**输出结果1：Kruskal-Wallis检验分析结果表**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 分析项 | 分组变量 | 样本量 | 中位数 | 标准差 | 统计量 | P | Cohen's f值 |
| Age\_Group | Normal\_Weight | 196 | 1 | 0.29 | 63.112 | 0.000\*\*\* | 0.016 |
| Overweight\_Level\_I | 148 | 1 | 0.181 |
| Obesity\_Type\_I | 194 | 1 | 0.199 |
| Overweight\_Level\_II | 165 | 1 | 0.25 |
| Obesity\_Type\_II | 212 | 1 | 0 |
| Insufficient\_Weight | 137 | 1 | 0.339 |
| Obesity\_Type\_III | 324 | 1 | 0 |
| 总计 | 1376 | 1 | 0.204 |
| MTRANS | Normal\_Weight | 196 | 2 | 1.225 | 83.852 | 0.000\*\*\* | 0.018 |
| Overweight\_Level\_I | 148 | 2 | 1.31 |
| Obesity\_Type\_I | 194 | 2 | 1.082 |
| Overweight\_Level\_II | 165 | 2 | 1.197 |
| Obesity\_Type\_II | 212 | 2 | 1.385 |
| Insufficient\_Weight | 137 | 2 | 0.883 |
| Obesity\_Type\_III | 324 | 2 | 0.167 |
| 总计 | 1376 | 2 | 1.095 |
| CAEC | Normal\_Weight | 196 | 1 | 0.732 | 269.611 | 0.000\*\*\* | 0.031 |
| Overweight\_Level\_I | 148 | 1 | 0.383 |
| Obesity\_Type\_I | 194 | 1 | 0.291 |
| Overweight\_Level\_II | 165 | 1 | 0.323 |
| Obesity\_Type\_II | 212 | 1 | 0.097 |
| Insufficient\_Weight | 137 | 1 | 0.567 |
| Obesity\_Type\_III | 324 | 1 | 0.056 |
| 总计 | 1376 | 1 | 0.426 |
| SCC | Normal\_Weight | 196 | 0 | 0.31 | 96.099 | 0.000\*\*\* | 0.02 |
| Overweight\_Level\_I | 148 | 0 | 0.35 |
| Obesity\_Type\_I | 194 | 0 | 0.101 |
| Overweight\_Level\_II | 165 | 0 | 0.154 |
| Obesity\_Type\_II | 212 | 0 | 0.069 |
| Insufficient\_Weight | 137 | 0 | 0.339 |
| Obesity\_Type\_III | 324 | 0 | 0 |
| 总计 | 1376 | 0 | 0.215 |
| FCVC | Normal\_Weight | 196 | 2 | 0.604 | 435.66 | 0.000\*\*\* | 0.033 |
| Overweight\_Level\_I | 148 | 2 | 0.525 |
| Obesity\_Type\_I | 194 | 2 | 0.498 |
| Overweight\_Level\_II | 165 | 2 | 0.522 |
| Obesity\_Type\_II | 212 | 2 | 0.624 |
| Insufficient\_Weight | 137 | 3 | 0.665 |
| Obesity\_Type\_III | 324 | 3 | 0 |
| 总计 | 1376 | 3 | 0.593 |
| SMOKE | Normal\_Weight | 196 | 0 | 0.198 | 39.871 | 0.000\*\*\* | 0.012 |
| Overweight\_Level\_I | 148 | 0 | 0.082 |
| Obesity\_Type\_I | 194 | 0 | 0.072 |
| Overweight\_Level\_II | 165 | 0 | 0.11 |
| Obesity\_Type\_II | 212 | 0 | 0.257 |
| Insufficient\_Weight | 137 | 0 | 0.085 |
| Obesity\_Type\_III | 324 | 0 | 0.056 |
| 总计 | 1376 | 0 | 0.144 |
| Gender | Normal\_Weight | 196 | 1 | 0.498 | 616.485 | 0.000\*\*\* | 0.042 |
| Overweight\_Level\_I | 148 | 1 | 0.5 |
| Obesity\_Type\_I | 194 | 1 | 0.439 |
| Overweight\_Level\_II | 165 | 1 | 0.461 |
| Obesity\_Type\_II | 212 | 1 | 0 |
| Insufficient\_Weight | 137 | 0 | 0.481 |
| Obesity\_Type\_III | 324 | 0 | 0.056 |
| 总计 | 1376 | 1 | 0.5 |
| FAVC | Normal\_Weight | 196 | 1 | 0.445 | 183.264 | 0.000\*\*\* | 0.026 |
| Overweight\_Level\_I | 148 | 1 | 0.274 |
| Obesity\_Type\_I | 194 | 1 | 0.187 |
| Overweight\_Level\_II | 165 | 1 | 0.45 |
| Obesity\_Type\_II | 212 | 1 | 0.152 |
| Insufficient\_Weight | 137 | 1 | 0.429 |
| Obesity\_Type\_III | 324 | 1 | 0.056 |
| 总计 | 1376 | 1 | 0.318 |
| family\_history\_with\_overweight | Normal\_Weight | 196 | 1 | 0.499 | 417.856 | 0.000\*\*\* | 0.041 |
| Overweight\_Level\_I | 148 | 1 | 0.426 |
| Obesity\_Type\_I | 194 | 1 | 0.159 |
| Overweight\_Level\_II | 165 | 1 | 0.215 |
| Obesity\_Type\_II | 212 | 1 | 0 |
| Insufficient\_Weight | 137 | 0 | 0.502 |
| Obesity\_Type\_III | 324 | 1 | 0 |
| 总计 | 1376 | 1 | 0.357 |
| 注：\*\*\*、\*\*、\*分别代表1%、5%、10%的显著性水平 | | | | | | | |

**输出结果2：事后多重分析**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 两独立样本 | | 样本量 | | 中位数 | | 统计量 | P | 中位数值差值 | Cohen's d值 |
| 分组项A | 分组项B | 分组项A | 分组项B | 分组项A | 分组项B |
| family\_history\_with\_overweight\_Normal\_Weight | family\_history\_with\_overweight\_Overweight\_Level\_I | 196 | 148 | 1 | 1 | 11422 | 0.000\*\*\* | 0 | 0.453 |
| family\_history\_with\_overweight\_Normal\_Weight | family\_history\_with\_overweight\_Obesity\_Type\_I | 196 | 194 | 1 | 1 | 10966 | 0.000\*\*\* | 0 | 1.141 |
| family\_history\_with\_overweight\_Normal\_Weight | family\_history\_with\_overweight\_Overweight\_Level\_II | 196 | 165 | 1 | 1 | 9694 | 0.000\*\*\* | 0 | 1.013 |
| family\_history\_with\_overweight\_Normal\_Weight | family\_history\_with\_overweight\_Obesity\_Type\_II | 196 | 212 | 1 | 1 | 11448 | 0.000\*\*\* | 0 | 1.299 |
| family\_history\_with\_overweight\_Normal\_Weight | family\_history\_with\_overweight\_Insufficient\_Weight | 196 | 137 | 1 | 0 | 14258 | 0.532 | 1 | 0.124 |
| family\_history\_with\_overweight\_Normal\_Weight | family\_history\_with\_overweight\_Obesity\_Type\_III | 196 | 324 | 1 | 1 | 17496 | 0.000\*\*\* | 0 | 1.467 |
| family\_history\_with\_overweight\_Overweight\_Level\_I | family\_history\_with\_overweight\_Obesity\_Type\_I | 148 | 194 | 1 | 1 | 11331 | 0.000\*\*\* | 0 | 0.691 |
| family\_history\_with\_overweight\_Overweight\_Level\_I | family\_history\_with\_overweight\_Overweight\_Level\_II | 148 | 165 | 1 | 1 | 9914.5 | 0.000\*\*\* | 0 | 0.566 |
| family\_history\_with\_overweight\_Overweight\_Level\_I | family\_history\_with\_overweight\_Obesity\_Type\_II | 148 | 212 | 1 | 1 | 11978 | 0.000\*\*\* | 0 | 0.866 |
| family\_history\_with\_overweight\_Overweight\_Level\_I | family\_history\_with\_overweight\_Insufficient\_Weight | 148 | 137 | 1 | 0 | 12920.5 | 0.000\*\*\* | 1 | 0.591 |
| family\_history\_with\_overweight\_Overweight\_Level\_I | family\_history\_with\_overweight\_Obesity\_Type\_III | 148 | 324 | 1 | 1 | 18306 | 0.000\*\*\* | 0 | 0.992 |
| family\_history\_with\_overweight\_Obesity\_Type\_I | family\_history\_with\_overweight\_Overweight\_Level\_II | 194 | 165 | 1 | 1 | 16368.5 | 0.503 | 0 | 0.121 |
| family\_history\_with\_overweight\_Obesity\_Type\_I | family\_history\_with\_overweight\_Obesity\_Type\_II | 194 | 212 | 1 | 1 | 20034 | 0.038\*\* | 0 | 0.235 |
| family\_history\_with\_overweight\_Obesity\_Type\_I | family\_history\_with\_overweight\_Insufficient\_Weight | 194 | 137 | 1 | 0 | 19736.5 | 0.000\*\*\* | 1 | 1.407 |
| family\_history\_with\_overweight\_Obesity\_Type\_I | family\_history\_with\_overweight\_Obesity\_Type\_III | 194 | 324 | 1 | 1 | 30618 | 0.007\*\*\* | 0 | 0.265 |
| family\_history\_with\_overweight\_Overweight\_Level\_II | family\_history\_with\_overweight\_Obesity\_Type\_II | 165 | 212 | 1 | 1 | 16642 | 0.002\*\*\* | 0 | 0.34 |
| family\_history\_with\_overweight\_Overweight\_Level\_II | family\_history\_with\_overweight\_Insufficient\_Weight | 165 | 137 | 1 | 0 | 16529.5 | 0.000\*\*\* | 1 | 1.238 |
| family\_history\_with\_overweight\_Overweight\_Level\_II | family\_history\_with\_overweight\_Obesity\_Type\_III | 165 | 324 | 1 | 1 | 25434 | 0.000\*\*\* | 0 | 0.388 |
| family\_history\_with\_overweight\_Obesity\_Type\_II | family\_history\_with\_overweight\_Insufficient\_Weight | 212 | 137 | 1 | 0 | 21942 | 0.000\*\*\* | 1 | 1.627 |
| family\_history\_with\_overweight\_Obesity\_Type\_II | family\_history\_with\_overweight\_Obesity\_Type\_III | 212 | 324 | 1 | 1 | 34344 | NaN | 0 |  |
| family\_history\_with\_overweight\_Insufficient\_Weight | family\_history\_with\_overweight\_Obesity\_Type\_III | 137 | 324 | 0 | 1 | 10854 | 0.000\*\*\* | 1 | 1.871 |
| 注：\*\*\*、\*\*、\*分别代表1%、5%、10%的显著性水平 | | | | | | | | | |