SUPPLEMENTARY DATA

Supplementary Table 1. Association of individual FFAs with HOMA-IR and C-peptide level in normal pregnant women.

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| --- | --- | --- | --- |
| Independent Variable | | Dependent Variable  β ± SE | |
| FFAs | Molecular %  (Mean ± SD) | HOMA-IR | C-peptide (ng/ml) |
| Palmitoleic acid | 2.55 ± 1.23 | -0.635 ± 0.070\* | -0.413 ± 0.040\* |
| Oleic acid | 26.16 ± 7.53 | -0.097 ± 0.011\* | -0.063 ± 0.006\* |
| Linoleic acid | 15.47 ± 5.07 | -1.198 ± 0.319\* | -0.026 ± 0.010‡ |
| α-Linolenic acid | 0.58 ± 0.27 | -0.024 ± 0.017 | -0.894 ± 0.183\* |
| Myristic acid | 1.92 ± 0.85 | -0.345 ± 0.102† | -0.159 ± 0.059‡ |
| Palmitic acid | 34.49 ± 8.17 | 0.061 ± 0.010\* | 0.038 ± 0.006\* |
| Stearic acid | 14.57 ± 5.41 | 0.080 ± 0.016\* | 0.057 ± 0.009\* |
| DGLA | 1.19 ± 0.76 | 0.774 ± 0.112\* | 0.599 ± 0.064\* |
| Arachidonic acid | 2.03 ± 1.24 | 0.280 ± 0.069\* | 0.200 ± 0.039\* |
| EPA | 0.14 ± 0.33 | 0.311 ± 0.260 | 0.506 ± 0.151† |
| DHA | 0.89±0.57 | 0.344 ± 0.153§ | 0.293 ± 0.088† |

Abbreviations: EPA, Eicosapentaenoic acid; DHA, Docosahexaenoic acid; DGLA, Dihomo-γ-linolenic acid. Same as in supplementary Table 2.

Models were adjusted for maternal age, pre-pregnant BMI, parity, ethnicity and cigarette smoking and separate model was performed for each independent variable with HOMA-IR or C-peptide level.

\* P<0.0001; † p<0.001; ‡ p<0.01; § p<0.05.

Supplementary Table 2. Association of individual FFAs with HOMA-IR and C-peptide level in GDM women

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| --- | --- | --- | --- |
| Independent Variable | | Dependent Variable  β ± SE | |
| FFAs | Molecular %  (Mean ± SD) | HOMA-IR | C-peptide (ng/ml) |
| Palmitoleic acid | 2.70 ± 0.94 | -1.074 ± 0.419\* | -1.181 ± 0.408† |
| Oleic acid | 27.35 ± 6.50 | -0.159 ± 0.059† | -0.189 ± 0.056† |
| Linoleic acid | 15.98 ± 3.91 | -0.185 ± 0.096 | -2.604 ± 1.833 |
| α-Linolenic acid | 0.61 ± 0.22 | -3.776 ± 1.796\* | 0.067 ± 0.097 |
| Myristic acid | 1.83 ± 0.78 | 0.434± 0.519 | -1.002 ± 0.490\* |
| Palmitic acid | 34.25 ± 7.20 | 0.140 ± 0.053\* | 0.079 ± 0.054 |
| Stearic acid | 12.94 ± 3.59 | 0.207 ± 0.105 | 0.123 ± 0.104 |
| DGLA | 1.39 ± 1.01 | 0.565 ± 0.413 | 1.166 ± 0.380† |
| Arachidonic acid | 1.91 ± 1.24 | 0.053 ± 0.326 | 0.594 ± 0.307 |
| EPA | 0.13 ± 0.10 | -0.799 ± 3.891 | 11.073 ± 3.520† |
| DHA | 0.91 ± 0.53 | -0.427 ± 0.738 | 2.042 ± 0.669† |

Models were adjusted for maternal age, pre-pregnant BMI, parity, ethnicity and cigarette smoking and separate model was performed for each independent variable with HOMA-IR or C-peptide level.

\* p<0.05; † p<0.01.