Table S3. Differentially methylated positions for pre-pregnancy BMI and trimester-specific gestational weight gain

| ProbeID  | chr  | pos   | Island/Name to _Islan Relation | RefGene | UCSC_Name | log2FC | FDR P | UCSC_Name | log2FC | FDR P | UCSC_Name | log2FC | FDR P |
|----------|------|-------|--------------------------------|---------|-----------|--------|-------|-----------|--------|-------|-----------|--------|-------|
| cg1456819chr19 | 139552716 chr1:13'N Shore TSS150 | 0.0135 | 1.46E-10 8.45E-05 | 0.009 | chr1:13'N Shore TSS150 | -0.005 | 2.24E-09 | chr1:46580000 | 0.0143 | 0.0003 | 0.0032 | 1.99E-04 |
| cg17911chr2 | 19834843  | 0.0319 | 1.58E-10 8.45E-05 | 0.009 | chr1:13'N Shore TSS150 | -0.005 | 2.24E-09 | chr1:46580000 | 0.0143 | 0.0003 | 0.0032 | 1.99E-04 |
| cg2133914chr12 | 95631472  | 0.0179 | 3.48E-10 7.65E-05 | 0.009 | chr1:13'N Shore TSS150 | -0.005 | 2.24E-09 | chr1:46580000 | 0.0143 | 0.0003 | 0.0032 | 1.99E-04 |
| cg520019chr19 | 85465191  | chr16:3'Island AC023771 | 0.0127 | 1.71E-09 5.87E-05 | 0.009 | chr1:13'N Shore TSS150 | -0.005 | 2.24E-09 | chr1:46580000 | 0.0143 | 0.0003 | 0.0032 | 1.99E-04 |
| cg171090chr7 | 24910682 chr1:24'N Shore SHHPRP2 5'UTR | 0.0124 | 3.21E-08 1.02E-04 | 0.015 | chr1:13'N Shore TSS150 | -0.005 | 2.24E-09 | chr1:46580000 | 0.0143 | 0.0003 | 0.0032 | 1.99E-04 |
| cg2197chr7 | 2675854 chr1:26'Island DBDSTD TSS10 | 0.0124 | 3.21E-08 1.02E-04 | 0.015 | chr1:13'N Shore TSS150 | -0.005 | 2.24E-09 | chr1:46580000 | 0.0143 | 0.0003 | 0.0032 | 1.99E-04 |
| cg171090chr7 | 24910682 chr1:24'N Shore SHHPRP2 5'UTR | 0.0124 | 3.21E-08 1.02E-04 | 0.015 | chr1:13'N Shore TSS150 | -0.005 | 2.24E-09 | chr1:46580000 | 0.0143 | 0.0003 | 0.0032 | 1.99E-04 |
| cg2197chr7 | 2675854 chr1:26'Island DBDSTD TSS10 | 0.0124 | 3.21E-08 1.02E-04 | 0.015 | chr1:13'N Shore TSS150 | -0.005 | 2.24E-09 | chr1:46580000 | 0.0143 | 0.0003 | 0.0032 | 1.99E-04 |

Note: genes near top CpGs associated with maternal obesity traits (FDR P<0.01) were enriched in biological functions or processes relevant to those traits.
| cg17910679 chr17:79981754 chr17:79 | STRA13 TSS150 -0.027 0.00000118 0.0079 0.2294 |
| cg06713671 chr19:5914158 | N_Shore CAPS;C TSS200 -0.017 0.00000107 0.0088 0.2294 |
| cg03393607 chr19:5914158 | N_Shore MRPL1 Body -0.01 0.00000122 0.008 0.2294 |
| cg24654269 chr2:111:211D | OpenSea AFF3;A TSS150 0.0117 0.00000151 0.0087 0.2294 |
| cg17341358 chr4:78 | OpenSea ST3GAL 5'UTR;5 -0.023 0.00000107 0.0073 0.2294 |
| cg06909695 chr8:118532951 | OpenSea 0.0162 0.00000144 0.0087 0.2294 |
| cg11118690 chr8:118532951 | OpenSea 0.0162 0.00000144 0.0087 0.2294 |
| cg00592695 chr8:134545685 | ST3GAL 5'UTR;5 -0.023 0.00000107 0.0073 0.2294 |
| cg14158594 chr7:95951129 | Island SLITRK 5'UTR;5 -0.03 0.00000146 0.0087 0.2416 |
| cg27651238 chr12:52644264 | Island MMP15 Body -0.02 0.00000136 0.0086 0.2351 |
| cg02365360 chr13:8455525 | Island SLITRK 1stExon -0.03 0.00000146 0.0087 0.2416 |
| cg22883882 chr2:27274575 | Island AGL5 5'UTR;5 -0.154 0.00000145 0.0087 0.2416 |
| cg19627259 chr16:58061473 | Island SCNN1B TSS200 -0.071 0.00000170 0.0093 0.2472 |
| cg23773757 chr16:58061473 | Island OpenSea RIMS2 1stExon -0.022 0.00000166 0.0092 0.2472 |
| cg21199988 chr11:57480024 | Island TMX2 TSS200 -0.172 0.00000178 0.0096 0.2478 |

Note: genes near top CpGs associated with maternal obesity traits (FDR P<0.01) were enriched in biological functions or processes relevant to those traits.