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| --- |
| Supplementary Table 7. Sensitivity analysis of studies providing data on leptin and colorectal adenoma (CRA), by components of study quality. |
| Criteria | Analysis of studies providing mean and SD |  | Analysis of studies providing RR (95% CI) |
|  | Random effects | Heterogeneity |  |  | Random effects | Heterogeneity |
| n | SMD (95% CI) | I2 (%) | p-value |  | n | RR (95% CI) | I2 (%) | p-value |
| Including only studies in which |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| cases and controls were matched  | 2 | **0.11 (0.02, 0.21)\*** | 0.0 | 0.81 |  | 1 | n/a | - | - |
|  |  |  |  |  |  |  |  |  |  |
| CRA diagnosis was histologically confirmed | all studies included |  | all studies included |
|  |  |  |  |  |  |  |  |  |  |
| subjects were excluded if they had positive history of: |  |  |  |  |  |  |  |  |  |
| malignancy | 3 | **0.12 (0.03, 0.20)\*** | 0.00 | 0.52 |  | 4 | **1.32 (1.00, 1.74)†** | 0.0 | 0.82 |
| IBD and/ or FAP | 4 | **0.11 (0.03, 0.20)\*\*** | 0.0 | 0.71 |  | all studies included |
| colectomy | 2 | **0.10 (0.00, 0.20)\*** | 0.0 | 0.38 |  | 3 | 1.31 (0.99, 1.74) | 0.0 | 0.80 |
| other medical conditions, such as diabetes mellitus, liver/ renal disease etc. | 1 | n/a | - | - |  | 1 | n/a | - | - |
|  |  |  |  |  |  |  |  |  |  |
| controls |  |  |  |  |  |  |  |  |  |
| had negative colonoscopy | all studies included |  | all studies included |
| were drawn from the same community as cases | 2 | **0.13 (0.04, 0.22)\*\*** | 0.0 | 0.55 |  | 3 | **1.33 (1.00, 1.77)\*** | 0.0 | 0.66 |
|  |  |  |  |  |  |  |  |  |  |
| leptin measurements were conducted: |  |  |  |  |  |  |  |  |  |
| in one batch | 3 | -0.10 (-0.47, 0.28) | 79.0 | <0.01 |  | 1 | n/a | - | - |
| blindly as to case-control status | 1 | n/a | - | - |  | 1 | n/a | - | - |
| in duplicate | 2 | 0.16 (-0.02, 0.33) | 0.0 | 0.57 |  | 2 | 1.70 (0.75, 3.86) | 0.0 | 0.50 |
| in fasting samples | 4 | 0.00 (-0.22, 0.23) | 72.5 | 0.01 |  | all studies included |
| in morning samples | 2 | -0.34 (-1.02, 0.35) | 81.1 | 0.02 |  | 2 | 1.49 (0.68, 3.29) | 0.0 | 0.56 |
|  |  |  |  |  |  |  |  |  |  |
| data were collected with personal interview | no study to include |  | 1 | n/a | - | - |
|  |  |  |  |  |  |  |  |  |  |
| somatometrics were measured by the investigators | 1 | n/a | - | - |  | 1 | n/a | - | - |
| CI, confidence interval; FAP, familial adenomatous polyposis; I2, inconsistency index; IBD, inflammatory bowel disease; n/a, not applicable; RR, relative risk; SD, standard deviation; SMD, standardised mean difference.\* p<0.05; \*\* p<0.01; † p= 0.05 |