3.95 | 20.5 | 0.18 | 10.3 | -1.53 | 22.1 | 0.09 | 9.47 | -2.74 | 21.7 | 0.13 |
| | high | 5.83 | -4.93 | 16.6 | 0.29 | 4.86 | -6.23 | 15.9 | 0.39 | 8.99 | -2.27 | 20.2 | 0.12 | 8.07 | -3.60 | 19.7 | 0.17 |
| | trend | | | | 0.27 | | | | 0.39 | | | | 0.15 | | | | 0.24 |
| fT4 (pmol/L) | 4-HBP, continuous (ng/mL) | -0.28 | -1.09 | 0.53 | 0.49 | -0.27 | -1.10 | 0.56 | 0.52 | 0.29 | -0.55 | 1.13 | 0.50 | 0.38 | -0.48 | 1.25 | 0.38 |
| | low | reference | | | | reference | | | | reference | | | | reference | | | |
| | 4-HBP categories | | | | | | | | | | | | | | | | |
| | middle | -0.14 | -1.06 | 0.78 | 0.76 | -0.13 | -1.07 | 0.82 | 0.79 | -0.01 | -0.90 | 0.87 | 0.98 | 0.05 | -0.86 | 0.96 | 0.91 |
| | high | -0.46 | -1.29 | 0.38 | 0.28 | -0.46 | -1.32 | 0.40 | 0.29 | -0.03 | -0.87 | 0.82 | 0.95 | 0.02 | -0.85 | 0.89 | 0.97 |
| | trend | | | | 0.55 | | | | 0.55 | | | | 1.00 | | | | 0.99 |
| IGF-I (μ g/L) | 4-HBP, continuous (ng/mL) | 28 | 12 | 44 | 0.001 | 29 | 13 | 46 | 0.001 | 18 | 1.0 | 35 | 0.04 | 19 | 1.4 | 37 | 0.04 |
| | low | reference | | | | reference | | | | reference | | | | reference | | | |
| | 4-HBP categories | | | | | | | | | | | | | | | | |
| | middle | 18 | -0.26 | 37 | 0.05 | 20 | 1.03 | 39 | 0.04 | 16 | -2.2 | 33 | 0.09 | 17 | -1.7 | 35 | 0.08 |
| | high | 23 | 6.1 | 40 | 0.008 | 24 | 7.2 | 42 | 0.006 | 14 | -2.9 | 31 | 0.10 | 15 | -2.2 | 33 | 0.09 |
| | trend | | | | 0.02 | | | | 0.02 | | | | 0.14 | | | | 0.12 |
| IGFBP3 (μ g/L) | 4-HBP, continuous (ng/mL) | 564 | 169 | 960 | 0.006 | 524 | 124 | 923 | 0.01 | 591 | 157 | 1025 | 0.008 | 516 | 72.8 | 959 | 0.02 |
| | low | reference | | | | reference | | | | reference | | | | reference | | | |
| | 4-HBP categories | | | | | | | | | | | | | | | | |
| | middle | 1.3 | -456 | 458 | 1.00 | -71 | -532 | 389 | 0.76 | -0.78 | -462 | 461 | 1.00 | -84 | -550 | 382 | 0.72 |
| | high | 454 | 40.5 | 867 | 0.03 | 415 | -2.93 | 832 | 0.05 | 447 | 7.7 | 886 | 0.05 | 379 | -66 | 824 | 0.09 |
| | trend | | | | 0.06 | | | | 0.07 | | | | 0.09 | | | | 0.11 |

TSH: thyroid stimulation hormone, T3: triiodothyronine, fT3: free triiodothyronine, T4: thyroxine, fT4: free thyroxine, IGF-I: Insulin-like Growth Factor-I, IGFBP3: Insulin-like Growth Factor Binding Protein 3, CI: confidence interval.