

## Electronic Supplementary Material (ESI) for Food & Function

### Supplementary Tables

Table S1. The diagnostic results of gestational diabetes mellitus according to the hospital diagnostic criteria

| Sample number | Fasting Plasma Glucose<br>0-5.1 mmol/L | GHbA1c<br>4.8-6% |
|---------------|--|------------------|
| 1             | 5.19                                   | 6.7              |
| 2             | 4.57                                   | 6.4              |
| 3             | 3.06                                   | 7.8              |
| 4             | 5.20                                   | 7.5              |
| 5             | 3.28                                   | 6.1              |
| 6             | 5.04                                   | 6.4              |
| 7             | 4.52                                   | 6.9              |
| 8             | 3.90                                   | 6.2              |
| 9             | 4.69                                   | 7.0              |
| 10            | 4.13                                   | 6.3              |
| 11            | 4.27                                   | 7.7              |
| 12            | 3.28                                   | 6.1              |
| 13            | 4.21                                   | 6.2              |
| 14            | 4.24                                   | 6.3              |
| 15            | 5.44                                   | 6.0              |
| 16            | 3.16                                   | 6.0              |
| 17            | 4.92                                   | 6.7              |
| 18            | 7.34                                   | 7.7              |
| 19            | 4.22                                   | 6.0              |
| 20            | 3.25                                   | 6.3              |
| 21            | 4.40                                   | 6.1              |

Table S2. Pregnant woman with gestational hypertension

| Sample | Arterial pressure<br>$\geq 140$ mmHg | Venous pressure<br>$\geq 90$ mmHg |
|--------|--------------------------------------|-----------------------------------|
| 22     | 142                                  | 95                                |
| 23     | 142                                  | 88                                |
| 24     | 157                                  | 103                               |
| 25     | 144                                  | 97                                |
| 26     | 151                                  | 94                                |
| 27     | 132                                  | 91                                |
| 28     | 162                                  | 111                               |
| 29     | 165                                  | 123                               |
| 30     | 139                                  | 91                                |
| 31     | 141                                  | 82                                |
| 32     | 137                                  | 90                                |
| 33     | 138                                  | 91                                |
| 34     | 142                                  | 86                                |
| 35     | 184                                  | 115                               |
| 36     | 147                                  | 93                                |
| 37     | 153                                  | 93                                |
| 38     | 148                                  | 95                                |
| 39     | 145                                  | 81                                |
| 40     | 138                                  | 95                                |
| 41     | 150                                  | 90                                |

Table S3. Pregnant woman with dyslipidemia

| Sample | TC<br>≥ 7.81 mmol/L | TG<br>≥ 4.53 mmol/L | HDL-C<br>≤ 2.17 mmol/L | LDL-C<br>≥ 4.71 mmol/L |
|--------|---------------------|---------------------|------------------------|------------------------|
| 42     | 8.65                | 8.47                | 1.85                   | 4.82                   |
| 43     | 8.15                | 5.67                | 1.74                   | 5.13                   |
| 44     | 9.79                | 3.98                | 2.7                    | 5.85                   |
| 45     | 8.76                | 5.68                | 2.23                   | 4.87                   |
| 46     | 7.99                | 4.57                | 1.66                   | 4.25                   |
| 47     | 8.06                | 6.57                | 1.92                   | 4.21                   |
| 48     | 7.67                | 5.23                | 1.9                    | 3.85                   |
| 49     | 8.01                | 4.93                | 1.91                   | 3.58                   |
| 50     | 8.15                | 5.93                | 2.44                   | 3.61                   |
| 51     | 8.87                | 6.97                | 1.62                   | 4.84                   |
| 52     | 10.28               | 5.09                | 1.4                    | 4.82                   |
| 53     | 8.26                | 5.32                | 1.72                   | 5.21                   |
| 54     | 10.07               | 6.73                | 1.58                   | 4.82                   |
| 55     | 9.39                | 8.57                | 1.95                   | 5.42                   |

## Supplementary Figures

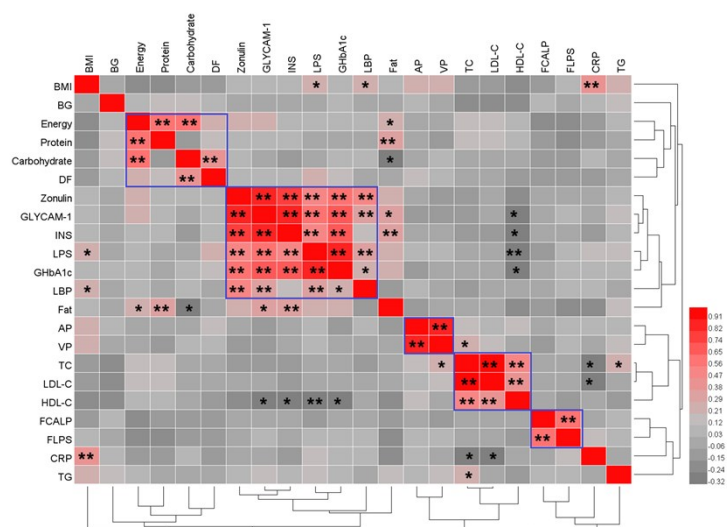


Figure S1. Heat-map of correlation analysis of different indicators. Counts were standardized (correlation score, shown in legend) prior to unsupervised hierarchical clustering of indicators (columns and lines). The colour bar indicates the correlation of the indicators (positive correlation, red; negative correlation, grey). \*,  $p < 0.05$ ; \*\*,  $p < 0.01$  using Spearman correlation. AP: arterial pressure; BG: blood glucose; BMI: body mass index; CRP: C reactive protein; DF: dietary fibre; FCALP: fecal calprotectin; FLPS: fecal LPS; HDL-C: high-density lipoprotein cholesterol; INS: insulin; LDL-C: low-density lipoprotein cholesterol; TC: total cholesterol; TG: triglyceride; VP: venous pressure

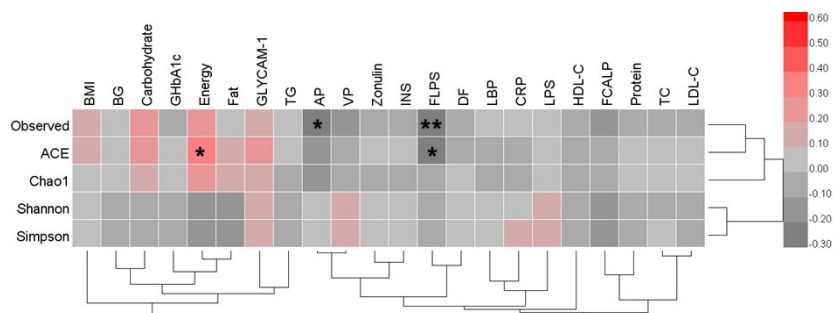


Figure S2. Heat-map of correlation analysis of different indicators and  $\alpha$ -diversity. Counts were standardized (correlation score, shown in legend) prior to unsupervised hierarchical clustering of indicators (columns and lines). The color bar indicates the correlation of the indicators (positive correlation, red; negative correlation, grey). \*,  $p < 0.05$ ; \*\*,  $p < 0.01$  using Spearman correlation. AP: arterial pressure; BG: blood glucose; BMI: body mass index; CRP: C reactive protein; DF: dietary fibre; FCALP: fecal calprotectin; FLPS: fecal LPS; HDL-C: high-density lipoprotein cholesterol; INS: insulin; LDL-C: low-density lipoprotein cholesterol; TC: total cholesterol; TG: triglyceride; VP: venous pressure. Correlation analysis of indicators with significant differences in  $\alpha$ -diversity.