

A nation-wide analysis of socioeconomic and geographical disparities in the prevalence of obesity and excess weight in children and adolescents in Spain: results from the ENE-COVID study

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Supplementary Table S1. Crude prevalence of severe obesity (WHO and IOTF cut-offs) in child and adolescent participants (6-17 years old) by sociodemographic characteristics in ENE-COVID study

| | TOTAL | | BOYS | | GIRLS | |
|---|-------|----------------|------|-----------------|-------|---------------|
| | N | % (95% CI) | N | % (95% CI) | N | % (95% CI) |
| SEVERE OBESITY (WHO) | | | | | | |
| Overall | 8570 | 2.1 (1.7-2.5) | 4397 | 2.9 (2.4-3.6) | 4173 | 1.2 (0.8-1.7) |
| Age (years) | | | | | | |
| 6-9 | 2534 | 4.2 (3.3-5.3) | 1368 | 6.0 (4.6-7.8) | 1166 | 2.0 (1.1-3.5) |
| 10-13 | 3003 | 1.6 (1.1-2.4) | 1526 | 2.1 (1.4-3.4) | 1477 | 1.1 (0.6-2.1) |
| 14-17 | 3033 | 0.8 (0.5-1.2) | 1503 | 0.9 (0.5-1.7) | 1530 | 0.6 (0.3-1.2) |
| Nationality | | | | | | |
| Spanish | 8205 | 2.1 (1.7-2.5) | 4208 | 2.9 (2.3-3.6) | 3997 | 1.2 (0.8-1.7) |
| Other | 353 | 1.6 (0.8-3.4) | 182 | 2.3 (0.9-5.8) | 171 | 0.9 (0.3-2.6) |
| Disability | | | | | | |
| No | 8067 | 1.9 (1.6-2.3) | 4110 | 2.6 (2.1-3.3) | 3957 | 1.2 (0.8-1.7) |
| Yes | 121 | 7.7 (2.6-20.7) | 74 | 11.6 (3.9-29.4) | 47 | 0.0 |
| Household highest education level | | | | | | |
| Primary | 373 | 3.5 (1.8-6.7) | 191 | 5.5 (2.7-10.7) | 182 | 1.3 (0.2-7.8) |
| Secondary | 4597 | 3.0 (2.4-3.7) | 2342 | 4.3 (3.3-5.5) | 2255 | 1.6 (1.1-2.5) |
| University | 3600 | 0.9 (0.6-1.4) | 1864 | 1.1 (0.7-1.9) | 1736 | 0.7 (0.3-1.3) |
| Any adult with excess weight in the family | | | | | | |
| No | 1935 | 0.7 (0.4-1.3) | 973 | 1.2 (0.7-2.3) | 962 | 0.2 (0.0-0.9) |
| Yes | 6635 | 2.5 (2.1-3.1) | 3424 | 3.4 (2.7-4.3) | 3211 | 1.5 (1.0-2.2) |
| Census tract average income* | | | | | | |
| <25 th percentile | 2264 | 3.2 (2.4-4.4) | 1167 | 4.2 (3.0-6.0) | 1097 | 2.2 (1.3-3.6) |
| 25 th -<50 th percentile | 2222 | 1.7 (1.2-2.4) | 1161 | 2.4 (1.5-3.6) | 1061 | 0.9 (0.5-1.8) |
| 50 th -<75 th percentile | 1998 | 2.5 (1.7-3.5) | 1031 | 3.8 (2.5-5.6) | 967 | 1.0 (0.4-2.6) |
| ≥75 th percentile | 2086 | 0.9 (0.5-1.4) | 1038 | 1.1 (0.6-2.1) | 1048 | 0.6 (0.3-1.4) |
| Municipality size (inhabitants) | | | | | | |
| <5,000 | 1397 | 1.6 (1.1-2.5) | 720 | 2.3 (1.4-3.7) | 677 | 1.0 (0.4-2.2) |
| 5,000-19,999 | 1835 | 2.9 (2.0-4.1) | 941 | 3.6 (2.4-5.4) | 894 | 2.1 (1.1-4.1) |
| 20,000-99,999 | 2780 | 2.4 (1.8-3.3) | 1418 | 3.6 (2.5-5.0) | 1362 | 1.2 (0.7-2.2) |
| ≥100,000 | 2558 | 1.5 (1.1-2.2) | 1318 | 2.2 (1.4-3.4) | 1240 | 0.8 (0.4-1.6) |
| SEVERE OBESITY (IOTF) | | | | | | |
| Overall | 8586 | 1.8 (1.5-2.1) | 4408 | 2.0 (1.6-2.6) | 4178 | 1.5 (1.1-2.1) |
| Age (years) | | | | | | |
| 6-9 | 2549 | 3.4 (2.6-4.4) | 1378 | 4.0 (2.9-5.5) | 1171 | 2.6 (1.6-4.2) |
| 10-13 | 3004 | 1.1 (0.7-1.7) | 1527 | 1.0 (0.6-1.7) | 1477 | 1.2 (0.7-2.2) |
| 14-17 | 3033 | 1.1 (0.7-1.6) | 1503 | 1.3 (0.7-2.2) | 1530 | 0.9 (0.5-1.6) |
| Nationality | | | | | | |
| Spanish | 8218 | 1.8 (1.4-2.2) | 4218 | 2.0 (1.5-2.6) | 4000 | 1.5 (1.1-2.1) |
| Other | 356 | 1.6 (0.8-3.3) | 183 | 1.8 (0.7-4.8) | 173 | 1.4 (0.5-3.9) |
| Disability | | | | | | |
| No | 8079 | 1.7 (1.3-2.0) | 4118 | 1.8 (1.4-2.4) | 3961 | 1.5 (1.1-2.1) |
| Yes | 121 | 1.7 (0.2-11.3) | 74 | 2.5 (0.3-16.2) | 47 | 0.0 |
| Household highest education level | | | | | | |
| Primary | 376 | 2.9 (1.4-6.0) | 193 | 3.7 (1.5-8.8) | 183 | 1.9 (0.4-7.4) |
| Secondary | 4607 | 2.5 (2.0-3.1) | 2349 | 2.9 (2.2-3.9) | 2258 | 1.9 (1.3-2.8) |
| University | 3603 | 0.9 (0.6-1.4) | 1866 | 0.8 (0.4-1.5) | 1737 | 1.0 (0.5-1.7) |
| Any adult with excess weight in the family | | | | | | |
| No | 1938 | 0.6 (0.3-1.1) | 973 | 0.7 (0.3-1.7) | 965 | 0.4 (0.2-1.1) |
| Yes | 6648 | 2.1 (1.7-2.6) | 3435 | 2.4 (1.8-3.1) | 3213 | 1.9 (1.3-2.6) |
| Census tract average income* | | | | | | |
| <25 th percentile | 2271 | 2.6 (1.9-3.6) | 1171 | 2.7 (1.8-4.1) | 1100 | 2.5 (1.6-4.0) |
| 25 th -<50 th percentile | 2228 | 1.6 (1.1-2.4) | 1165 | 1.7 (1.0-2.8) | 1063 | 1.5 (0.9-2.7) |
| 50 th -<75 th percentile | 2001 | 1.9 (1.2-2.8) | 1034 | 2.4 (1.5-3.8) | 967 | 1.3 (0.6-2.9) |
| ≥75 th percentile | 2086 | 0.9 (0.5-1.5) | 1038 | 1.1 (0.6-2.2) | 1048 | 0.6 (0.3-1.4) |
| Municipality size (inhabitants) | | | | | | |
| <5,000 | 1398 | 1.1 (0.6-1.8) | 720 | 1.1 (0.6-2.2) | 678 | 1.0 (0.4-2.2) |
| 5,000-19,999 | 1838 | 2.2 (1.5-3.4) | 944 | 2.2 (1.3-3.8) | 894 | 2.2 (1.2-4.2) |
| 20,000-99,999 | 2787 | 2.0 (1.5-2.8) | 1422 | 2.5 (1.6-3.7) | 1365 | 1.6 (1.0-2.6) |
| ≥100,000 | 2563 | 1.5 (1.1-2.1) | 1322 | 1.7 (1.1-2.7) | 1241 | 1.2 (0.7-2.1) |

Supplementary Table S2. Crude prevalence of obesity and excess weight in child and adolescent participants in ENE-COVID study by sociodemographic characteristics according to IOTF cut-offs.

| | TOTAL | | BOYS | | GIRLS | |
|---|-------|------------------|------|------------------|-------|------------------|
| | N | % (95% CI) | N | % (95% CI) | N | % (95% CI) |
| OBESITY (IOTF) | | | | | | |
| Overall | 10446 | 7.5 (6.9-8.2) | 5339 | 8.3 (7.4-9.4) | 5107 | 6.7 (5.9-7.6) |
| Age (years) | | | | | | |
| 2-5 | 1860 | 13.0 (11.2-15.2) | 931 | 13.5 (10.9-16.6) | 929 | 12.5 (10.1-15.5) |
| 6-9 | 2549 | 10.5 (9.1-12.2) | 1378 | 11.6 (9.5-14.0) | 1171 | 9.3 (7.5-11.6) |
| 10-13 | 3004 | 4.8 (3.9-5.9) | 1527 | 5.3 (4.0-6.9) | 1477 | 4.3 (3.2-5.7) |
| 14-17 | 3033 | 4.4 (3.5-5.5) | 1503 | 5.3 (4.0-7.1) | 1530 | 3.4 (2.4-4.8) |
| Nationality | | | | | | |
| Spanish | 9966 | 7.4 (6.7-8.1) | 5099 | 8.2 (7.3-9.3) | 4867 | 6.5 (5.7-7.5) |
| Other | 457 | 8.5 (6.0-12.1) | 228 | 7.0 (3.9-12.2) | 229 | 10.2 (6.4-15.9) |
| Disability | | | | | | |
| No | 9763 | 7.0 (6.4-7.7) | 4960 | 7.6 (6.7-8.7) | 4803 | 6.4 (5.5-7.3) |
| Yes | 136 | 13.6 (7.0-24.8) | 86 | 13.4 (5.5-29.0) | 50 | 14.3 (5.6-31.7) |
| Household highest education level | | | | | | |
| Primary | 483 | 14.2 (10.5-18.8) | 239 | 16.2 (10.7-23.8) | 244 | 11.9 (8.0-17.4) |
| Secondary | 5557 | 9.5 (8.5-10.6) | 2820 | 11.1 (9.6-12.7) | 2737 | 7.9 (6.8-9.2) |
| University | 4406 | 4.6 (3.8-5.6) | 2280 | 4.5 (3.5-5.8) | 2126 | 4.8 (3.7-6.2) |
| Any adult with excess weight in the family | | | | | | |
| No | 2334 | 3.6 (2.7-4.6) | 1174 | 4.4 (3.1-6.1) | 1160 | 2.8 (1.9-4.1) |
| Yes | 8112 | 8.7 (7.9-9.6) | 4165 | 9.5 (8.3-10.8) | 3947 | 7.9 (6.9-9.1) |
| Census tract average income* | | | | | | |
| <25 th percentile | 2767 | 10.4 (9.0-12.0) | 1416 | 11.0 (9.1-13.4) | 1351 | 9.7 (7.9-11.9) |
| 25 th -<50 th percentile | 2684 | 7.1 (6.0-8.4) | 1392 | 7.4 (5.9-9.4) | 1292 | 6.7 (5.2-8.7) |
| 50 th -<75 th percentile | 2427 | 8.0 (6.6-9.7) | 1253 | 10.4 (8.2-13.0) | 1174 | 5.4 (4.0-7.2) |
| ≥75 th percentile | 2568 | 4.3 (3.4-5.4) | 1278 | 3.9 (2.7-5.6) | 1290 | 4.7 (3.5-6.4) |
| Municipality size (inhabitants) | | | | | | |
| <5,000 | 1669 | 8.5 (7.1-10.3) | 869 | 9.2 (7.0-12.0) | 800 | 7.8 (5.7-10.7) |
| 5,000-19,999 | 2239 | 8.1 (6.8-9.6) | 1137 | 8.3 (6.4-10.6) | 1102 | 7.8 (6.0-10.1) |
| 20,000-99,999 | 3400 | 8.0 (6.8-9.4) | 1728 | 9.6 (7.8-11.8) | 1672 | 6.3 (5.0-7.9) |
| ≥100,000 | 3138 | 6.6 (5.6-7.9) | 1605 | 7.1 (5.7-8.9) | 1533 | 6.2 (4.9-7.8) |
| EXCESS WEIGHT (IOTF) | | | | | | |
| Overall | 10446 | 24.9 (23.7-26.1) | 5339 | 26.9 (25.2-28.5) | 5107 | 22.8 (21.3-24.4) |
| Age (years) | | | | | | |
| 2-5 | 1860 | 26.0 (23.3-28.9) | 931 | 26.0 (22.3-30.1) | 929 | 26.0 (22.6-29.7) |
| 6-9 | 2549 | 29.0 (26.8-31.3) | 1378 | 30.7 (27.5-34.1) | 1171 | 26.9 (23.9-30.2) |
| 10-13 | 3004 | 25.3 (23.3-27.5) | 1527 | 27.3 (24.5-30.2) | 1477 | 23.3 (20.5-26.3) |
| 14-17 | 3033 | 20.3 (18.5-22.1) | 1503 | 23.3 (20.8-26.1) | 1530 | 17.2 (14.9-19.7) |
| Nationality | | | | | | |
| Spanish | 9966 | 24.6 (23.4-25.8) | 5099 | 26.5 (24.8-28.2) | 4867 | 22.6 (21.1-24.2) |
| Other | 457 | 29.3 (23.8-35.4) | 228 | 30.7 (22.5-40.3) | 229 | 27.7 (21.4-35.1) |
| Disability | | | | | | |
| No | 9763 | 24.4 (23.3-25.6) | 4960 | 26.4 (24.8-28.2) | 4803 | 22.3 (20.8-23.9) |
| Yes | 136 | 33.1 (23.9-43.8) | 86 | 35.9 (24.3-49.6) | 50 | 26.9 (14.7-44.1) |
| Household highest education level | | | | | | |
| Primary | 483 | 33.7 (28.1-39.8) | 239 | 33.4 (25.7-42.2) | 244 | 34.0 (26.8-42.0) |
| Secondary | 5557 | 29.8 (28.1-31.5) | 2820 | 32.5 (30.2-34.8) | 2737 | 26.9 (24.7-29.1) |
| University | 4406 | 18.6 (17.1-20.2) | 2280 | 19.9 (17.8-22.2) | 2126 | 17.2 (15.0-19.5) |
| Any adult with excess weight in the family | | | | | | |
| No | 2334 | 15.4 (13.4-17.7) | 1174 | 17.3 (14.5-20.5) | 1160 | 13.5 (11.2-16.4) |
| Yes | 8112 | 27.8 (26.5-29.1) | 4165 | 29.6 (27.8-31.5) | 3947 | 25.8 (24.0-27.5) |
| Census tract average income* | | | | | | |
| <25 th percentile | 2767 | 29.5 (27.2-31.9) | 1416 | 30.6 (27.2-34.1) | 1351 | 28.3 (25.4-31.5) |
| 25 th -<50 th percentile | 2684 | 25.9 (23.9-28.1) | 1392 | 27.8 (24.9-30.9) | 1292 | 23.9 (21.1-26.9) |
| 50 th -<75 th percentile | 2427 | 24.2 (21.9-26.7) | 1253 | 27.6 (24.5-30.9) | 1174 | 20.5 (17.6-23.6) |
| ≥75 th percentile | 2568 | 19.5 (17.3-21.9) | 1278 | 20.8 (17.5-24.4) | 1290 | 18.3 (15.4-21.5) |
| Municipality size (inhabitants) | | | | | | |
| <5,000 | 1669 | 26.4 (23.3-29.8) | 869 | 30.3 (26.0-35.0) | 800 | 22.1 (18.2-26.5) |
| 5,000-19,999 | 2239 | 25.8 (23.6-28.3) | 1137 | 26.3 (23.1-29.8) | 1102 | 25.3 (22.1-28.9) |
| 20,000-99,999 | 3400 | 26.0 (23.8-28.3) | 1728 | 27.9 (24.9-31.0) | 1672 | 24.0 (21.5-26.7) |
| ≥100,000 | 3138 | 23.2 (21.4-25.1) | 1605 | 25.4 (22.8-28.3) | 1533 | 20.8 (18.4-23.5) |

Population prevalence and 95% confidence intervals (CI) accounting for sampling weights, nonresponse rates by sex, age, and census tract average income, stratification by province and municipality size, and clustering by household and census tract. N: number of participants; * Categories based on percentiles from province-specific distributions of census tract average income in 2017.

Supplementary Table S3. Crude prevalence of obesity and excess weight (WHO and IOTF cut-offs) by age and sex in child and adolescent participants in ENE-COVID study

| | TOTAL | | BOYS | | GIRLS | |
|-----------------------------|-------|------------------|------|------------------|-------|------------------|
| | N | % (95% CI) | N | % (95% CI) | N | % (95% CI) |
| OBESITY (WHO) | | | | | | |
| Age (years) | | | | | | |
| 2 | 411 | 9.4 (6.3-13.6) | 206 | 10.6 (6.4-17.1) | 205 | 8.0 (4.2-14.7) |
| 3 | 479 | 7.0 (4.7-10.5) | 249 | 7.5 (4.3-12.6) | 230 | 6.6 (3.5-12.1) |
| 4 | 525 | 7.3 (4.9-10.6) | 256 | 7.5 (4.1-13.5) | 269 | 7.0 (4.3-11.0) |
| 5 | 558 | 14.7 (11.3-18.8) | 267 | 18.0 (12.8-24.7) | 291 | 11.7 (7.9-16.9) |
| 6 | 555 | 18.8 (15.1-23.1) | 304 | 22.6 (17.2-29.2) | 251 | 14.4 (10.0-20.2) |
| 7 | 635 | 16.9 (13.7-20.7) | 332 | 20.8 (15.8-26.8) | 303 | 12.5 (8.6-17.9) |
| 8 | 651 | 18.1 (14.4-22.5) | 350 | 21.0 (15.7-27.4) | 301 | 14.5 (9.6-21.2) |
| 9 | 693 | 14.5 (11.4-18.3) | 382 | 18.7 (14.0-24.3) | 311 | 9.2 (5.9-14.0) |
| 10 | 733 | 13.0 (9.9-17.0) | 365 | 18.3 (13.2-24.7) | 368 | 8.1 (5.0-12.9) |
| 11 | 728 | 13.8 (10.9-17.2) | 392 | 16.5 (12.4-21.5) | 336 | 10.3 (6.9-15.0) |
| 12 | 770 | 8.4 (6.5-10.8) | 386 | 9.8 (7.0-13.6) | 384 | 7.0 (4.6-10.3) |
| 13 | 772 | 7.9 (5.9-10.5) | 383 | 9.8 (6.8-14.0) | 389 | 5.9 (3.5-9.8) |
| 14 | 765 | 7.4 (5.4-10.1) | 375 | 9.6 (6.3-14.2) | 390 | 5.1 (3.0-8.6) |
| 15 | 779 | 6.5 (4.4-9.4) | 398 | 9.2 (5.8-14.3) | 381 | 3.4 (1.7-6.7) |
| 16 | 749 | 5.0 (3.5-7.3) | 368 | 6.6 (4.3-10.2) | 381 | 3.5 (1.7-6.9) |
| 17 | 740 | 5.7 (3.9-8.1) | 362 | 7.0 (4.2-11.4) | 378 | 4.5 (2.7-7.2) |
| EXCESS WEIGHT (WHO) | | | | | | |
| Age (years) | | | | | | |
| 2 | 411 | 18.3 (13.8-23.8) | 206 | 18.9 (12.6-27.4) | 205 | 17.6 (11.7-25.7) |
| 3 | 479 | 16.0 (12.3-20.6) | 249 | 18.7 (13.2-25.6) | 230 | 13.4 (8.8-19.9) |
| 4 | 525 | 16.7 (13.0-21.1) | 256 | 16.3 (11.2-23.2) | 269 | 17.0 (12.2-23.3) |
| 5 | 558 | 33.6 (28.8-38.7) | 267 | 38.0 (30.8-45.6) | 291 | 29.7 (23.5-36.7) |
| 6 | 555 | 36.8 (31.8-42.0) | 304 | 41.8 (34.8-49.1) | 251 | 31.1 (24.3-38.8) |
| 7 | 635 | 35.9 (31.2-40.8) | 332 | 39.6 (32.9-46.6) | 303 | 31.7 (25.6-38.5) |
| 8 | 651 | 40.6 (35.5-45.9) | 350 | 44.7 (37.7-51.9) | 301 | 35.6 (29.1-42.7) |
| 9 | 693 | 35.9 (31.5-40.5) | 382 | 38.0 (32.1-44.2) | 311 | 33.2 (27.0-40.0) |
| 10 | 733 | 40.4 (35.8-45.2) | 365 | 41.7 (35.2-48.4) | 368 | 39.3 (33.1-45.8) |
| 11 | 728 | 37.2 (32.9-41.8) | 392 | 40.7 (34.7-47.0) | 336 | 32.7 (26.8-39.3) |
| 12 | 770 | 34.0 (29.6-38.7) | 386 | 40.9 (35.0-47.0) | 384 | 27.2 (21.2-34.2) |
| 13 | 772 | 30.3 (26.3-34.6) | 383 | 37.2 (31.1-43.7) | 389 | 23.3 (18.3-29.1) |
| 14 | 765 | 26.4 (22.9-30.3) | 375 | 32.3 (26.6-38.5) | 390 | 20.3 (16.2-25.2) |
| 15 | 779 | 25.3 (21.6-29.4) | 398 | 27.2 (22.0-33.1) | 381 | 23.3 (18.0-29.5) |
| 16 | 749 | 21.2 (17.8-25.0) | 368 | 24.2 (19.2-29.9) | 381 | 18.2 (13.9-23.5) |
| 17 | 740 | 21.1 (17.7-24.9) | 362 | 24.2 (19.3-30.0) | 378 | 18.2 (14.1-23.2) |
| OBESITY (IOTF) | | | | | | |
| Age (years) | | | | | | |
| 2 | 260 | 18.6 (13.3-25.3) | 135 | 19.7 (12.7-29.1) | 125 | 17.3 (10.3-27.6) |
| 3 | 499 | 12.7 (9.3-17.0) | 259 | 11.9 (7.6-18.2) | 240 | 13.4 (8.8-19.9) |
| 4 | 537 | 12.4 (9.2-16.6) | 264 | 12.4 (7.9-18.9) | 273 | 12.5 (8.4-18.2) |
| 5 | 564 | 11.2 (8.3-14.9) | 273 | 12.8 (8.3-19.1) | 291 | 9.8 (6.4-14.8) |
| 6 | 560 | 14.2 (11.1-18.2) | 308 | 14.2 (9.9-19.9) | 252 | 14.3 (10.0-20.2) |
| 7 | 643 | 10.1 (7.7-13.1) | 337 | 11.6 (8.0-16.4) | 306 | 8.5 (5.5-12.7) |
| 8 | 652 | 10.8 (7.9-14.5) | 350 | 12.4 (8.2-18.1) | 302 | 8.8 (5.5-13.9) |
| 9 | 694 | 7.7 (5.4-11.0) | 383 | 8.8 (5.4-13.9) | 311 | 6.4 (3.7-10.6) |
| 10 | 734 | 5.7 (3.8-8.4) | 366 | 7.3 (4.2-12.3) | 368 | 4.1 (2.3-7.4) |
| 11 | 728 | 5.4 (3.6-8.1) | 392 | 6.0 (3.5-10.2) | 336 | 4.7 (2.5-8.5) |
| 12 | 770 | 3.8 (2.6-5.5) | 386 | 2.5 (1.4-4.4) | 384 | 5.1 (3.1-8.1) |
| 13 | 772 | 4.3 (2.9-6.5) | 383 | 5.2 (3.2-8.5) | 389 | 3.4 (1.6-7.0) |
| 14 | 765 | 3.9 (2.4-6.1) | 375 | 4.2 (2.2-7.8) | 390 | 3.6 (1.8-6.8) |
| 15 | 779 | 4.4 (2.7-7.1) | 398 | 6.2 (3.5-11.0) | 381 | 2.4 (1.1-5.5) |
| 16 | 749 | 4.4 (2.9-6.6) | 368 | 5.3 (3.2-8.6) | 381 | 3.5 (1.7-6.9) |
| 17 | 740 | 4.8 (3.3-7.0) | 362 | 5.6 (3.3-9.4) | 378 | 4.1 (2.4-6.8) |
| EXCESS WEIGHT (IOTF) | | | | | | |

| Age (years) | | | | | | |
|-------------|-----|------------------|-----|------------------|-----|------------------|
| 2 | 260 | 27.3 (20.8-35.0) | 135 | 28.2 (20.2-37.9) | 125 | 26.2 (17.4-37.5) |
| 3 | 499 | 25.2 (20.8-30.2) | 259 | 25.1 (18.9-32.4) | 240 | 25.4 (19.3-32.6) |
| 4 | 537 | 24.5 (19.8-29.9) | 264 | 21.9 (16.0-29.2) | 273 | 27.3 (20.3-35.6) |
| 5 | 564 | 27.5 (23.0-32.5) | 273 | 29.9 (23.3-37.5) | 291 | 25.3 (19.6-32.1) |
| 6 | 560 | 30.5 (25.7-35.7) | 308 | 32.2 (25.6-39.6) | 252 | 28.4 (22.0-35.9) |
| 7 | 643 | 28.9 (24.8-33.4) | 337 | 31.4 (25.5-37.9) | 306 | 26.1 (20.5-32.6) |
| 8 | 652 | 29.2 (24.8-34.0) | 350 | 30.6 (24.7-37.3) | 302 | 27.4 (21.6-34.2) |
| 9 | 694 | 27.7 (23.8-32.0) | 383 | 29.0 (23.7-35.0) | 311 | 26.0 (20.4-32.6) |
| 10 | 734 | 27.4 (23.3-32.1) | 366 | 29.1 (23.2-35.7) | 368 | 25.9 (20.5-32.2) |
| 11 | 728 | 27.9 (24.0-32.2) | 392 | 27.7 (22.6-33.6) | 336 | 28.1 (22.5-34.6) |
| 12 | 770 | 23.0 (19.2-27.2) | 386 | 25.4 (20.5-31.0) | 384 | 20.6 (15.3-27.2) |
| 13 | 772 | 23.2 (19.4-27.5) | 383 | 27.0 (21.4-33.4) | 389 | 19.4 (14.7-25.0) |
| 14 | 765 | 20.0 (16.8-23.7) | 375 | 23.8 (18.7-29.7) | 390 | 16.1 (12.3-20.8) |
| 15 | 779 | 21.5 (18.0-25.3) | 398 | 23.7 (18.7-29.5) | 381 | 19.0 (14.6-24.4) |
| 16 | 749 | 18.8 (15.5-22.6) | 368 | 21.4 (16.7-27.1) | 381 | 16.2 (12.2-21.3) |
| 17 | 740 | 20.7 (17.3-24.5) | 362 | 24.4 (19.4-30.2) | 378 | 17.3 (13.3-22.2) |

Supplementary Table S4. Standardized* prevalence and prevalence ratio of obesity (IOTF cut-offs) by sociodemographic variables in child and adolescent participants in ENE-COVID study

| | Total (N=10,446) | | Boys (N=5,339) | | Girls (N=5,107) | |
|---|------------------------------------|--|------------------------------------|--|------------------------------------|--|
| | Standardized prevalence % (95% CI) | Standardized prevalence ratio (95% CI) | Standardized prevalence % (95% CI) | Standardized prevalence ratio (95% CI) | Standardized prevalence % (95% CI) | Standardized prevalence ratio (95% CI) |
| Sex | | | | | | |
| Boys | 7.6 (6.7-8.7) | 1.16 (0.97-1.39) | | | | |
| Girls | 6.6 (5.7-7.5) | Ref. | | | | |
| Age group (years) | | | | | | |
| 2-5 | 12.7 (10.7-14.9) | Ref. | 13.1 (10.5-16.3) | Ref. | 12.0 (9.4-15.2) | Ref. |
| 6-9 | 10.2 (8.7-11.8) | 0.80 (0.65-0.99) | 10.8 (8.8-13.3) | 0.83 (0.62-1.11) | 9.4 (7.4-11.9) | 0.78 (0.57-1.07) |
| 10-13 | 4.7 (3.8-5.9) | 0.37 (0.28-0.49) | 5.1 (3.8-6.8) | 0.39 (0.27-0.55) | 4.5 (3.2-6.2) | 0.37 (0.25-0.54) |
| 14-17 | 4.0 (3.1-5.1) | 0.32 (0.23-0.43) | 4.6 (3.4-6.3) | 0.35 (0.24-0.52) | 3.3 (2.2-5.1) | 0.28 (0.18-0.43) |
| Nationality | | | | | | |
| Spanish | 7.1 (6.5-7.9) | Ref. | 7.7 (6.8-8.8) | Ref. | 6.5 (5.6-7.6) | Ref. |
| Other | 6.8 (4.5-10.0) | 0.95 (0.63-1.43) | 5.7 (3.0-10.5) | 0.73 (0.39-1.39) | 7.7 (4.8-12.2) | 1.19 (0.68-2.08) |
| Disability | | | | | | |
| No | 7.0 (6.4-7.7) | Ref. | 7.5 (6.6-8.6) | Ref. | 6.4 (5.5-7.5) | Ref. |
| Yes | 13.1 (6.9-23.3) | 1.86 (1.01-3.43) | 12.4 (5.4-26.1) | 1.65 (0.74-3.69) | 14.9 (7.4-27.7) | 2.31 (0.94-5.68) |
| Household highest education level | | | | | | |
| Primary | 12.3 (8.2-18.0) | 2.59 (1.64-4.08) | 14.3 (8.7-22.4) | 3.25 (1.87-5.66) | 10.0 (5.0-19.0) | 1.95 (1.04-3.67) |
| Secondary | 8.7 (7.8-9.8) | 1.84 (1.43-2.36) | 9.9 (8.5-11.5) | 2.26 (1.64-3.10) | 7.5 (6.1-9.2) | 1.47 (1.07-2.01) |
| University | 4.8 (3.9-5.8) | Ref. | 4.4 (3.4-5.7) | Ref. | 5.1 (4.1-6.4) | Ref. |
| Any adult with excess weight in the family | | | | | | |
| No | 3.6 (2.8-4.7) | Ref. | 4.3 (3.0-6.1) | Ref. | 3.0 (1.8-4.9) | Ref. |
| Yes | 8.1 (7.3-8.9) | 2.23 (1.67-2.99) | 8.5 (7.4-9.7) | 1.97 (1.35-2.88) | 7.5 (6.5-8.8) | 2.55 (1.62-4.02) |
| Census tract average income | | | | | | |
| <25th | 8.2 (7.0-9.7) | 1.63 (1.20-2.22) | 8.2 (6.6-10.1) | 1.69 (1.10-2.61) | 8.3 (6.7-10.2) | 1.56 (1.02-2.37) |
| 25th-<50th | 6.5 (5.4-7.9) | 1.29 (0.93-1.79) | 6.5 (5.0-8.4) | 1.35 (0.85-2.14) | 6.5 (5.0-8.4) | 1.22 (0.78-1.92) |
| 50th-<75th | 8.1 (6.7-9.7) | 1.60 (1.18-2.16) | 10.3 (8.1-12.9) | 2.13 (1.38-3.29) | 5.6 (3.7-8.5) | 1.05 (0.68-1.63) |
| ≥75th | 5.0 (3.9-6.5) | Ref. | 4.8 (3.3-7.0) | Ref. | 5.3 (3.8-7.4) | Ref. |
| Municipality size (inhabitants) | | | | | | |
| <5,000 | 7.9 (6.6-9.5) | 1.18 (0.91-1.53) | 8.5 (6.4-11.2) | 1.26 (0.87-1.81) | 7.2 (5.1-9.9) | 1.10 (0.75-1.60) |
| 5,000-19,999 | 7.2 (6.0-8.7) | 1.08 (0.84-1.40) | 7.3 (5.6-9.6) | 1.08 (0.76-1.56) | 7.2 (5.4-9.4) | 1.10 (0.75-1.60) |
| 20,000-99,999 | 7.3 (6.3-8.5) | 1.10 (0.87-1.39) | 8.5 (6.9-10.4) | 1.26 (0.92-1.73) | 6.0 (4.5-8.0) | 0.92 (0.66-1.29) |
| ≥100,000 | 6.7 (5.5-8.0) | Ref. | 6.8 (5.3-8.6) | Ref. | 6.5 (5.1-8.4) | Ref. |

* Standardized to the overall distribution of age, sex, nationality, disability, household highest education level, presence of any adult with excess weight in the household, census tract income and municipality size

Supplementary Table S5. Standardized* prevalence and prevalence ratio of excess weight (IOTF cut-offs) by sociodemographic variables in child and adolescent participants in ENE-COVID study

| | Total (N=10,446) | | Boys (N=5,339) | | Girls (N=5,107) | |
|---|------------------------------------|--|------------------------------------|--|------------------------------------|--|
| | Standardized prevalence % (95% CI) | Standardized prevalence ratio (95% CI) | Standardized prevalence % (95% CI) | Standardized prevalence ratio (95% CI) | Standardized prevalence % (95% CI) | Standardized prevalence ratio (95% CI) |
| Sex | | | | | | |
| Boys | 26.4 (24.8-28.1) | 1.17 (1.07-1.28) | | | | |
| Girls | 22.6 (21.1-24.2) | Ref. | | | | |
| Age group (years) | | | | | | |
| 2-5 | 25.5 (22.8-28.5) | Ref. | 25.9 (22.2-29.9) | Ref. | 25.0 (21.3-29.1) | Ref. |
| 6-9 | 29.0 (26.7-31.4) | 1.14 (1.00-1.30) | 30.9 (27.7-34.4) | 1.20 (1.00-1.43) | 26.9 (23.7-30.4) | 1.08 (0.89-1.30) |
| 10-13 | 25.6 (23.6-27.8) | 1.00 (0.87-1.15) | 27.5 (24.7-30.4) | 1.06 (0.89-1.27) | 23.7 (21.0-26.7) | 0.95 (0.78-1.16) |
| 14-17 | 19.4 (17.6-21.4) | 0.76 (0.66-0.88) | 22.1 (19.5-24.9) | 0.85 (0.70-1.04) | 16.6 (14.1-19.5) | 0.66 (0.54-0.81) |
| Nationality | | | | | | |
| Spanish | 24.5 (23.3-25.7) | Ref. | 26.3 (24.6-28.0) | Ref. | 22.6 (20.9-24.3) | Ref. |
| Other | 26.1 (20.7-32.4) | 1.07 (0.85-1.34) | 29.0 (20.9-38.7) | 1.10 (0.81-1.51) | 22.8 (15.1-32.9) | 1.01 (0.74-1.39) |
| Disability | | | | | | |
| No | 24.5 (23.3-25.7) | Ref. | 26.3 (24.6-28.0) | Ref. | 22.5 (20.9-24.2) | Ref. |
| Yes | 30.6 (22.6-40.0) | 1.25 (0.93-1.67) | 33.9 (23.5-46.1) | 1.29 (0.91-1.82) | 25.4 (15.7-38.5) | 1.13 (0.65-1.96) |
| Household highest education level | | | | | | |
| Primary | 34.0 (27.2-41.4) | 1.78 (1.41-2.24) | 34.9 (25.8-45.1) | 1.72 (1.26-2.33) | 32.7 (23.8-43.1) | 1.84 (1.33-2.54) |
| Secondary | 28.7 (27.0-30.5) | 1.50 (1.35-1.67) | 31.2 (28.8-33.7) | 1.54 (1.34-1.76) | 26.0 (23.7-28.5) | 1.46 (1.24-1.72) |
| University | 19.1 (17.5-20.8) | Ref. | 20.3 (18.1-22.6) | Ref. | 17.8 (15.7-20.2) | Ref. |
| Any adult with excess weight in the family | | | | | | |
| No | 16.0 (13.9-18.4) | Ref. | 18.0 (15.0-21.4) | Ref. | 14.0 (11.1-17.4) | Ref. |
| Yes | 27.0 (25.7-28.3) | 1.68 (1.46-1.94) | 28.8 (27.0-30.7) | 1.60 (1.33-1.93) | 25.1 (23.3-26.9) | 1.79 (1.46-2.20) |
| Census tract average income | | | | | | |
| <25th | 25.8 (23.7-28.1) | 1.15 (1.00-1.33) | 26.5 (23.5-29.8) | 1.11 (0.91-1.36) | 25.0 (21.9-28.3) | 1.19 (0.97-1.47) |
| 25th-<50th | 25.0 (23.0-27.1) | 1.12 (0.97-1.29) | 26.8 (24.0-29.9) | 1.13 (0.93-1.37) | 23.1 (20.3-26.1) | 1.10 (0.89-1.36) |
| 50th-<75th | 24.6 (22.4-26.9) | 1.10 (0.95-1.27) | 27.9 (24.9-31.2) | 1.17 (0.97-1.42) | 20.9 (17.9-24.2) | 1.00 (0.81-1.23) |
| ≥75th | 22.4 (19.9-25.1) | Ref. | 23.8 (20.2-27.8) | Ref. | 20.9 (17.4-25.0) | Ref. |
| Municipality size (inhabitants) | | | | | | |
| <5,000 | 24.7 (21.8-27.8) | 1.03 (0.89-1.19) | 28.6 (24.4-33.1) | 1.10 (0.92-1.33) | 20.6 (16.6-25.3) | 0.95 (0.76-1.18) |
| 5,000-19,999 | 24.6 (22.5-26.9) | 1.03 (0.91-1.16) | 25.1 (21.9-28.5) | 0.97 (0.82-1.14) | 24.1 (21.0-27.6) | 1.11 (0.92-1.34) |
| 20,000-99,999 | 25.2 (23.2-27.4) | 1.05 (0.94-1.18) | 27.2 (24.4-30.2) | 1.05 (0.91-1.22) | 23.2 (20.4-26.3) | 1.07 (0.91-1.26) |
| ≥100,000 | 23.9 (22.1-25.9) | Ref. | 25.9 (23.3-28.7) | Ref. | 21.7 (19.1-24.6) | Ref. |

* Standardized to the overall distribution of age, sex, nationality, disability, household highest education level, presence of any adult with excess weight in the household, census tract income and municipality size

Supplementary Table S6. Crude prevalence of obesity (WHO growth reference) by province (total and by sex) in child and adolescent participants in ENE-COVID study

| | TOTAL | | BOYS | | GIRLS | |
|------------------------|-------|------------------|------|------------------|-------|------------------|
| | N | % (95% CI) | N | % (95% CI) | N | % (95% CI) |
| Spain | 10543 | 10.7 (10.0-11.6) | 5375 | 13.4 (12.2-14.7) | 5168 | 7.9 (7.0-9.0) |
| Province | | | | | | |
| Albacete | 197 | 13.9 (9-20.8) | 90 | 21 (12.3-33.4) | 107 | 6 (2.6-13.5) |
| Alicante/Alacant | 253 | 13.1 (9.3-18.2) | 122 | 17.2 (11-26) | 131 | 9.1 (4.9-16.1) |
| Almería | 177 | 10.7 (6.2-17.7) | 80 | 14.6 (6.8-28.7) | 97 | 6.5 (2.4-16.2) |
| Araba/Álava | 112 | 2.2 (0.8-5.9) | 69 | 2.6 (0.9-7.4) | 43 | 1.7 (0.2-12.2) |
| Asturias | 191 | 11.2 (7-17.3) | 91 | 13.9 (7.6-24) | 100 | 8 (4.1-15) |
| Ávila | 91 | 7.8 (4.2-13.8) | 52 | 15.7 (9-26.1) | 39 | 0 |
| Badajoz | 238 | 12.9 (8.6-18.8) | 127 | 16.7 (10-26.8) | 111 | 8.6 (4.5-15.9) |
| Balears, Illes | 219 | 11.4 (7.3-17.3) | 114 | 12.1 (6.1-22.6) | 105 | 10.6 (6-18.1) |
| Barcelona | 646 | 7.7 (5.8-10.1) | 349 | 8.9 (6.4-12.3) | 297 | 6.4 (4-10) |
| Bizkaia | 167 | 2.7 (1.1-6.7) | 86 | 5.2 (2.1-12.6) | 81 | 0 |
| Burgos | 144 | 12.6 (4.5-30.5) | 66 | 19.3 (5.7-48.7) | 78 | 5.7 (2.2-14) |
| Cáceres | 170 | 6.4 (3.1-12.5) | 87 | 9.8 (4.7-19.5) | 83 | 2.8 (0.8-8.9) |
| Cádiz | 227 | 13.8 (9.5-19.5) | 121 | 13.3 (6.8-24.3) | 106 | 14.2 (9-21.7) |
| Cantabria | 276 | 7.4 (4.5-12.2) | 143 | 7.6 (3.9-14.4) | 133 | 7.3 (3.7-13.8) |
| Castellón/Castelló | 136 | 17.4 (10.1-28.4) | 66 | 25.8 (13.2-44.1) | 70 | 8.2 (3.7-17.2) |
| Ciudad Real | 186 | 10.6 (7-15.9) | 100 | 13.8 (8.2-22.4) | 86 | 7 (3.7-12.9) |
| Córdoba | 193 | 17 (11-25.5) | 97 | 20.6 (11.7-33.8) | 96 | 13.1 (6.9-23.4) |
| Coruña, A | 173 | 7.1 (3.7-13.2) | 82 | 9 (4.5-17.1) | 91 | 5.1 (1.9-12.9) |
| Cuenca | 128 | 9.8 (5.4-17) | 67 | 7.2 (3-16.3) | 61 | 12.6 (5.2-27.3) |
| Gipuzkoa | 168 | 3.3 (1.4-7.6) | 85 | 4.4 (1.5-12) | 83 | 2.3 (0.7-7.2) |
| Girona | 182 | 13.5 (8.1-21.8) | 99 | 20.3 (12.1-32) | 83 | 5.8 (2.3-13.9) |
| Granada | 202 | 11.8 (7.4-18.3) | 86 | 9.6 (4-21.1) | 116 | 14.2 (8.4-22.7) |
| Guadalajara | 167 | 12.1 (7.8-18.2) | 72 | 17.4 (8.4-32.8) | 95 | 6.4 (2-18.3) |
| Huelva | 170 | 21.6 (17.1-26.9) | 85 | 30.5 (21.9-40.7) | 85 | 12.9 (6.6-23.6) |
| Huesca | 120 | 11.7 (7.2-18.6) | 67 | 13 (6.1-25.6) | 53 | 10.3 (4.3-22.7) |
| Jaén | 163 | 11.9 (6.5-20.8) | 80 | 14.5 (6.8-28.5) | 83 | 9.4 (5-16.9) |
| León | 152 | 8.5 (3.9-17.6) | 92 | 10.7 (3.6-27.5) | 60 | 5.4 (1.6-16.8) |
| Lleida | 145 | 10.5 (5.5-19.3) | 66 | 11 (4.1-26.3) | 79 | 10 (5.5-17.5) |
| Lugo | 95 | 6.3 (3-12.8) | 50 | 6.1 (2.2-15.9) | 45 | 6.5 (1.8-20.9) |
| Madrid | 661 | 9.8 (7.5-12.7) | 339 | 12 (8.8-16.1) | 322 | 7.4 (4.7-11.4) |
| Málaga | 284 | 12.8 (9.1-17.7) | 132 | 18.1 (12.2-26) | 152 | 7.6 (4.1-13.7) |
| Murcia | 326 | 11 (7.4-15.9) | 162 | 13.3 (8.2-20.9) | 164 | 8.4 (5.1-13.5) |
| Navarra | 330 | 7.7 (5-11.7) | 177 | 10.4 (6.3-16.7) | 153 | 5 (2.4-9.8) |
| Ourense | 82 | 5.6 (2.8-11) | 46 | 7.1 (2.2-20.5) | 36 | 4.1 (1.2-12.9) |
| Palencia | 105 | 11.7 (7-18.8) | 62 | 14.7 (9.1-22.8) | 43 | 8.3 (2.7-22.5) |
| Palmas, Las | 223 | 15.6 (10.4-22.7) | 109 | 19.2 (10-33.6) | 114 | 12 (6.7-20.6) |
| Pontevedra | 193 | 15.2 (10.2-21.9) | 93 | 19.4 (10.9-32.1) | 100 | 10.6 (6.3-17.2) |
| Rioja, La | 237 | 7.2 (4-12.6) | 114 | 9.2 (4.8-16.9) | 123 | 5.3 (2.2-12) |
| Salamanca | 123 | 6 (2.4-14.1) | 75 | 1.8 (0.5-7) | 48 | 10.6 (3.4-28.5) |
| Santa Cruz de Tenerife | 170 | 12.1 (6.9-20.1) | 85 | 16.5 (9-28.3) | 85 | 7.9 (3.4-17.3) |
| Segovia | 103 | 7.3 (3.7-14) | 55 | 10.6 (4.4-23.2) | 48 | 3.3 (0.4-21.3) |
| Sevilla | 327 | 15 (11-20.3) | 196 | 17.3 (13.4-22.1) | 131 | 12.4 (6.3-22.9) |
| Soria | 103 | 11.6 (5.9-21.4) | 58 | 19.5 (9.2-36.6) | 45 | 4.1 (1-15.6) |
| Tarragona | 166 | 5.4 (2.3-12.1) | 84 | 4.5 (1.3-14.4) | 82 | 6.4 (2.1-18) |
| Teruel | 130 | 6.9 (3.7-12.5) | 67 | 4.3 (1.3-13.4) | 63 | 9.6 (3.4-23.9) |
| Toledo | 223 | 11.5 (6.9-18.8) | 116 | 15.8 (8-28.8) | 107 | 7.1 (3.3-14.4) |
| Valencia/València | 329 | 14.2 (10.4-19) | 161 | 20.5 (14.6-28) | 168 | 8.1 (4.2-15.1) |
| Valladolid | 171 | 8.7 (3.5-19.8) | 76 | 9.9 (4-22.3) | 95 | 7.5 (2.3-21.5) |
| Zamora | 86 | 13.8 (8.4-22) | 45 | 20.5 (9.5-38.8) | 41 | 7 (1.9-22.4) |
| Zaragoza | 228 | 7.1 (4.6-10.9) | 118 | 10.5 (6.2-17.3) | 110 | 3.7 (1.2-10.8) |
| Ceuta | 221 | 18.4 (13.1-25.4) | 102 | 19.3 (11.1-31.5) | 119 | 17.6 (12.1-25) |
| Melilla | 234 | 19.3 (14.6-25) | 112 | 21 (14.4-29.4) | 122 | 17.6 (11.1-26.7) |

Supplementary Table S7. Crude prevalence of excess weight (WHO growth reference) by province (total and by sex) in child and adolescent participants in ENE-COVID study

| | TOTAL | | BOYS | | GIRLS | |
|------------------------|-------|------------------|------|------------------|-------|------------------|
| | N | % (95% CI) | N | % (95% CI) | N | % (95% CI) |
| Spain | 10543 | 30.0 (28.8-31.2) | 5375 | 33.7 (31.9-35.5) | 5168 | 26.0 (24.5-27.5) |
| Province | | | | | | |
| Albacete | 197 | 35.1 (26.9-44.2) | 90 | 35.4 (25.2-47.2) | 107 | 34.7 (23.9-47.4) |
| Alicante/Alacant | 253 | 34.2 (28-41) | 122 | 37.6 (28.6-47.6) | 131 | 30.9 (23.2-39.7) |
| Almería | 177 | 27.1 (19.7-36) | 80 | 30.5 (20-43.6) | 97 | 23.5 (16-33) |
| Araba/Álava | 112 | 22.6 (16.4-30.2) | 69 | 31.9 (22.8-42.7) | 43 | 10.8 (4.3-24.5) |
| Asturias | 191 | 35.7 (28.1-44.2) | 91 | 37.9 (26.4-51) | 100 | 33.1 (25.8-41.3) |
| Ávila | 91 | 26.3 (17-38.4) | 52 | 33.5 (22-47.3) | 39 | 19.3 (9.5-35.1) |
| Badajoz | 238 | 30.6 (24.9-37) | 127 | 38.7 (28.4-50.1) | 111 | 21.8 (15-30.6) |
| Balears, Illes | 219 | 27.8 (22.7-33.5) | 114 | 32.6 (25.9-40.2) | 105 | 22.9 (15.7-32.2) |
| Barcelona | 646 | 25.9 (22.2-30) | 349 | 28.3 (23.2-34.1) | 297 | 23.3 (18.7-28.6) |
| Bizkaia | 167 | 21.5 (15.5-28.9) | 86 | 27.2 (19.8-36.1) | 81 | 15.4 (7.5-28.9) |
| Burgos | 144 | 38.8 (29.2-49.3) | 66 | 49.9 (33.6-66.2) | 78 | 27.4 (17.3-40.4) |
| Cáceres | 170 | 31.2 (25.2-38) | 87 | 35.7 (28.6-43.4) | 83 | 26.6 (18.7-36.4) |
| Cádiz | 227 | 33.3 (27.6-39.5) | 121 | 31.4 (23.6-40.5) | 106 | 35.3 (26.6-45) |
| Cantabria | 276 | 24 (18.8-30.2) | 143 | 24.6 (17-34.3) | 133 | 23.4 (17.2-31) |
| Castellón/Castelló | 136 | 28.2 (18.6-40.4) | 66 | 32.9 (19.4-50) | 70 | 23 (14.2-35) |
| Ciudad Real | 186 | 26.6 (22.1-31.7) | 100 | 34.5 (26.9-42.8) | 86 | 17.7 (10.9-27.5) |
| Córdoba | 193 | 43.6 (36.2-51.3) | 97 | 49.3 (35.6-63.2) | 96 | 37.3 (29-46.4) |
| Coruña, A | 173 | 23.4 (16.5-32.1) | 82 | 32.3 (23.5-42.7) | 91 | 13.7 (7.1-24.9) |
| Cuenca | 128 | 30.3 (23.6-38) | 67 | 28 (19.7-38.1) | 61 | 32.9 (21.4-46.9) |
| Gipuzkoa | 168 | 23.2 (16-32.4) | 85 | 23.1 (13.7-36.4) | 83 | 23.3 (15.7-33.2) |
| Girona | 182 | 32 (24.2-41) | 99 | 40 (27.8-53.6) | 83 | 22.8 (16.8-30.3) |
| Granada | 202 | 33.2 (27.3-39.8) | 86 | 34.8 (21.7-50.8) | 116 | 31.6 (22.6-42.2) |
| Guadalajara | 167 | 31.3 (23-40.9) | 72 | 37.8 (26.4-50.6) | 95 | 24.3 (15.2-36.5) |
| Huelva | 170 | 41.3 (32.9-50.2) | 85 | 45.9 (32.9-59.6) | 85 | 36.7 (23.4-52.3) |
| Huesca | 120 | 30.9 (23.6-39.3) | 67 | 30.1 (19.2-43.8) | 53 | 31.8 (21.5-44.4) |
| Jaén | 163 | 33.3 (26.7-40.7) | 80 | 37.3 (25.8-50.4) | 83 | 29.6 (21.2-39.7) |
| León | 152 | 25.1 (18.2-33.5) | 92 | 27.3 (16.5-41.7) | 60 | 21.9 (11.8-37.1) |
| Lleida | 145 | 27.2 (20.8-34.8) | 66 | 31.6 (22.1-43.1) | 79 | 22.3 (14.1-33.3) |
| Lugo | 95 | 22.7 (16-31.2) | 50 | 21.3 (14.4-30.2) | 45 | 24.3 (14.2-38.5) |
| Madrid | 661 | 28.5 (24.6-32.7) | 339 | 32.7 (27-39) | 322 | 23.8 (19-29.3) |
| Málaga | 284 | 31.4 (25.4-38.1) | 132 | 34.7 (25-46) | 152 | 28.1 (22.7-34.2) |
| Murcia | 326 | 34.4 (28.7-40.7) | 162 | 36 (28.8-43.9) | 164 | 32.7 (25.4-40.9) |
| Navarra | 330 | 23.3 (19.1-28.1) | 177 | 26 (20.2-32.6) | 153 | 20.5 (14.9-27.6) |
| Ourense | 82 | 30.8 (20.1-44) | 46 | 36.6 (23.8-51.6) | 36 | 24.8 (12.1-44.3) |
| Palencia | 105 | 30.7 (18.1-47.1) | 62 | 37.2 (23.6-53.3) | 43 | 23.3 (9.9-45.4) |
| Palmas, Las | 223 | 32.8 (23-44.4) | 109 | 35.2 (21.1-52.5) | 114 | 30.5 (21.4-41.4) |
| Pontevedra | 193 | 35.5 (28.7-43) | 93 | 40.3 (30.6-50.9) | 100 | 30.4 (22.4-39.7) |
| Rioja, La | 237 | 29.6 (24.2-35.7) | 114 | 37.6 (30.6-45.2) | 123 | 21.7 (14.2-31.6) |
| Salamanca | 123 | 22.8 (15.4-32.3) | 75 | 15.2 (9.3-24) | 48 | 31.1 (18.6-47.2) |
| Santa Cruz de Tenerife | 170 | 38.4 (28.5-49.3) | 85 | 39.8 (25.3-56.4) | 85 | 37 (25.6-50) |
| Segovia | 103 | 26.2 (17.2-37.8) | 55 | 36.5 (22.8-52.7) | 48 | 13.7 (6.5-26.7) |
| Sevilla | 327 | 30.6 (25.3-36.6) | 196 | 34.7 (28.1-41.9) | 131 | 25.8 (18.1-35.5) |
| Soria | 103 | 34.1 (24.8-44.7) | 58 | 42.1 (27.4-58.2) | 45 | 26.5 (14.8-42.7) |
| Tarragona | 166 | 28 (19.7-38.3) | 84 | 30.1 (16.9-47.7) | 82 | 25.7 (17.4-36.1) |
| Teruel | 130 | 27.4 (19.9-36.4) | 67 | 27.2 (18.5-38.1) | 63 | 27.7 (17.5-40.8) |
| Toledo | 223 | 26.4 (18.1-36.7) | 116 | 33.3 (18.7-51.9) | 107 | 19.1 (13.7-26.2) |
| Valencia/València | 329 | 34.4 (29.1-40.1) | 161 | 41 (33-49.6) | 168 | 28 (21.7-35.4) |
| Valladolid | 171 | 27 (16.7-40.6) | 76 | 29 (16.5-45.8) | 95 | 25.1 (12.6-43.6) |
| Zamora | 86 | 39.8 (22.9-59.6) | 45 | 38.9 (23.6-56.8) | 41 | 40.8 (20.7-64.6) |
| Zaragoza | 228 | 26.2 (20.4-33) | 118 | 30.9 (23.4-39.6) | 110 | 21.4 (13.7-31.9) |
| Ceuta | 221 | 42.8 (35.2-50.8) | 102 | 46 (35.4-56.9) | 119 | 39.9 (30.4-50.2) |
| Melilla | 234 | 42.6 (37.5-47.9) | 112 | 48.3 (39.9-56.8) | 122 | 37 (29.6-45) |

Supplementary Table S8. Crude prevalence of obesity (IOTF cut-offs) by province (total and by sex) in child and adolescent participants in ENE-COVID study

| | TOTAL | | BOYS | | GIRLS | |
|------------------------|-------|-----------------|------|------------------|-------|-----------------|
| | N | % (95% CI) | N | % (95% CI) | N | % (95% CI) |
| Spain | 10446 | 7.5 (6.9-8.2) | 5339 | 8.3 (7.4-9.4) | 5107 | 6.7 (5.9-7.6) |
| Province | | | | | | |
| Albacete | 194 | 9.1 (5-15.9) | 89 | 13 (6.2-25.1) | 105 | 4.7 (1.5-13.7) |
| Alicante/Alacant | 248 | 7.6 (4.7-12.1) | 122 | 6.7 (3-14.4) | 126 | 8.5 (4.4-15.8) |
| Almería | 174 | 7.9 (3.7-15.9) | 80 | 9.4 (3-26.3) | 94 | 6.3 (2.3-16) |
| Araba/Álava | 112 | 1.8 (0.4-7.6) | 69 | 1.9 (0.4-8.4) | 43 | 1.7 (0.2-12.2) |
| Asturias | 189 | 7.9 (4.5-13.4) | 89 | 8 (3.2-18.7) | 100 | 7.7 (4-14.6) |
| Ávila | 89 | 5.9 (3-11.4) | 51 | 12 (5.9-22.6) | 38 | 0 |
| Badajoz | 232 | 8.3 (4.9-13.8) | 124 | 10.8 (6-18.7) | 108 | 5.6 (2.5-12.3) |
| Balears, Illes | 221 | 8.9 (5.3-14.5) | 115 | 8.9 (4-18.3) | 106 | 8.9 (4.9-15.8) |
| Barcelona | 645 | 5 (3.6-6.8) | 348 | 5 (3.1-7.9) | 297 | 4.9 (3.1-7.8) |
| Bizkaia | 168 | 1.4 (0.3-5.4) | 86 | 1.1 (0.2-7.8) | 82 | 1.6 (0.2-11) |
| Burgos | 143 | 4.7 (2.1-10.5) | 65 | 3.8 (1.2-11) | 78 | 5.7 (2.2-14) |
| Cáceres | 167 | 4.3 (1.4-12.5) | 86 | 6.1 (2-17.2) | 81 | 2.3 (0.5-9.9) |
| Cádiz | 229 | 11.9 (8.2-17.1) | 123 | 11.6 (6.3-20.3) | 106 | 12.3 (7.2-20.1) |
| Cantabria | 269 | 5.2 (2.8-9.4) | 142 | 2.9 (1.1-7.6) | 127 | 7.7 (3.9-14.6) |
| Castellón/Castelló | 133 | 12.8 (7.2-21.7) | 64 | 18.2 (8.7-34.2) | 69 | 6.9 (2.8-15.8) |
| Ciudad Real | 183 | 8.5 (5.5-12.7) | 99 | 9 (4.4-17.4) | 84 | 7.9 (4.3-13.9) |
| Córdoba | 187 | 12 (7.5-18.8) | 95 | 11 (6.8-17.4) | 92 | 13.2 (6.9-23.7) |
| Coruña, A | 173 | 7.7 (3.5-16) | 84 | 8.7 (3.8-18.4) | 89 | 6.6 (2-19.2) |
| Cuenca | 126 | 9.2 (4.9-16.8) | 66 | 7.3 (3.1-16.4) | 60 | 11.3 (4.2-27.1) |
| Gipuzkoa | 169 | 2.1 (0.7-6.4) | 86 | 2.9 (0.7-11.2) | 83 | 1.4 (0.3-5.3) |
| Girona | 178 | 6.1 (3.2-11.3) | 96 | 7.8 (3.9-14.9) | 82 | 4.1 (1.3-12.6) |
| Granada | 204 | 12.9 (7.4-21.6) | 88 | 13.3 (5.6-28.4) | 116 | 12.5 (7.5-20.2) |
| Guadalajara | 163 | 6.4 (3.8-10.7) | 70 | 6.4 (2.8-13.9) | 93 | 6.5 (2.1-18.6) |
| Huelva | 168 | 14.3 (11-18.4) | 83 | 18.5 (11.1-29.3) | 85 | 10.2 (5.5-18.1) |
| Huesca | 117 | 9.4 (5.8-15) | 65 | 5.7 (1.7-17.2) | 52 | 13.4 (7-24.4) |
| Jaén | 160 | 7.2 (3.5-14.1) | 77 | 6 (2-16.7) | 83 | 8.4 (4-16.6) |
| León | 148 | 6.5 (2.3-16.9) | 89 | 7.2 (1.6-27.7) | 59 | 5.5 (1.6-17.1) |
| Lleida | 144 | 8.7 (4.4-16.4) | 66 | 8.2 (2.7-22.8) | 78 | 9.3 (4.7-17.6) |
| Lugo | 94 | 4.7 (1.8-11.8) | 49 | 3.1 (0.7-12.3) | 45 | 6.5 (1.8-20.9) |
| Madrid | 662 | 7.1 (5-10) | 340 | 7.1 (4.5-11) | 322 | 7.2 (4.6-11.1) |
| Málaga | 279 | 8.4 (5.7-12.3) | 132 | 12.1 (7.5-18.8) | 147 | 4.7 (2.3-9.3) |
| Murcia | 327 | 8.9 (5.9-13.3) | 163 | 9.3 (5.4-15.6) | 164 | 8.5 (5.2-13.6) |
| Navarra | 322 | 3.4 (1.7-6.7) | 172 | 3.9 (1.4-10.7) | 150 | 2.8 (1.1-7.1) |
| Ourense | 79 | 5.8 (2.9-11.2) | 44 | 7.3 (2.3-20.9) | 35 | 4.2 (1.2-13.3) |
| Palencia | 103 | 4.3 (1.2-14) | 61 | 1.7 (0.2-12.4) | 42 | 7.4 (2.2-21.8) |
| Palmas, Las | 222 | 8.8 (4.5-16.7) | 108 | 11.2 (3.9-28.1) | 114 | 6.4 (2.5-15.6) |
| Pontevedra | 191 | 8.3 (5.5-12.5) | 91 | 8.1 (4-15.6) | 100 | 8.6 (4.9-14.7) |
| Rioja, La | 233 | 3.8 (1.7-8) | 111 | 5.1 (2.1-12) | 122 | 2.5 (0.9-6.5) |
| Salamanca | 120 | 5.1 (2.3-10.9) | 74 | 1.8 (0.4-7.3) | 46 | 8.7 (3.1-22) |
| Santa Cruz de Tenerife | 171 | 9.4 (5.6-15.1) | 85 | 13.2 (6.6-24.6) | 86 | 5.9 (2.3-14.3) |
| Segovia | 103 | 8.1 (4.2-15.1) | 55 | 13.4 (5.6-28.7) | 48 | 1.6 (0.2-12.1) |
| Sevilla | 321 | 9.7 (6.8-13.8) | 189 | 9.7 (6.3-14.5) | 132 | 9.8 (5.5-16.9) |
| Soria | 103 | 7.6 (3.8-14.4) | 58 | 11.2 (5.2-22.5) | 45 | 4.1 (1-15.6) |
| Tarragona | 163 | 2 (0.7-5.9) | 82 | 0.4 (0.1-3.2) | 81 | 3.8 (1.2-11.6) |
| Teruel | 128 | 2.6 (0.5-12.2) | 67 | 1.1 (0.2-7) | 61 | 4.3 (0.6-26.1) |
| Toledo | 226 | 8.5 (4.8-14.6) | 118 | 12 (6.7-20.4) | 108 | 4.7 (1.8-11.9) |
| Valencia/València | 333 | 11.2 (8.4-14.9) | 167 | 17.7 (12.4-24.7) | 166 | 4.8 (2.3-9.7) |
| Valladolid | 169 | 4.9 (2.1-11.2) | 76 | 2.9 (0.5-14) | 93 | 7 (2.4-18.7) |
| Zamora | 87 | 15.1 (7.5-28.2) | 45 | 21.7 (9.3-42.8) | 42 | 8.1 (2.6-22.5) |
| Zaragoza | 226 | 4.1 (2.3-6.9) | 117 | 5.3 (2.7-10.1) | 109 | 2.8 (1-7.9) |
| Ceuta | 219 | 15 (10.7-20.7) | 104 | 17.3 (10.9-26.3) | 115 | 12.8 (8-19.6) |
| Melilla | 232 | 15.9 (11-22.4) | 114 | 16.2 (10.5-24.1) | 118 | 15.7 (9.2-25.3) |

Supplementary Table S9. Crude prevalence of excess weight (IOTF cut-offs) by province (total and by sex) in child and adolescent participants in ENE-COVID study

| | TOTAL | | BOYS | | GIRLS | |
|------------------------|-------|------------------|------|------------------|-------|------------------|
| | N | % (95% CI) | N | % (95% CI) | N | % (95% CI) |
| Spain | 10446 | 24.9 (23.7-26.1) | 5339 | 26.9 (25.2-28.5) | 5107 | 22.8 (21.3-24.4) |
| Province | | | | | | |
| Albacete | 194 | 28.2 (20.9-36.8) | 89 | 28.7 (18.7-41.3) | 105 | 27.6 (18.6-38.7) |
| Alicante/Alacant | 248 | 29.6 (22.9-37.3) | 122 | 31.2 (23.3-40.4) | 126 | 27.9 (20-37.5) |
| Almería | 174 | 23.9 (16.3-33.7) | 80 | 24.6 (13.7-40.1) | 94 | 23.3 (15.4-33.5) |
| Araba/Álava | 112 | 14.3 (8.1-24.1) | 69 | 19.4 (10.6-32.8) | 43 | 7.9 (2.4-22.8) |
| Asturias | 189 | 25.9 (19.5-33.5) | 89 | 24.1 (16-34.6) | 100 | 28 (20.9-36.3) |
| Ávila | 89 | 22.7 (15.6-31.9) | 51 | 25.9 (18.1-35.5) | 38 | 19.7 (11-32.7) |
| Badajoz | 232 | 21.6 (15.2-29.9) | 124 | 25.9 (17.9-35.8) | 108 | 17 (10.6-26.1) |
| Balears, Illes | 221 | 25.4 (20-31.7) | 115 | 29.7 (22.4-38.2) | 106 | 21 (14.5-29.4) |
| Barcelona | 645 | 22.3 (18.8-26.3) | 348 | 23.7 (18.8-29.4) | 297 | 20.8 (16-26.7) |
| Bizkaia | 168 | 18.3 (11.9-27.1) | 86 | 24.7 (17.2-34) | 82 | 11.5 (4.5-26.3) |
| Burgos | 143 | 29.3 (20.6-39.7) | 65 | 34.4 (17.6-56.4) | 78 | 24 (14.1-37.9) |
| Cáceres | 167 | 26 (20-33.1) | 86 | 28.3 (21.6-36.2) | 81 | 23.6 (14.4-36.2) |
| Cádiz | 229 | 29.3 (22.2-37.5) | 123 | 27.1 (18.7-37.5) | 106 | 31.5 (21.9-43) |
| Cantabria | 269 | 21.9 (16.8-28) | 142 | 20.2 (13.5-28.9) | 127 | 23.8 (17-32.1) |
| Castellón/Castelló | 133 | 24.3 (16.1-35) | 64 | 31.8 (19.2-47.7) | 69 | 16.3 (9-27.7) |
| Ciudad Real | 183 | 22 (18.3-26.2) | 99 | 28.3 (22.2-35.2) | 84 | 14.8 (9.9-21.5) |
| Córdoba | 187 | 34.6 (26.5-43.7) | 95 | 38 (23.8-54.7) | 92 | 30.8 (23.8-38.7) |
| Coruña, A | 173 | 18.6 (11.9-27.9) | 84 | 23.6 (14.8-35.5) | 89 | 12.9 (6.1-25.4) |
| Cuenca | 126 | 21.4 (15-29.6) | 66 | 18.9 (12-28.5) | 60 | 24.1 (13.5-39.4) |
| Gipuzkoa | 169 | 14.1 (9-21.3) | 86 | 13.2 (7.1-23.3) | 83 | 14.9 (8.7-24.2) |
| Girona | 178 | 25 (18.8-32.3) | 96 | 31 (21.4-42.6) | 82 | 18.2 (11.4-27.7) |
| Granada | 204 | 27.5 (20.9-35.1) | 88 | 25.8 (14.8-41) | 116 | 29.2 (20.2-40.2) |
| Guadalajara | 163 | 25.8 (18-35.5) | 70 | 28.2 (18.9-39.8) | 93 | 23.2 (14.1-35.7) |
| Huelva | 168 | 38.4 (31-46.4) | 83 | 44.6 (31.6-58.4) | 85 | 32.5 (19.7-48.5) |
| Huesca | 117 | 29.5 (24.4-35.2) | 65 | 29.1 (20.5-39.6) | 52 | 30 (20.6-41.4) |
| Jaén | 160 | 29.1 (21.5-38) | 77 | 35.1 (23.7-48.5) | 83 | 23.5 (14.4-35.9) |
| León | 148 | 20.2 (13.2-29.6) | 89 | 21.2 (11.1-36.8) | 59 | 18.7 (9-34.9) |
| Lleida | 144 | 23 (16.3-31.3) | 66 | 23.5 (15.3-34.5) | 78 | 22.4 (14.5-32.9) |
| Lugo | 94 | 18.2 (12-26.7) | 49 | 15.6 (8-28.3) | 45 | 21.1 (11.4-35.7) |
| Madrid | 662 | 21.7 (18.1-25.8) | 340 | 24 (19.1-29.6) | 322 | 19.2 (14.8-24.6) |
| Málaga | 279 | 29.1 (23-36.1) | 132 | 33.1 (22.9-45.1) | 147 | 25.1 (20-31) |
| Murcia | 327 | 28.3 (23.2-34) | 163 | 27.9 (21.8-34.9) | 164 | 28.8 (21.9-36.9) |
| Navarra | 322 | 20.2 (16.3-24.6) | 172 | 19.8 (15.2-25.4) | 150 | 20.6 (14.9-27.8) |
| Ourense | 79 | 23.9 (16.1-33.9) | 44 | 22.5 (13.5-35.1) | 35 | 25.2 (12.2-44.9) |
| Palencia | 103 | 26.4 (16.3-39.7) | 61 | 31.8 (20.6-45.6) | 42 | 20.1 (8.5-40.4) |
| Palmas, Las | 222 | 27.7 (20-37) | 108 | 25 (15-38.6) | 114 | 30.5 (21.9-40.8) |
| Pontevedra | 191 | 32.5 (26.4-39.3) | 91 | 34.9 (26-45) | 100 | 30 (22.4-38.7) |
| Rioja, La | 233 | 27.7 (19.3-37.9) | 111 | 28.1 (20.5-37.2) | 122 | 27.3 (16.5-41.5) |
| Salamanca | 120 | 19 (11.7-29.5) | 74 | 12.6 (6.7-22.3) | 46 | 26.3 (14.1-43.6) |
| Santa Cruz de Tenerife | 171 | 30.2 (20.8-41.6) | 85 | 34.1 (20.8-50.6) | 86 | 26.6 (16.2-40.5) |
| Segovia | 103 | 21.8 (14.2-32) | 55 | 27.7 (14.3-46.7) | 48 | 14.6 (7.7-25.9) |
| Sevilla | 321 | 25.8 (21-31.4) | 189 | 25.6 (20.5-31.5) | 132 | 26.1 (18.5-35.4) |
| Soria | 103 | 30 (21.7-40) | 58 | 31.7 (19.5-47.1) | 45 | 28.5 (16.5-44.5) |
| Tarragona | 163 | 20.4 (14-28.8) | 82 | 22.2 (12.1-37.2) | 81 | 18.4 (11.6-28) |
| Teruel | 128 | 21.6 (14.8-30.4) | 67 | 19.3 (10.5-32.8) | 61 | 24 (13.9-38.1) |
| Toledo | 226 | 25.6 (17.6-35.7) | 118 | 31.1 (17.5-49) | 108 | 19.7 (14.1-26.9) |
| Valencia/València | 333 | 30.1 (25.4-35.3) | 167 | 34.9 (27.3-43.3) | 166 | 25.4 (19.2-32.8) |
| Valladolid | 169 | 21.5 (12.9-33.6) | 76 | 24 (13.9-38.3) | 93 | 18.9 (9.3-34.7) |
| Zamora | 87 | 35.6 (21-53.4) | 45 | 34 (21.1-49.8) | 42 | 37.2 (17.3-62.6) |
| Zaragoza | 226 | 21 (16.1-27) | 117 | 22.7 (16.2-30.8) | 109 | 19.3 (12-29.5) |
| Ceuta | 219 | 37.2 (28.7-46.6) | 104 | 40.9 (29.6-53.3) | 115 | 33.5 (23.8-44.8) |
| Melilla | 232 | 37.5 (31.6-43.7) | 114 | 38.2 (28.7-48.7) | 118 | 36.6 (29.2-44.8) |

Supplementary Table S10. Age-standardized prevalence of obesity (WHO growth reference) by province (total and by sex) in child and adolescent participants in ENE-COVID study

| | TOTAL | | BOYS | | GIRLS | |
|------------------------|-------|------------------|------|------------------|-------|------------------|
| | N | % (95% CI) | N | % (95% CI) | N | % (95% CI) |
| Spain | 10543 | 10.7 (9.9-11.6) | 5375 | 13.4 (12.2-14.6) | 5168 | 8.1 (7.1-9.1) |
| Province | | | | | | |
| Albacete | 197 | 13.4 (8.5-20.5) | 90 | 20.5 (12.0-32.6) | 107 | 5.8 (0.9-28.9) |
| Alicante/Alacant | 253 | 12.9 (9.1-18.0) | 122 | 15.9 (10.1-24.4) | 131 | 9.6 (4.5-19.4) |
| Almería | 177 | 10.6 (6.1-17.8) | 80 | 14.9 (6.7-30.0) | 97 | 6.1 (0.9-32.0) |
| Araba/Álava | 112 | 2.3 (0.8-6.1) | 69 | 2.6 (0.9-7.3) | 43 | 2.0 (0.5-7.6) |
| Asturias | 191 | 11.5 (7.2-17.9) | 91 | 14.5 (8.0-24.9) | 100 | 8.3 (3.0-21.2) |
| Ávila | 91 | 7.8 (4.3-13.9) | 52 | 15.7 (8.6-26.8) | 39 | 0.0 (-) |
| Badajoz | 238 | 12.9 (8.5-19.0) | 127 | 16.3 (9.5-26.7) | 111 | 9.2 (3.5-21.9) |
| Balears, Illes | 219 | 11.8 (7.7-17.8) | 114 | 12.6 (6.4-23.2) | 105 | 10.8 (5.0-22.1) |
| Barcelona | 646 | 7.8 (5.9-10.3) | 349 | 8.9 (6.5-12.2) | 297 | 6.6 (4.3-10.1) |
| Bizkaia | 167 | 2.6 (1.0-6.5) | 86 | 4.9 (2.0-11.8) | 81 | 0.0 (-) |
| Burgos | 144 | 12.3 (5.0-27.1) | 66 | 17.4 (5.6-42.9) | 78 | 6.2 (0.3-60.3) |
| Cáceres | 170 | 6.4 (3.2-12.5) | 87 | 10.2 (4.9-20.1) | 83 | 2.6 (0.2-31.5) |
| Cádiz | 227 | 13.9 (9.4-20.1) | 121 | 13.1 (6.7-24.3) | 106 | 14.4 (7.7-25.2) |
| Cantabria | 276 | 7.8 (4.7-12.7) | 143 | 8.0 (4.1-15.1) | 133 | 7.4 (3.6-14.7) |
| Castellón/Castelló | 136 | 15.6 (8.9-25.9) | 66 | 22.4 (11.3-39.6) | 70 | 8.0 (1.2-37.7) |
| Ciudad Real | 186 | 10.3 (6.6-15.7) | 100 | 13.5 (7.7-22.8) | 86 | 6.7 (2.2-19.1) |
| Córdoba | 193 | 16.2 (10.4-24.3) | 97 | 19.9 (11.2-32.8) | 96 | 12.1 (4.8-27.5) |
| Coruña, A | 173 | 7.1 (3.8-12.9) | 82 | 8.9 (4.6-16.7) | 91 | 5.2 (1.7-15.2) |
| Cuenca | 128 | 10.5 (5.9-18.1) | 67 | 7.6 (3.2-16.9) | 61 | 14.2 (8.9-21.8) |
| Gipuzkoa | 168 | 3.2 (1.4-7.0) | 85 | 3.9 (1.4-10.6) | 83 | 2.4 (0.4-11.9) |
| Girona | 182 | 14.0 (8.4-22.5) | 99 | 21.3 (12.9-33.2) | 83 | 6.1 (1.1-27.6) |
| Granada | 202 | 12.0 (7.1-19.6) | 86 | 9.7 (3.8-22.7) | 116 | 14.0 (7.3-25.3) |
| Guadalajara | 167 | 11.4 (7.5-17.0) | 72 | 16.0 (7.5-30.8) | 95 | 6.4 (1.0-31.4) |
| Huelva | 170 | 21.8 (17.4-26.9) | 85 | 30.5 (21.9-40.8) | 85 | 12.9 (5.9-25.8) |
| Huesca | 120 | 11.2 (6.8-17.8) | 67 | 12.4 (5.7-24.8) | 53 | 9.9 (3.7-23.5) |
| Jaén | 163 | 12.7 (7.1-21.8) | 80 | 15.8 (7.7-29.8) | 83 | 9.5 (2.9-27.1) |
| León | 152 | 8.2 (3.9-16.7) | 92 | 11.0 (4.0-26.9) | 60 | 5.1 (0.6-33.0) |
| Lleida | 145 | 10.4 (5.6-18.5) | 66 | 10.9 (4.2-25.3) | 79 | 9.8 (3.4-24.9) |
| Lugo | 95 | 6.5 (3.2-13.1) | 50 | 6.5 (2.4-16.7) | 45 | 6.5 (2.4-16.7) |
| Madrid | 661 | 9.5 (7.3-12.4) | 339 | 11.6 (8.5-15.7) | 322 | 7.3 (4.4-11.8) |
| Málaga | 284 | 13.1 (9.5-18.0) | 132 | 17.9 (12.0-25.9) | 152 | 7.9 (3.2-18.2) |
| Murcia | 326 | 10.9 (7.5-15.7) | 162 | 13.4 (8.3-20.9) | 164 | 8.3 (3.9-17.0) |
| Navarra | 330 | 7.8 (5.1-11.8) | 177 | 10.3 (6.3-16.4) | 153 | 5.1 (1.9-13.1) |
| Ourense | 82 | 5.6 (2.7-11.2) | 46 | 6.7 (2.0-19.9) | 36 | 4.5 (0.8-22.3) |
| Palencia | 105 | 11.4 (7.0-18.1) | 62 | 13.6 (8.3-21.6) | 43 | 8.9 (4.1-17.9) |
| Palmas, Las | 223 | 16.9 (11.5-24.1) | 109 | 21.0 (11.5-35.1) | 114 | 12.5 (4.7-29.6) |
| Pontevedra | 193 | 15.8 (10.9-22.2) | 93 | 20.5 (11.9-32.9) | 100 | 10.7 (3.9-26.4) |
| Rioja, La | 237 | 7.3 (4.1-12.8) | 114 | 9.1 (4.6-17.0) | 123 | 5.4 (1.7-15.4) |
| Salamanca | 123 | 5.8 (2.2-14.0) | 75 | 1.7 (0.4-6.6) | 48 | 10.5 (8.4-13.1) |
| Santa Cruz de Tenerife | 170 | 12.4 (7.3-20.2) | 85 | 16.3 (9.1-27.5) | 85 | 8.3 (2.7-23.0) |
| Segovia | 103 | 6.9 (3.6-13.1) | 55 | 10.2 (4.4-21.9) | 48 | 3.3 (0.3-31.0) |
| Sevilla | 327 | 14.7 (10.9-19.6) | 196 | 16.8 (12.8-21.7) | 131 | 12.6 (8.8-17.8) |
| Soria | 103 | 11.8 (6.2-21.3) | 58 | 18.7 (9.5-33.6) | 45 | 4.4 (0.3-44.6) |
| Tarragona | 166 | 5.2 (2.3-11.7) | 84 | 4.4 (1.3-13.5) | 82 | 6.3 (2.7-13.8) |
| Teruel | 130 | 6.8 (3.5-12.5) | 67 | 4.0 (1.2-13.0) | 63 | 9.8 (5.9-15.9) |
| Toledo | 223 | 11.4 (7.1-17.7) | 116 | 15.9 (8.8-27.1) | 107 | 6.6 (1.6-23.4) |
| Valencia/València | 329 | 14.3 (10.7-18.9) | 161 | 20.4 (14.7-27.5) | 168 | 8.1 (3.6-17.2) |
| Valladolid | 171 | 8.9 (3.5-20.7) | 76 | 10.3 (4.1-23.9) | 95 | 7.1 (1.9-23.8) |
| Zamora | 86 | 14.7 (8.4-24.4) | 45 | 20.4 (9.3-39.1) | 41 | 8.1 (1.2-39.5) |
| Zaragoza | 228 | 7.5 (4.8-11.4) | 118 | 10.8 (6.5-17.5) | 110 | 3.9 (0.9-14.7) |
| Ceuta | 221 | 18.5 (12.9-25.8) | 102 | 18.5 (10.4-30.8) | 119 | 17.7 (9.7-30.2) |
| Melilla | 234 | 18.8 (14.1-24.6) | 112 | 20.3 (14.2-28.3) | 122 | 17.0 (11.0-25.2) |

Supplementary Table S11. Age-standardized prevalence of excess weight (WHO growth reference) by province (total and by sex) in child and adolescent participants in ENE-COVID study

| | TOTAL | | BOYS | | GIRLS | |
|------------------------|-------|------------------|------|------------------|-------|------------------|
| | N | % (95% CI) | N | % (95% CI) | N | % (95% CI) |
| Spain | 10543 | 30.0 (28.8-31.2) | 5375 | 33.6 (31.8-35.3) | 5168 | 26.1 (24.6-27.6) |
| Province | | | | | | |
| Albacete | 197 | 35.2 (27.2-44.2) | 90 | 35.6 (25.4-47.4) | 107 | 34.9 (24.6-46.7) |
| Alicante/Alacant | 253 | 34.4 (28.0-41.3) | 122 | 36.5 (27.6-46.5) | 131 | 31.9 (23.2-42.1) |
| Almería | 177 | 27.1 (19.8-35.9) | 80 | 31.2 (20.6-44.1) | 97 | 22.8 (13.0-36.7) |
| Araba/Álava | 112 | 22.2 (16.0-30.0) | 69 | 30.6 (21.6-41.5) | 43 | 11.4 (4.6-25.8) |
| Asturias | 191 | 35.8 (28.4-43.9) | 91 | 38.4 (27.0-51.2) | 100 | 33.2 (22.1-46.4) |
| Ávila | 91 | 26.4 (16.8-38.9) | 52 | 33.9 (22.3-47.8) | 39 | 18.9 (9.1-35.3) |
| Badajoz | 238 | 30.8 (24.8-37.5) | 127 | 38.8 (28.1-50.6) | 111 | 22.2 (12.8-35.6) |
| Balears, Illes | 219 | 28.9 (23.9-34.5) | 114 | 33.8 (27.2-41.2) | 105 | 23.8 (17.5-31.5) |
| Barcelona | 646 | 26.0 (22.2-30.2) | 349 | 28.0 (22.9-33.8) | 297 | 23.9 (18.9-29.8) |
| Bizkaia | 167 | 21.2 (15.3-28.5) | 86 | 26.8 (19.4-35.6) | 81 | 15.3 (8.8-25.3) |
| Burgos | 144 | 38.3 (29.5-48.0) | 66 | 46.8 (31.8-62.5) | 78 | 29.0 (15.9-46.9) |
| Cáceres | 170 | 31.5 (25.8-37.7) | 87 | 36.3 (29.6-43.7) | 83 | 26.3 (19.9-34.0) |
| Cádiz | 227 | 33.2 (27.4-39.6) | 121 | 30.8 (23.2-39.7) | 106 | 35.5 (27.6-44.2) |
| Cantabria | 276 | 24.7 (19.5-30.8) | 143 | 25.3 (17.8-34.6) | 133 | 24.0 (16.5-33.4) |
| Castellón/Castelló | 136 | 27.6 (18.2-39.5) | 66 | 31.9 (18.8-48.6) | 70 | 23.1 (11.3-41.5) |
| Ciudad Real | 186 | 26.1 (21.7-31.0) | 100 | 34.5 (27.2-42.5) | 86 | 17.0 (10.6-26.2) |
| Córdoba | 193 | 42.6 (35.4-50.1) | 97 | 48.3 (35.1-61.7) | 96 | 36.3 (24.0-50.7) |
| Coruña, A | 173 | 23.3 (16.5-31.8) | 82 | 32.6 (23.8-42.8) | 91 | 13.5 (6.4-26.2) |
| Cuenca | 128 | 31.0 (24.4-38.5) | 67 | 28.2 (20.6-37.3) | 61 | 34.3 (26.4-43.1) |
| Gipuzkoa | 168 | 22.2 (15.3-30.9) | 85 | 21.3 (12.6-33.7) | 83 | 23.1 (14.2-35.2) |
| Girona | 182 | 32.7 (24.8-41.8) | 99 | 41.5 (29.2-55.1) | 83 | 23.2 (12.5-38.8) |
| Granada | 202 | 33.9 (27.4-41.1) | 86 | 36.3 (22.0-53.4) | 116 | 31.5 (17.8-49.3) |
| Guadalajara | 167 | 30.8 (23.3-39.6) | 72 | 37.7 (27.3-49.4) | 95 | 23.8 (14.4-36.7) |
| Huelva | 170 | 41.1 (33.1-49.4) | 85 | 45.7 (32.2-59.9) | 85 | 36.2 (23.5-51.2) |
| Huesca | 120 | 31.2 (24.4-38.8) | 67 | 30.0 (19.9-42.6) | 53 | 32.6 (22.3-45.0) |
| Jaén | 163 | 33.8 (27.4-40.9) | 80 | 38.4 (27.5-50.5) | 83 | 29.1 (18.8-42.0) |
| León | 152 | 24.8 (18.5-32.5) | 92 | 28.1 (18.2-40.8) | 60 | 21.2 (12.0-34.8) |
| Lleida | 145 | 26.9 (20.7-34.1) | 66 | 30.6 (21.6-41.3) | 79 | 22.6 (14.2-34.1) |
| Lugo | 95 | 23.4 (15.8-33.1) | 50 | 22.0 (14.2-32.4) | 45 | 25.0 (17.0-35.2) |
| Madrid | 661 | 28.1 (24.3-32.3) | 339 | 32.2 (26.7-38.3) | 322 | 23.7 (18.4-30.0) |
| Málaga | 284 | 32.0 (26.0-38.7) | 132 | 34.4 (25.0-45.4) | 152 | 29.2 (20.0-40.5) |
| Murcia | 326 | 34.3 (28.7-40.4) | 162 | 36.4 (29.3-44.1) | 164 | 32.2 (25.2-40.1) |
| Navarra | 330 | 23.5 (19.2-28.5) | 177 | 25.7 (20.0-32.5) | 153 | 21.1 (15.5-28.1) |
| Ourense | 82 | 30.1 (20.0-42.5) | 46 | 36.0 (24.3-49.7) | 36 | 24.2 (13.6-39.3) |
| Palencia | 105 | 31.3 (19.1-46.8) | 62 | 35.7 (21.7-52.6) | 43 | 26.1 (13.4-44.6) |
| Palmas, Las | 223 | 33.8 (24.6-44.5) | 109 | 36.0 (23.1-51.3) | 114 | 31.3 (18.8-47.2) |
| Pontevedra | 193 | 35.7 (29.3-42.7) | 93 | 40.8 (31.2-51.3) | 100 | 30.2 (21.1-41.3) |
| Rioja, La | 237 | 29.8 (24.5-35.8) | 114 | 36.9 (29.4-45.0) | 123 | 22.3 (15.4-31.1) |
| Salamanca | 123 | 22.1 (14.8-31.5) | 75 | 14.5 (9.1-22.2) | 48 | 31.0 (24.9-37.8) |
| Santa Cruz de Tenerife | 170 | 38.1 (28.2-49.1) | 85 | 39.2 (24.9-55.6) | 85 | 36.6 (22.6-53.3) |
| Segovia | 103 | 26.5 (17.9-37.4) | 55 | 38.3 (24.5-54.4) | 48 | 13.6 (4.1-36.8) |
| Sevilla | 327 | 30.3 (25.3-35.8) | 196 | 34.2 (27.6-41.5) | 131 | 26.1 (19.7-33.7) |
| Soria | 103 | 35.2 (26.0-45.7) | 58 | 41.5 (28.6-55.6) | 45 | 28.4 (16.7-43.9) |
| Tarragona | 166 | 27.2 (19.0-37.3) | 84 | 29.1 (16.8-45.5) | 82 | 25.2 (13.4-42.2) |
| Teruel | 130 | 27.6 (19.8-36.9) | 67 | 26.6 (18.2-37.1) | 63 | 28.5 (20.1-38.9) |
| Toledo | 223 | 26.1 (18.5-35.4) | 116 | 33.2 (20.0-49.7) | 107 | 18.5 (7.6-38.4) |
| Valencia/València | 329 | 34.5 (29.2-40.3) | 161 | 40.9 (33.1-49.3) | 168 | 28.0 (20.6-36.8) |
| Valladolid | 171 | 27.7 (16.9-41.9) | 76 | 29.8 (16.7-47.3) | 95 | 25.1 (12.7-43.6) |
| Zamora | 86 | 41.1 (23.5-61.4) | 45 | 38.4 (23.5-55.9) | 41 | 43.9 (28.4-60.7) |
| Zaragoza | 228 | 26.7 (20.7-33.6) | 118 | 31.5 (24.1-39.8) | 110 | 21.7 (14.8-30.6) |
| Ceuta | 221 | 43.4 (35.6-51.5) | 102 | 45.2 (34.0-56.9) | 119 | 40.9 (29.9-52.8) |
| Melilla | 234 | 42.7 (37.7-48.0) | 112 | 48.5 (40.1-56.9) | 122 | 36.7 (28.7-45.5) |

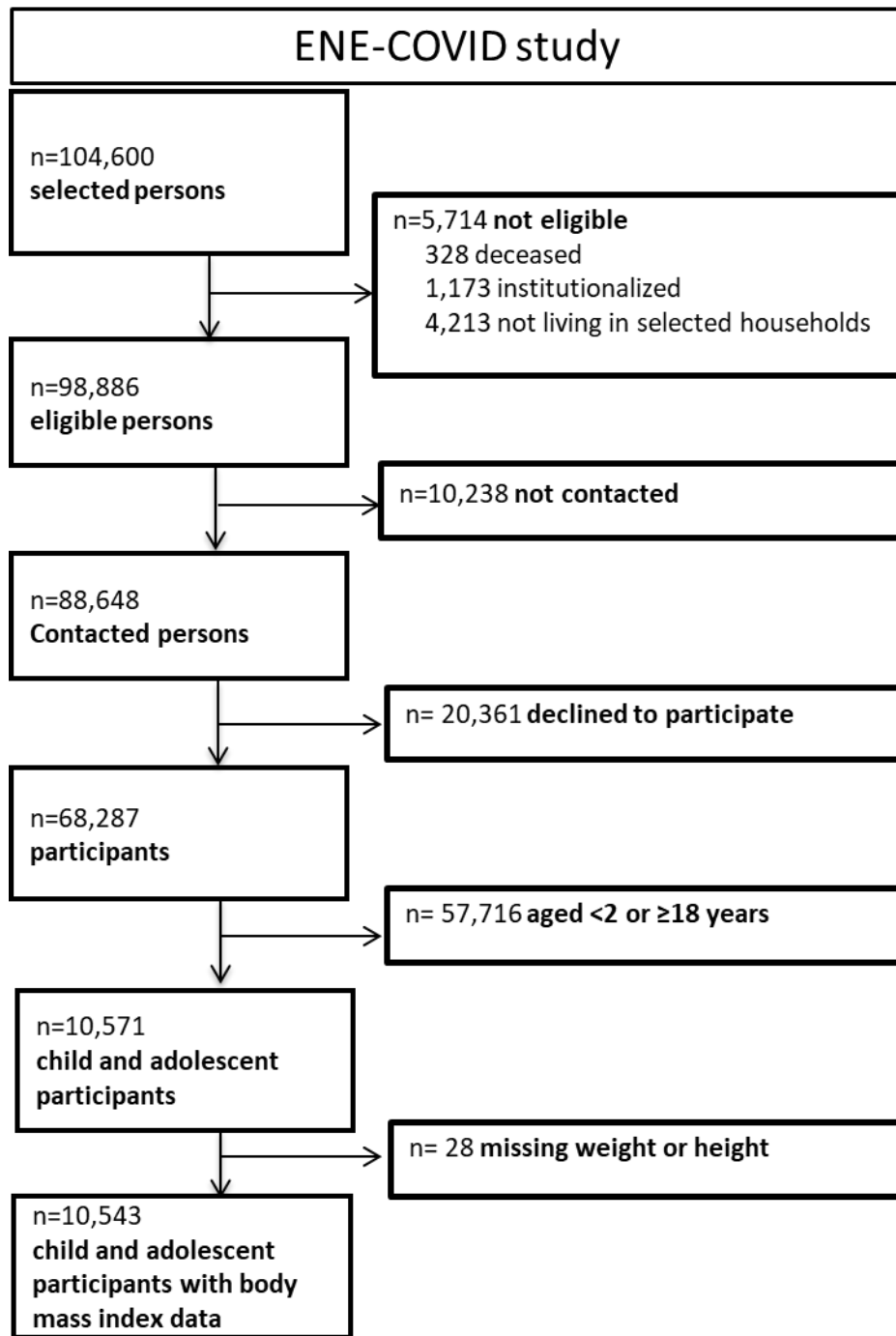
Supplementary Table S12. Age-standardized prevalence of obesity (IOTF cut-offs) by province (total and by sex) in child and adolescent participants in ENE-COVID study

| | TOTAL | | BOYS | | GIRLS | |
|------------------------|-------|------------------|------|------------------|-------|-----------------|
| | N | % (95% CI) | N | % (95% CI) | N | % (95% CI) |
| Spain | 10446 | 7.5 (6.8-8.2) | 5339 | 8.3 (7.3-9.3) | 5107 | 6.7 (5.9-7.6) |
| Province | | | | | | |
| Albacete | 194 | 8.4 (4.5-15.3) | 89 | 12.2 (6.0-23.2) | 105 | 4.4 (0.6-25.2) |
| Alicante/Alacant | 248 | 7.4 (4.6-11.8) | 122 | 6.2 (2.7-13.4) | 126 | 9.0 (5.1-15.3) |
| Almería | 174 | 7.8 (3.7-15.5) | 80 | 9.4 (2.8-26.9) | 94 | 6.1 (1.0-30.1) |
| Araba/Álava | 112 | 2.1 (0.5-8.7) | 69 | 2.1 (0.5-9.2) | 43 | 2.1 (0.5-9.3) |
| Asturias | 189 | 8.4 (4.7-14.5) | 89 | 8.6 (3.3-20.4) | 100 | 8.2 (3.0-20.3) |
| Ávila | 89 | 6.0 (3.1-11.4) | 51 | 11.7 (5.9-21.9) | 38 | 0.0 (-) |
| Badajoz | 232 | 8.4 (5.0-13.8) | 124 | 10.4 (5.9-17.7) | 108 | 6.2 (2.4-15.1) |
| Balears, Illes | 221 | 8.5 (5.0-14.0) | 115 | 8.5 (3.9-17.6) | 106 | 8.4 (3.9-17.5) |
| Barcelona | 645 | 5.1 (3.7-7.0) | 348 | 5.1 (3.2-8.1) | 297 | 5.0 (3.1-8.0) |
| Bizkaia | 168 | 1.3 (0.3-5.2) | 86 | 1.0 (0.1-7.1) | 82 | 1.8 (0.6-5.5) |
| Burgos | 143 | 4.8 (2.1-10.7) | 65 | 3.8 (1.2-11.1) | 78 | 5.7 (2.7-11.7) |
| Cáceres | 167 | 4.4 (1.4-12.5) | 86 | 6.3 (2.1-17.3) | 81 | 2.4 (0.1-30.6) |
| Cádiz | 229 | 12.1 (8.3-17.5) | 123 | 11.9 (6.4-20.9) | 106 | 12.3 (6.8-21.2) |
| Cantabria | 269 | 5.4 (3.0-9.7) | 142 | 3.1 (1.2-7.9) | 127 | 7.9 (5.4-11.4) |
| Castellón/Castelló | 133 | 11.1 (6.1-19.4) | 64 | 15.0 (6.9-29.5) | 69 | 6.5 (1.1-29.9) |
| Ciudad Real | 183 | 8.4 (5.3-13.1) | 99 | 8.7 (4.0-17.9) | 84 | 8.0 (3.5-17.5) |
| Córdoba | 187 | 11.7 (7.2-18.2) | 95 | 10.9 (6.8-17.1) | 92 | 12.4 (8.1-18.4) |
| Coruña, A | 173 | 7.7 (3.6-15.7) | 84 | 8.4 (3.8-17.7) | 89 | 7.0 (2.7-17.1) |
| Cuenca | 126 | 10.2 (5.5-18.2) | 66 | 7.9 (3.3-17.5) | 60 | 13.1 (7.8-21.2) |
| Gipuzkoa | 169 | 2.2 (0.7-6.5) | 86 | 2.8 (0.7-10.8) | 83 | 1.5 (0.1-17.4) |
| Girona | 178 | 6.1 (3.2-11.5) | 96 | 7.7 (3.9-14.6) | 82 | 4.4 (1.4-13.4) |
| Granada | 204 | 12.2 (6.8-21.0) | 88 | 12.2 (4.8-27.8) | 116 | 12.2 (4.8-27.8) |
| Guadalajara | 163 | 6.1 (3.4-10.7) | 70 | 5.6 (2.3-12.7) | 93 | 6.9 (3.4-13.4) |
| Huelva | 168 | 14.7 (11.1-19.2) | 83 | 18.8 (11.4-29.6) | 85 | 10.5 (4.3-23.6) |
| Huesca | 117 | 8.5 (5.3-13.4) | 65 | 5.3 (1.6-16.6) | 52 | 11.7 (6.7-19.7) |
| Jaén | 160 | 7.9 (3.9-15.2) | 77 | 6.6 (2.2-18.0) | 83 | 8.9 (3.9-18.8) |
| León | 148 | 6.5 (2.3-16.6) | 89 | 7.4 (1.7-27.3) | 59 | 5.3 (0.7-31.6) |
| Lleida | 144 | 8.6 (4.3-16.6) | 66 | 8.5 (2.6-24.2) | 78 | 8.7 (2.8-24.2) |
| Lugo | 94 | 4.8 (1.8-12.0) | 49 | 3.3 (0.8-13.1) | 45 | 6.2 (2.8-13.0) |
| Madrid | 662 | 7.0 (4.9-9.8) | 340 | 6.9 (4.3-10.8) | 322 | 7.0 (4.5-10.9) |
| Málaga | 279 | 8.5 (5.8-12.4) | 132 | 12.3 (7.7-19.2) | 147 | 4.6 (1.3-14.9) |
| Murcia | 327 | 8.8 (5.8-13.1) | 163 | 9.0 (5.3-15.1) | 164 | 8.7 (5.0-14.9) |
| Navarra | 322 | 3.4 (1.7-6.9) | 172 | 4.0 (1.4-10.8) | 150 | 2.8 (0.6-11.5) |
| Ourense | 79 | 6.1 (2.9-12.3) | 44 | 6.8 (2.0-20.8) | 35 | 5.3 (1.1-22.0) |
| Palencia | 103 | 4.0 (1.1-13.3) | 61 | 1.6 (0.2-12.1) | 42 | 6.5 (3.8-10.8) |
| Palmas, Las | 222 | 9.4 (4.7-18.0) | 108 | 12.4 (4.2-31.7) | 114 | 6.6 (0.8-36.5) |
| Pontevedra | 191 | 9.0 (6.1-13.0) | 91 | 8.9 (4.7-16.3) | 100 | 9.0 (4.8-16.3) |
| Rioja, La | 233 | 3.8 (1.8-8.0) | 111 | 5.3 (2.1-12.7) | 122 | 2.4 (0.3-16.3) |
| Salamanca | 120 | 5.1 (2.3-11.2) | 74 | 1.9 (0.4-7.6) | 46 | 8.9 (6.5-11.9) |
| Santa Cruz de Tenerife | 171 | 9.8 (6.0-15.5) | 85 | 13.2 (6.7-24.1) | 86 | 6.3 (1.6-22.0) |
| Segovia | 103 | 7.1 (3.7-13.3) | 55 | 11.1 (4.8-23.8) | 48 | 1.7 (0.0-79.5) |
| Sevilla | 321 | 9.5 (6.7-13.4) | 189 | 9.4 (6.2-14.2) | 132 | 9.6 (6.3-14.3) |
| Soria | 103 | 7.1 (3.5-14.0) | 58 | 10.7 (4.8-22.1) | 45 | 3.7 (0.4-28.1) |
| Tarragona | 163 | 2.1 (0.7-6.1) | 82 | 0.5 (0.1-3.3) | 81 | 3.8 (3.0-4.9) |
| Teruel | 128 | 2.5 (0.5-11.6) | 67 | 1.0 (0.2-6.4) | 61 | 4.1 (2.6-6.5) |
| Toledo | 226 | 8.2 (4.8-13.9) | 118 | 11.9 (6.8-19.9) | 108 | 4.5 (1.0-17.4) |
| Valencia/València | 333 | 11.2 (8.6-14.4) | 167 | 17.4 (12.6-23.5) | 166 | 4.8 (1.5-14.2) |
| Valladolid | 169 | 4.8 (2.0-11.4) | 76 | 2.9 (0.5-14.8) | 93 | 6.4 (2.9-13.6) |
| Zamora | 87 | 15.5 (7.6-28.8) | 45 | 21.8 (9.2-43.4) | 42 | 8.6 (1.0-45.9) |
| Zaragoza | 226 | 4.2 (2.5-7.1) | 117 | 5.4 (2.7-10.5) | 109 | 3.0 (0.9-9.9) |
| Ceuta | 219 | 14.5 (10.5-19.7) | 104 | 16.6 (10.7-24.8) | 115 | 12.2 (6.7-21.1) |
| Melilla | 232 | 15.0 (10.4-21.3) | 114 | 15.0 (9.6-22.8) | 118 | 15.1 (9.7-22.8) |

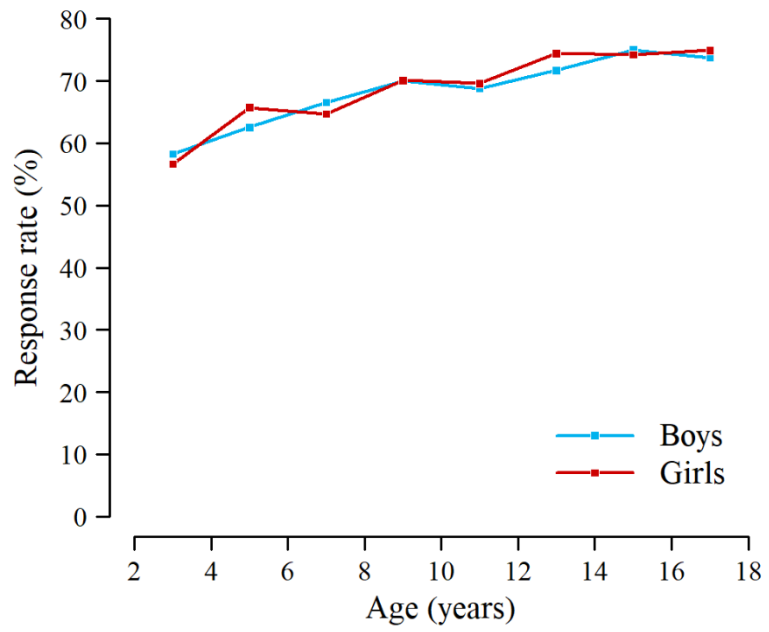
Supplementary Table S13. Age-standardized prevalence of excess weight (IOTF cut-offs) by province (total and by sex) in child and adolescent participants in ENE-COVID study

| | TOTAL | | BOYS | | GIRLS | |
|------------------------|-------|------------------|------|------------------|-------|------------------|
| | N | % (95% CI) | N | % (95% CI) | N | % (95% CI) |
| Spain | 10446 | 24.9 (23.7-26.1) | 5339 | 26.8 (25.2-28.5) | 5107 | 22.8 (21.3-24.4) |
| Province | | | | | | |
| Albacete | 194 | 27.8 (20.4-36.5) | 89 | 28.5 (18.6-41.1) | 105 | 27.1 (17.3-39.8) |
| Alicante/Alacant | 248 | 29.5 (22.8-37.3) | 122 | 30.6 (22.7-39.8) | 126 | 28.6 (20.8-37.9) |
| Almería | 174 | 23.8 (16.0-33.9) | 80 | 24.7 (13.7-40.5) | 94 | 22.8 (12.0-39.0) |
| Araba/Álava | 112 | 14.6 (8.3-24.5) | 69 | 19.4 (10.6-33.0) | 43 | 8.5 (2.2-28.1) |
| Asturias | 189 | 26.2 (19.9-33.7) | 89 | 24.4 (16.4-34.7) | 100 | 28.3 (20.1-38.3) |
| Ávila | 89 | 22.8 (15.5-32.3) | 51 | 25.8 (17.8-35.9) | 38 | 19.8 (12.3-30.4) |
| Badajoz | 232 | 21.6 (15.1-30.0) | 124 | 25.6 (17.6-35.7) | 108 | 17.5 (10.1-28.5) |
| Balears, Illes | 221 | 25.6 (20.3-31.8) | 115 | 30.0 (22.7-38.6) | 106 | 21.1 (14.2-30.2) |
| Barcelona | 645 | 22.5 (18.9-26.5) | 348 | 23.7 (18.8-29.4) | 297 | 21.2 (16.4-27.0) |
| Bizkaia | 168 | 18.2 (11.9-26.8) | 86 | 24.3 (16.8-33.7) | 82 | 11.9 (5.7-23.2) |
| Burgos | 143 | 29.2 (21.1-38.9) | 65 | 33.5 (17.3-54.7) | 78 | 24.6 (10.2-48.3) |
| Cáceres | 167 | 26.2 (20.3-33.1) | 86 | 28.7 (21.9-36.6) | 81 | 23.7 (17.1-31.8) |
| Cádiz | 229 | 29.4 (22.2-37.7) | 123 | 27.0 (18.6-37.5) | 106 | 31.6 (22.9-41.8) |
| Cantabria | 269 | 22.3 (17.2-28.3) | 142 | 20.5 (13.9-29.3) | 127 | 24.1 (17.3-32.6) |
| Castellón/Castelló | 133 | 23.4 (15.3-34.0) | 64 | 30.3 (18.1-46.1) | 69 | 16.0 (6.2-35.6) |
| Ciudad Real | 183 | 21.7 (18.0-25.9) | 99 | 28.1 (22.0-35.1) | 84 | 14.5 (9.0-22.4) |
| Córdoba | 187 | 33.9 (25.9-43.0) | 95 | 37.6 (23.5-54.2) | 92 | 29.9 (16.7-47.6) |
| Coruña, A | 173 | 18.5 (11.9-27.7) | 84 | 23.5 (14.8-35.3) | 89 | 13.0 (5.6-27.0) |
| Cuenca | 126 | 22.1 (15.6-30.2) | 66 | 19.2 (12.3-28.6) | 60 | 25.5 (18.2-34.5) |
| Gipuzkoa | 169 | 13.9 (9.0-21.0) | 86 | 12.8 (6.9-22.5) | 83 | 15.2 (9.0-24.5) |
| Girona | 178 | 25.2 (18.9-32.8) | 96 | 31.4 (21.7-43.1) | 82 | 18.6 (10.1-31.8) |
| Granada | 204 | 27.4 (20.6-35.4) | 88 | 25.9 (14.5-41.8) | 116 | 28.9 (17.1-44.3) |
| Guadalajara | 163 | 25.4 (17.9-34.7) | 70 | 27.6 (18.6-38.8) | 93 | 23.2 (14.6-34.9) |
| Huelva | 168 | 38.5 (31.2-46.5) | 83 | 44.6 (31.6-58.3) | 85 | 32.5 (20.6-47.3) |
| Huesca | 117 | 29.0 (23.9-34.7) | 65 | 28.7 (20.2-39.0) | 52 | 29.2 (20.7-39.5) |
| Jaén | 160 | 29.7 (22.1-38.6) | 77 | 35.9 (24.5-49.1) | 83 | 23.6 (13.4-38.2) |
| León | 148 | 20.0 (13.1-29.4) | 89 | 21.5 (11.5-36.6) | 59 | 18.3 (8.8-34.2) |
| Lleida | 144 | 22.8 (16.3-30.9) | 66 | 23.4 (15.2-34.1) | 78 | 22.3 (14.2-33.1) |
| Lugo | 94 | 18.5 (12.0-27.5) | 49 | 15.9 (8.1-28.8) | 45 | 21.2 (12.7-33.1) |
| Madrid | 662 | 21.5 (18.0-25.6) | 340 | 23.8 (18.9-29.4) | 322 | 19.1 (14.4-24.9) |
| Málaga | 279 | 29.5 (23.3-36.5) | 132 | 33.1 (23.0-45.1) | 147 | 25.4 (15.9-38.1) |
| Murcia | 327 | 28.2 (23.1-34.0) | 163 | 27.9 (21.9-34.9) | 164 | 28.7 (22.7-35.7) |
| Navarra | 322 | 20.3 (16.4-24.8) | 172 | 19.7 (15.0-25.3) | 150 | 20.9 (16.2-26.5) |
| Ourense | 79 | 23.8 (16.2-33.7) | 44 | 22.1 (13.5-34.1) | 35 | 25.9 (16.9-37.5) |
| Palencia | 103 | 26.1 (16.4-39.0) | 61 | 31.1 (20.0-45.0) | 42 | 20.4 (10.4-35.9) |
| Palmas, Las | 222 | 28.4 (20.7-37.7) | 108 | 25.6 (15.6-39.0) | 114 | 31.1 (20.6-43.9) |
| Pontevedra | 191 | 33.0 (27.2-39.5) | 91 | 35.4 (26.6-45.3) | 100 | 30.3 (21.8-40.5) |
| Rioja, La | 233 | 27.8 (19.4-38.1) | 111 | 28.0 (20.2-37.3) | 122 | 27.3 (19.6-36.7) |
| Salamanca | 120 | 18.8 (11.5-29.2) | 74 | 12.4 (6.7-21.7) | 46 | 26.3 (19.6-34.3) |
| Santa Cruz de Tenerife | 171 | 30.4 (21.1-41.6) | 85 | 34.0 (20.8-50.1) | 86 | 26.8 (14.5-44.0) |
| Segovia | 103 | 21.3 (14.0-31.2) | 55 | 27.4 (14.1-46.5) | 48 | 14.7 (4.4-39.3) |
| Sevilla | 321 | 25.5 (20.8-30.9) | 189 | 25.3 (20.1-31.3) | 132 | 25.9 (20.7-31.9) |
| Soria | 103 | 30.1 (21.6-40.1) | 58 | 31.3 (19.6-46.0) | 45 | 28.3 (16.9-43.4) |
| Tarragona | 163 | 20.2 (14.0-28.3) | 82 | 22.0 (12.1-36.6) | 81 | 18.1 (8.8-33.6) |
| Teruel | 128 | 21.4 (14.5-30.5) | 67 | 19.0 (10.2-32.7) | 61 | 23.9 (14.5-36.7) |
| Toledo | 226 | 25.3 (17.6-35.0) | 118 | 31.2 (18.0-48.2) | 108 | 19.2 (8.0-39.2) |
| Valencia/València | 333 | 30.2 (25.6-35.2) | 167 | 34.8 (27.3-43.1) | 166 | 25.4 (18.3-34.1) |
| Valladolid | 169 | 21.6 (12.9-34.0) | 76 | 24.4 (14.0-39.1) | 93 | 18.5 (8.9-34.5) |
| Zamora | 87 | 36.4 (21.1-55.1) | 45 | 34.1 (20.8-50.4) | 42 | 39.2 (25.4-54.9) |
| Zaragoza | 226 | 21.3 (16.2-27.5) | 117 | 22.9 (16.4-31.0) | 109 | 19.5 (13.2-27.9) |
| Ceuta | 219 | 37.1 (28.5-46.6) | 104 | 40.6 (29.1-53.2) | 115 | 33.3 (22.3-46.4) |
| Melilla | 232 | 37.1 (31.2-43.4) | 114 | 38.0 (28.4-48.6) | 118 | 36.2 (26.8-46.9) |

Supplementary Figure S1. Flow chart of adult participants with anthropometric measurements in ENE-COVID study



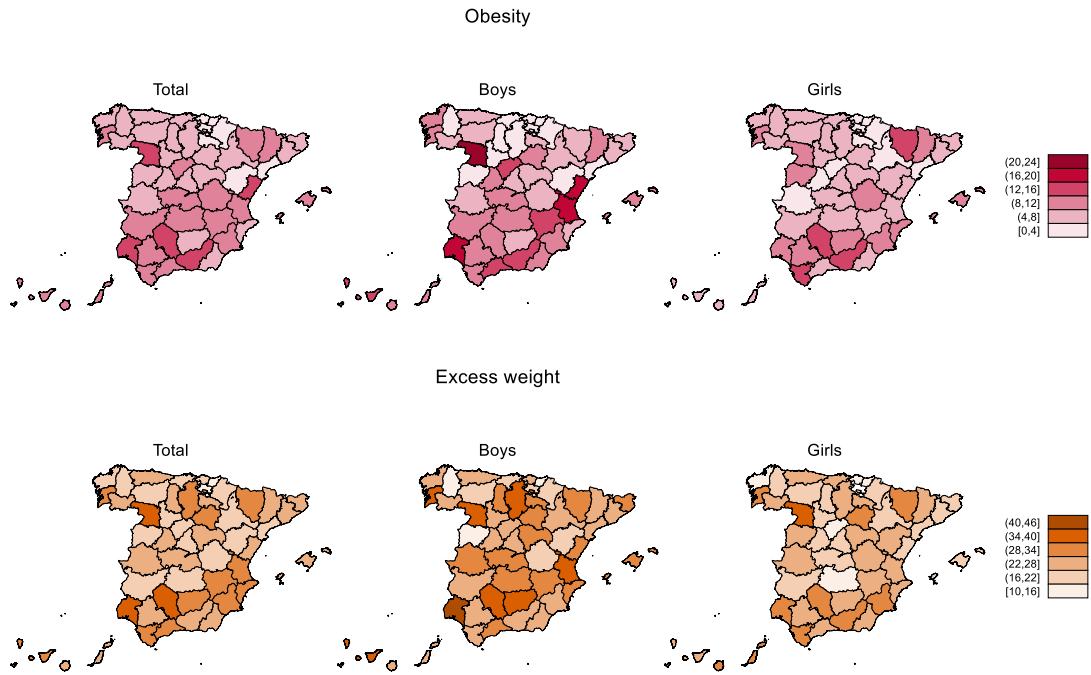
Supplementary Figure S2. Response rates by sex and age among eligible persons aged 2–17 years in ENE-COVID study



Supplementary Figure S3. Provinces, autonomous communities, and autonomous cities (Ceuta, Melilla) of Spain

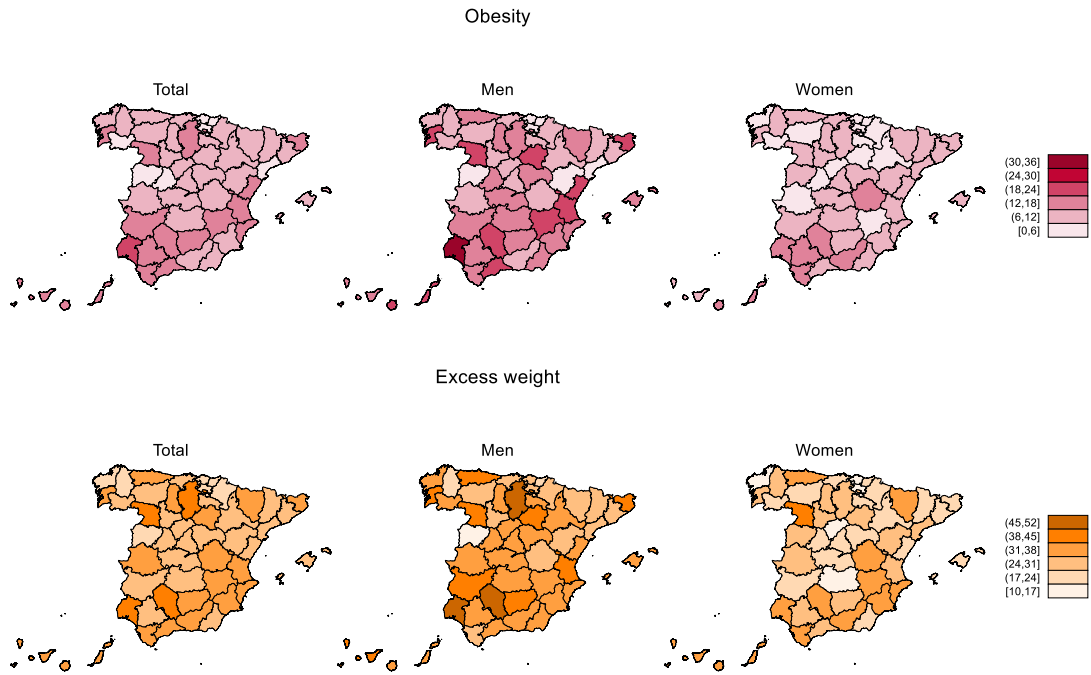


Supplementary Figure S4. Crude prevalences (%) of obesity and excess weight (IOTF cut-offs) by province and sex in child and adolescent participants from ENE-COVID study

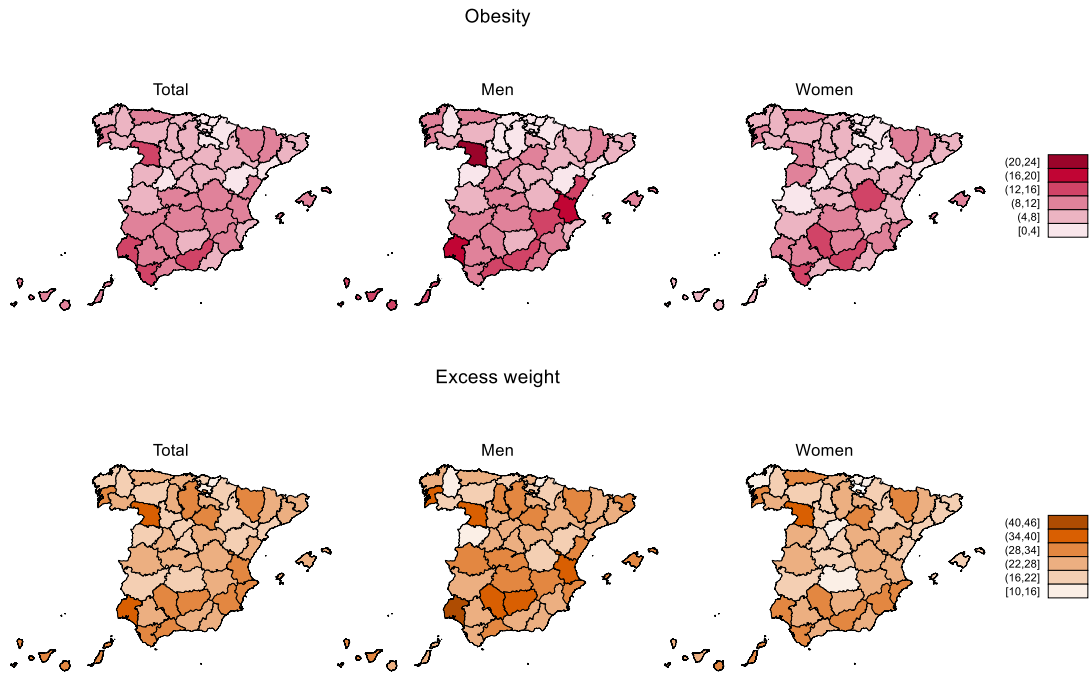


IOTF: International Obesity Task Force

Supplementary Figure S5. Age-standardized prevalences (%) of obesity and excess weight (WHO cut-offs) by province and sex in child and adolescent participants from ENE-COVID study



Supplementary Figure S6. Age-standardized prevalences (%) of obesity and excess weight (IOTF cut-offs) by province and sex in child and adolescent participants from ENE-COVID study



IOTF: International Obesity Task Force