**Supplementary material**

**Table 1: Comparison of sample groups with non-smoking participants only**

|  |  |  |
| --- | --- | --- |
|  | **Groups** | **Group tests** |
| **Variables** | **Overweight & depressed****N= 58** | **Overweight control****N= 32** | **Normal weight & depressed****N= 44** | **Normal weight control****N= 51** | **Statistic** | ***P*** |
| **Demographics** |  |  |  |  |  |  |
| Median age in years(range) | 38.5(25 – 50) | 37(25 – 48) | 30(25 – 50) | 30(24 – 50) | *K* = 15.16 | 0.002 |
| Gender, female(%) | 36(62.1%) | 15(46.9%) | 33(75%) | 39(76.5%) | *x*2 = 9.744 | 0.021 |
| BMI(range) | 29.6(25.3 – 47.8) | 28.5(25 – 35.6) | 22(18.1 – 24.9) | 22.4(18.8 – 24.9) | *K* = 138.57 | <0.001 |
| Ethnicity, white(%) | 52(89.7%) | 26(81.2%) | 36(81.8%) | 40(78.4%) | *x*2 = 2.711 | 0.438 |
| **Clinical** |  |  |  |  |  |  |
| Median HAM-D total score(range) | 19(14 – 31) | 0(0 – 5) | 18(14 – 26) | 0(0 – 7) | *K* = 141.16 | <0.001 |
| Currently on antidepressants(%) | 37(63.8%) | NA | 31(70.5%) | NA | *x*2 = 0.245 | 0.621 |
| Mean age of depression onset ± SD | 25 ± 9.8 | NA | 25.4 ± 9.2 | NA | *F* = 1.623 | 0.206 |
| **hsCRP** |  |  |  |  |  |  |
| Median hsCRP (range) | 2.25(0.2 – 15.3) | 1.4(0.2 – 11.8) | 0.7(0.2 – 8.8) | 0.5(0.2 – 5.2) | *K* = 30.514 | <0.001 |
| Mean log hsCRP mg/L ± SDCohen’s *d* effect size *vs* controls | 0.27 ± 0.511.11 | 0.09 ± 0.480.81 | -0.11 ± 0.430.29 | -0.23 ± 0.36 | *F* = 12.07 | <0.001 |
| hsCRP ≥3mg/L(%) | 23(39.7%) | 4(12.5%) | 5(11.4%) | 3(5.9%) | *x*2 = 24.405 | <0.001 |
| **Salivary cortisol** |  |  |  |  |  |  |
| Mean CAR AUCi (nmol min/L) ± SD | 99.8 ± 262 | 87.7 ± 238 | 6.79 ± 228 | 89 ± 311 | *F* = 0.889 | 0.448 |
| Mean log AUCg (nmol hour/L) ± SD | 1.66 ± 0.18 | 1.67 ± 0.23 | 1.7 ± 0.18 | 1.72 ± 0.23 | *F* = 0.082 | 0.495 |

BMI= body mass index, HAM-D= Hamilton Depression Rating Scale 17 for depressive symptoms, hsCRP= high sensitivity C-reactive protein, SD = standard deviation, CAR= cortisol awakening response, AUCi= area under the curve with respect to increase, AUCg= area under the curve with respect to ground.

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