



Supplementary Material

The Effect of Chemical and Surgical Castration on the Live Weight Gain and some Hormones of Male Norduz Sheep

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Supplementary Table SI.- Control group correlations.

| | Live weight | Leptin | Ghrelin | Testosteron | TSH | Growth hormone |
|----------------|-------------|--------|---------|-------------|--------|----------------|
| Live weight | 1.000 | 0.473 | 0.371 | 0.293 | 0.264 | 0.060 |
| | | 0.026 | 0.088 | 0.185 | 0.234 | 0.789 |
| Leptin | 0.473 | 1.000 | 0.524 | 0.689 | 0.682 | 0.163 |
| | | 0.026 | 0.010 | 0.0003 | 0.0003 | 0.469 |
| Ghrelin | 0.371 | 0.524 | 1.0000 | 0.446 | 0.773 | 0.560 |
| | | 0.088 | 0.010 | 0.032 | <.0001 | 0.007 |
| Testosteron | 0.293 | 0.689 | 0.446 | 1.000 | 0.620 | 0.324 |
| | | 0.185 | 0.0003 | 0.032 | 0.002 | 0.141 |
| TSH | 0.264 | 0.682 | 0.773 | 0.620 | 1.000 | 0.275 |
| | | 0.234 | <.0003 | 0.0016 | | 0.215 |
| Growth hormone | 0.060 | 0.162 | 0.560 | 0.324 | 0.275 | 1.000 |
| | | 0.789 | 0.007 | 0.141 | 0.215 | |

Supplementary Table SII.- Surgical group correlations.

| | Live weight | Leptin | Ghrelin | Testosteron | TSH | Growth hormone |
|----------------|-------------|--------|---------|-------------|---------|----------------|
| Live weight | 1.000 | 0.152 | -0.08 | 0.391 | 0.323 | 0.113 |
| | | 0.508 | 0.7307 | 0.0790 | 0.152 | 0.627 |
| Leptin | 0.152 | 1.000 | 0.444 | 0.422 | 0.383 | 0.330 |
| | | 0.508 | 0.033 | 0.044 | 0.071 | 0.123 |
| Ghrelin | -0.080 | 0.444 | 1.000 | 0.512 | 0.23424 | 0.440 |
| | | 0.730 | 0.033 | 0.012 | 0.2823 | 0.035 |
| Testosterone | 0.391 | 0.422 | 0.51229 | 1.000 | 0.594 | 0.275 |
| | | 0.079 | 0.044 | 0.0124 | 0.002 | 0.202 |
| TSH | 0.323 | 0.383 | 0.234 | 0.594 | 1.000 | 0.320 |
| | | 0.152 | 0.071 | 0.002 | | 0.136 |
| Growth hormone | 0.112 | 0.330 | 0.440 | 0.275 | 0.320 | 1.000 |
| | | 0.627 | 0.123 | 0.202 | 0.136 | |

Supplementary Table SIII. Formal group correlations.

| | Live weight | Leptin | Ghrelin | Testosteron | TSH | Growth hormone |
|----------------|--------------------|-----------------|-----------------|--------------------|-----------------|-----------------------|
| Live weight | 1.000 | -0.036 0.878 | -0.012 0.958 | -0.186 0.431 | -0.056 0.813 | -0.470 0.036 |
| Leptin | -0.036 0.878 | 1.000 | 0.406 0.060 | 0.424 0.048 | 0.788 0.001 | 0.402 0.063 |
| Ghrelin | -0.012 0.958 | 0.406 0.060 | 1.000 | 0.374 0.085 | 0.475 0.025 | 0.205 0.359 |
| Testosterone | -0.186 0.431 | 0.424 0.048 | 0.374 0.085 | 1.000 | 0.581 0.004 | 0.409 0.058 |
| TSH | -0.056 0.813 | 0.788 0.001 | 0.475 0.025 | 0.581 0.004 | 1.000 | 0.326 0.138 |
| Growth hormone | -0.470 0.036 | 0.402 0.063 | 0.205 0.359 | 0.409 0.058 | 0.326 0.138 | 1.000 |

Supplementary Table SIV.- General correlation.

| | Live weight | Leptin | Ghrelin | Testosterone | TSH | Growth hormone |
|----------------|--------------------|----------------|-----------------|---------------------|-----------------|-----------------------|
| Live weight | 1.000 | 0.211 0.095 | 0.165 0.195 | 0.290 0.020 | 0.100 0.433 | -0.096 0.453 |
| Leptin | 0.211 0.095 | 1.000 | 0.470 0.001 | 0.527 0.001 | 0.630 0.001 | 0.358 0.002 |
| Ghrelin | 0.165 0.195 | 0.470 0.001 | 1.000 | 0.485 0.001 | 0.418 0.0004 | 0.383 0.001 |
| Testosterone | 0.290 0.020 | 0.527 0.001 | 0.485 0.001 | 1.000 | 0.546 0.001 | 0.383 0.001 |
| TSH | 0.100 0.433 | 0.630 0.001 | 0.418 0.0004 | 0.546 0.001 | 1.000 | 0.358 0.002 |
| Growth hormone | -0.096 0.453 | 0.358 0.002 | 0.383 0.001 | 0.383 0.001 | 0.358 0.002 | 1.000 |