**Table 1** Comparison of general information between two groups

|  |  |  |  |
| --- | --- | --- | --- |
| Variables | Study group (n = 75) | Control group (n = 75) | *P* |
| Age (years) |  |  | 0.542 |
| 20~25 | 7 (9.33%) | 11 (14.67%) | - |
| 26~30 | 42 (56.00%) | 37 (49.33%) | - |
| 31~35 | 26 (34.67%) | 27 (36.00%) | - |
| Body mass index (kg/m2) |  |  | 0.250 |
| <18.50 | 2 (2.67%) | 6 (8.00%) | - |
| 18.50~24.00 | 42 (56.00%) | 35 (46.67%) | - |
| >24.00 | 31 (41.33%) | 34 (45.33%) | - |
| Gravidity (times) |  |  | 0.623 |
| 1 | 43 (57.33%) | 40 (53.33%) | - |
| 2 | 26 (34.67%) | 31 (41.33%) | - |
| ≥ 3 | 6 (8.00%) | 4 (5.33%) | - |
| Parity |  |  | 0.739 |
| Primiparous | 46 (61.33%) | 44 (58.67%) | - |
| Multiparous | 29 (38.67%) | 31 (41.33%) | - |
| Gestational week (week) |  |  | 0.972 |
| 24 | 30 (40.00%) | 33 (44.00%) | - |
| 25 | 17 (22.67%) | 18 (24.00%) | - |
| 26 | 15 (20.00%) | 13 (17.33%) | - |
| 27 | 9 (12.00%) | 8 (10.67%) | - |
| 28 | 4 (5.33%) | 3 (4.00%) | - |

**Table 2** Comparison of two groups of blood glucose metabolism indicators

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Indicator | Time | Study group (n = 75) | Control group (n = 75) | *P* |
| FINS (mU/L) | Before treatment | 22.42 ± 5.84 | 23.03 ± 5.65 | 0.517 |
| After treatment | 17.19 ± 3.22a | 18.66 ± 4.02a | 0.014 |
| FPG (mmol/L) | Before treatment | 7.68 (6.34, 9.11) | 7.54 (6.23, 8.93) | 0.566 |
| After treatment | 5.14 (4.31, 6.10)a | 5.65 (4.71, 6.97)a | 0.007 |
| 2hPG (mmol/L) | Before treatment | 11.67 (10.03, 13.42) | 11.74 (10.06, 13.52) | 0.752 |
| After treatment | 6.21 (5.17, 7.32)a | 7.32 (6.18, 8.53)a | <0.001 |
| HbA1c (%) | Before treatment | 6.55 ± 0.74 | 6.51 ± 0.77 | 0.44 |
| After treatment | 5.16 ± 0.54a | 5.52 ± 0.63a | <0.001 |

Note: a*P* < 0.05 vs. Before treatment.

**Table 3** Comparison of two groups of lipid metabolism indicators

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Indicator | Time | Study group (n = 75) | Control group (n = 75) | *P* |
| HDL-C (mmol/L) | Before treatment | 2.37 ± 0.58 | 2.30 ± 0.62 | 0.477 |
| After treatment | 4.49 ± 0.83a | 3.67 ± 0.68a | <0.001 |
| LDL-C (mmol/L) | Before treatment | 4.54 ± 1.10 | 4.36 ± 1.15 | 0.327 |
| After treatment | 3.11 ± 0.89a | 3.69 ± 0.93a | <0.001 |
| TC (mmol/L) | Before treatment | 5.37 ± 1.21 | 5.41 ± 1.18 | 0.838 |
| After treatment | 3.13 ± 1.01a | 3.87 ± 1.10a | <0.001 |
| TG (mmol/L) | Before treatment | 5.01 ± 1.16 | 5.12 ± 1.09 | 0.547 |
| After treatment | 2.95 ± 0.92a | 3.75 ± 1.10a | <0.001 |

Note: a*P* < 0.05 vs. Before treatment.

**Table 4** Comparison of two groups of gut microbiota

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Indicator | Time | Study group (n = 75) | Control group (n = 75) | *P* |
| Bifidobacterium (lgN/g) | Before treatment | 7.83 ± 0.65 | 7.79 ± 0.69 | 0.718 |
| After treatment | 9.54 ± 0.72a | 8.77 ± 0.75a | <0.001 |
| Lactobacillus (lgN/g) | Before treatment | 7.28 ± 1.05 | 7.32 ± 1.01 | 0.814 |
| After treatment | 8.96 ± 1.22a | 8.24 ± 1.17a | <0.001 |
| Coccidioides (lgN/g) | Before treatment | 7.20 ± 0.54 | 7.18 ± 0.51 | 0.816 |
| After treatment | 6.44 ± 0.46a | 6.91 ± 0.55a | <0.001 |
| Enterobacteriaceae (lgN/g) | Before treatment | 8.67 ± 0.84 | 8.70 ± 0.80 | 0.823 |
| After treatment | 7.01 ± 0.33a | 7.79 ± 0.52a | <0.001 |
| Saccharomycetes (lgN/g) | Before treatment | 6.27 ± 0.82 | 6.35 ± 0.78 | 0.541 |
| After treatment | 4.96 ± 0.60a | 5.54 ± 0.66a | <0.001 |

Note: a*P* < 0.05 vs. Before treatment.

**Table 5** Comparison of blood glucose compliance rates between two groups

|  |  |  |  |
| --- | --- | --- | --- |
| Indicator | Study group (n = 75) | Control group (n = 75) | *P* |
| Complete compliance | 64 (85.33%) | 49 (65.33%) | - |
| Basic compliance | 8 (10.67%) | 14 (18.67%) | - |
| Non-compliance | 3 (4.00%) | 12 (16.00%) | - |
| Compliance rate | 72 (96.00%) | 63 (84.00%) | 0.014 |

**Table 6** Comparison of pregnancy outcomes between two groups

|  |  |  |  |
| --- | --- | --- | --- |
| Indicator | Study group (n = 75) | Control group (n = 75) | *P* |
| Mode of delivery |  |  | 0.027 |
| Vaginal delivery | 70 (93.33%) | 61 (81.33%) | - |
| Cesarean section | 5 (6.67%) | 14 (18.67%) | - |
| Adverse pregnancy outcomes | 11 (14.67%) | 25 (33.33%) | 0.007 |
| Preterm delivery | 1 (1.33%) | 3 (4.00%) | - |
| Excess amniotic fluid | 3 (4.00%) | 7 (9.33%) | - |
| Postpartum hemorrhage | 2 (2.67%) | 4 (5.33%) | - |
| Hypoglycemic children | 0 (0.00%) | 2 (2.67%) | - |
| Macrosomic children | 2 (2.67%) | 3 (4.00%) | - |
| Malformed children | 0 (0.00%) | 1 (1.33%) | - |
| Death or miscarriage | 3 (4.00%) | 5 (6.67%) | - |