Supplementary Table 1. Proportions of observations with specific outcomes, by BMI and height growth clusters for the whole dataset as defined in Figure 1. P-values across all clusters were derived from a $χ^{2}$– or Fisher’s exact test (as appropriate). Significant cell deviations are shown in bold.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **cluster 1** | **cluster 2** | **cluster 3** | **cluster 4** | **cluster 5** | **cluster 6** | **cluster 7** | **cluster 8** | **p-value** |
| ***BMI patterns*** | n=240 | n=334 | n=184 | n=284 | n=388 | n=349 | n=208 | n=249 |  |
|  Any autoantibodies | 0.08 | 0.07 | 0.09 | 0.10 | 0.11 | 0.06 | 0.09 | 0.09 | 0.437 |
|  Multiple autoantibodies | 0.05 | 0.04 | 0.04 | 0.04 | 0.06 | 0.02 | 0.06 | 0.06 | 0.274 |
|  HLA-DR3/4 genotype | 0.09 | 0.08 | 0.09 | 0.04 | 0.08 | 0.07 | 0.09 | 0.08 | 0.395 |
|  Maternal smoking  | 0.09 | 0.10 | 0.10 | 0.07 | 0.08 | 0.10 | **0.15** | 0.13 | **0.046** |
|  Preterm delivery  | 0.08 | **0.07** | **0.23** | **0.07** | 0.11 | 0.14 | **0.20** | 0.09 | **<0.001** |
|  Cesarean section  | 0.42 | 0.32 | 0.44 | **0.27** | 0.37 | 0.34 | 0.45 | 0.44 | **<0.001** |
|  Any breastfeeding | 0.83 | 0.83 | 0.82 | 0.85 | 0.87 | 0.86 | 0.78 | 0.81 | 0.112 |
| ***Height patterns*** | n=252 | n=334 | n=193 | n=340 | n=230 | n=314 | n=305 | n=268 |  |
|  Any autoantibodies | 0.10 | 0.11 | 0.10 | 0.06 | 0.06 | 0.10 | 0.09 | 0.07 | 0.196 |
|  Multiple autoantibodies | 0.04 | 0.05 | 0.04 | 0.04 | 0.02 | 0.07 | 0.05 | 0.04 | 0.183 |
|  HLA-DR3/4 genotype | 0.09 | 0.07 | 0.09 | 0.08 | 0.07 | 0.07 | 0.08 | 0.07 | 0.980 |
|  Maternal smoking  | 0.09 | 0.07 | 0.15 | 0.11 | 0.11 | 0.09 | 0.12 | 0.07 | 0.099 |
|  Preterm delivery  | **0.06** | **0.05** | **0.29** | 0.09 | **0.32** | 0.10 | 0.11 | 0.03 | **<0.001** |
|  Cesarean section  | 0.32 | 0.33 | **0.49** | 0.36 | **0.46** | 0.33 | 0.38 | 0.35 | **<0.001** |
|  Any breastfeeding | 0.84 | 0.83 | 0.82 | 0.84 | 0.81 | 0.85 | 0.84 | 0.84 | 0.960 |

Supplementary Table 2. Proportions of observations with specific outcomes, by BMI and height growth clusters for children of diabetic mothers as defined in Figure 2. P-values across all clusters were derived from a $χ^{2}$– or Fisher’s exact test (as appropriate). Significant cell deviations are shown in bold.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **cluster 1** | **cluster 2** | **cluster 3** | **cluster 4** | **cluster 5** | **cluster 6** | **cluster 7** | **cluster 8** | **p-value** |
| ***BMI patterns*** | n=146 | n=195 | n=102 | n=171 | n=220 | n=172 | n=132 | n=156 |  |
|  Any autoantibodies | 0.08 | 0.07 | 0.06 | 0.10 | 0.13 | 0.09 | 0.07 | 0.10 | 0.406 |
|  Multiple autoantibodies | 0.04 | 0.04 | 0.02 | 0.04 | 0.06 | 0.03 | 0.04 | 0.06 | 0.733 |
|  HLA-DR3/4 genotype | 0.10 | 0.06 | 0.05 | 0.04 | 0.08 | 0.10 | 0.06 | 0.09 | 0.279 |
|  Maternal smoking  | 0.09 | 0.11 | 0.14 | 0.09 | 0.08 | 0.11 | 0.17 | 0.15 | 0.167 |
|  Preterm delivery  | 0.11 | **0.09** | 0.21 | 0.11 | 0.18 | 0.19 | 0.22 | 0.13 | **0.006** |
|  Cesarean section  | 0.54 | 0.45 | 0.52 | **0.37** | 0.49 | 0.43 | 0.58 | 0.55 | **0.007** |
|  Any breastfeeding | 0.81 | 0.78 | 0.86 | 0.80 | 0.84 | 0.84 | 0.70 | 0.76 | 0.055 |
| ***Height patterns*** | n=104 | n=188 | n=189 | n=128 | n=193 | n=146 | n=175 | n=171 |  |
|  Any autoantibodies | 0.11 | 0.13 | 0.07 | 0.08 | 0.08 | 0.06 | 0.09 | 0.09 | 0.498 |
|  Multiple autoantibodies | 0.05 | 0.05 | 0.02 | 0.05 | 0.06 | 0.02 | 0.05 | 0.05 | 0.495 |
|  HLA-DR3/4 genotype | 0.11 | 0.06 | 0.07 | 0.08 | 0.06 | 0.05 | 0.09 | 0.10 | 0.542 |
|  Maternal smoking  | 0.18 | 0.09 | 0.11 | 0.10 | 0.09 | 0.15 | 0.12 | 0.10 | 0.266 |
|  Preterm delivery  | **0.32** | **0.04** | 0.17 | **0.06** | 0.12 | **0.32** | 0.15 | **0.09** | **<0.001** |
|  Cesarean section  | **0.65** | 0.48 | 0.46 | 0.50 | 0.42 | 0.54 | 0.50 | 0.43 | **0.011** |
|  Any breastfeeding | 0.77 | 0.79 | 0.76 | 0.82 | 0.84 | 0.77 | 0.79 | 0.82 | 0.600 |

Supplementary Table 3. Proportions of observations with specific outcomes, by BMI and height growth clusters for children of non-diabetic mothers as defined in Figure 3. P-values across all clusters were derived from a $χ^{2}$– or Fisher’s exact test (as appropriate). Significant cell deviations are shown in bold.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **cluster 1** | **cluster 2** | **cluster 3** | **cluster 4** | **cluster 5** | **cluster 6** | **cluster 7** | **cluster 8** | **p-value** |
| ***BMI patterns*** | n=87 | n=112 | n=145 | n=103 | n=162 | n=109 | n=95 | n=129 |  |
|  Any autoantibodies | 0.11 | 0.10 | 0.03 | 0.08 | 0.07 | 0.07 | **0.16** | 0.06 | **0.045** |
|  Multiple autoantibodies | 0.06 | 0.05 | 0.02 | 0.04 | 0.04 | 0.03 | 0.12 | 0.05 | 0.108 |
|  HLA-DR3/4 genotype | 0.11 | 0.11 | 0.06 | 0.05 | 0.05 | 0.09 | 0.10 | 0.07 | 0.320 |
|  Maternal smoking  | 0.07 | 0.06 | 0.08 | 0.05 | 0.09 | 0.06 | 0.14 | 0.09 | 0.464 |
|  Preterm delivery  | **0.26** | **0.02** | **0.03** | 0.03 | 0.06 | **0.16** | 0.11 | **0.01** | **<0.001** |
|  Cesarean section  | **0.35** | 0.14 | 0.15 | 0.13 | 0.17 | **0.32** | 0.26 | 0.23 | **<0.001** |
|  Any breastfeeding | 0.81 | 0.92 | 0.89 | 0.92 | 0.89 | 0.89 | 0.90 | 0.90 | 0.373 |
| ***Height patterns*** | n=91 | n=103 | n=143 | n=129 | n=134 | n=121 | n=86 | n=135 |  |
|  Any autoantibodies | 0.05 | **0.01** | 0.08 | 0.09 | 0.12 | 0.06 | 0.05 | **0.16** | **<0.001** |
|  Multiple autoantibodies | 0.01 | **0.00** | 0.06 | 0.05 | 0.07 | 0.04 | 0.03 | 0.08 | **0.027** |
|  HLA-DR3/4 genotype | 0.08 | 0.08 | 0.10 | 0.08 | 0.06 | 0.09 | 0.05 | 0.07 | 0.894 |
|  Maternal smoking  | 0.09 | 0.07 | 0.08 | 0.06 | 0.09 | 0.09 | 0.15 | 0.04 | 0.129 |
|  Preterm delivery  | **0.22** | **0.01** | **0.02** | **0.00** | 0.04 | **0.21** | 0.09 | 0.04 | **<0.001** |
|  Cesarean section  | 0.28 | 0.14 | 0.22 | 0.20 | 0.20 | 0.26 | 0.29 | 0.14 | 0.027 |
|  Any breastfeeding | 0.92 | 0.91 | 0.92 | 0.86 | 0.88 | 0.86 | 0.88 | 0.91 | 0.703 |