**Supplementary materials: Results**

Supplementary information regarding linear mixed models executed in the study. Complete reports are found in the corresponding HTML-files.

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| **Table 1. Volume load – Linear Mixed Model Effect Tests** | | | | |
| **Variable** | **Fixed Effect** | **DF, DF Den** | **F Ratio** | **P value** |
| Total volume | Sex | 1, 13 | 40.4 | <0.0001 |
| Total volume | Group | 1, 13 | 8.5 | 0.0120 |
| Total volume | Time | 9, 117 | 23.2 | <0.0001 |
| Total volume | Sex×Time | 9, 117 | 1.7 | 0.0933 |
| Total volume | Group×Time | 9, 117 | 2.5 | 0.0113 |
| UPB Volume | Sex | 1, 13 | 63.9 | <0.0001 |
| UPB Volume | Group | 1, 13 | 0.7 | 0.4074 |
| UPB Volume | Time | 9, 117 | 8.4 | <0.0001 |
| UPB Volume | Sex×Time | 9, 117 | 0.7 | 0.6869 |
| UPB Volume | Group×Time | 9, 117 | 0.8 | 0.6156 |
| LB Volume | Sex | 1, 13 | 25.1 | 0.0002 |
| LB Volume | Group | 1, 13 | 13.8 | 0.0026 |
| LB Volume | Time | 9, 117 | 20.2 | <0.0001 |
| LB Volume | Sex×Time | 9, 117 | 2 | 0.0439 |
| LB Volume | Group×Time | 9, 117 | 3 | 0.0031 |
| UPB = Upper Body, LB = Lower Body, DF Den = Degrees of freedom denominator  Volume load analyzed using repeated measures three-way linear mixed model | | | | |

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| **Table 2. 1-RM Strength – Linear Mixed Model Effect Tests** | | | | |
| **Variable** | **Fixed Effect** | **DF, DF Den** | **F Ratio** | **P value** |
| BP (kg) | Sex | 1, 13 | 50.6 | < 0.0001 |
| BP (kg) | Group | 1, 13 | 0.7 | 0.42 |
| BP (kg) | Time | 2, 24 | 91.8 | < 0.0001 |
| BP (kg) | Sex×Time | 2, 24 | 9.2 | 0.0011 |
| BP (kg) | Group×Time | 2, 24 | 0.1 | 0.8842 |
| LP (kg) | Sex | 1, 13 | 23.1 | 0.0003 |
| LP (kg) | Group | 1, 13 | 0.2 | 0.6851 |
| LP (kg) | Time | 2, 24 | 39.2 | < 0.0001 |
| LP (kg) | Sex×Time | 2, 24 | 0.2 | 0.7899 |
| LP (kg) | Group×Time | 2, 24 | 0.6 | 0.5319 |
| LPD (kg) | Sex | 1, 13 | 91.5 | < 0.0001 |
| LPD (kg) | Group | 1, 13 | 0.1 | 0.7308 |
| LPD (kg) | Time | 2, 24 | 33.8 | < 0.0001 |
| LPD (kg) | Sex×Time | 2, 24 | 1.2 | 0.3223 |
| LPD (kg) | Group×Time | 2, 24 | 0.4 | 0.6788 |
| BP = Bench Press, LP = Leg Press, LPD = Lat-Pull Down, DF Den = Degrees of freedom denominator  Pre to Mid- and Post 1-RM strength analyzed using repeated measures three-way linear mixed model | | | | |

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| **Table 3. 1-RM Strength Relative Change – Linear Mixed Model Effect Tests** | | | | |
| **Variable** | **Fixed Effect** | **DF, DF Den** | **F Ratio** | **P value** |
| BP (%-Change)s | Sex | 1, 12.7 | 0.1 | 0.7895 |
| BP (%-Change) | Group | 1, 12.7 | 0.4 | 0.5343 |
| BP (%-Change) | Time | 2, 24.3 | 74.2 | < 0.0001 |
| BP (%-Change) | Sex×Time | 2, 24.3 | 1,0 | 0.3753 |
| BP (%-Change) | Group×Time | 2, 24.3 | 0.6 | 0.5336 |
| LP (%-Change) | Sex | 1, 12.9 | 1.8 | 0.1982 |
| LP (%-Change) | Group | 1, 12.9 | 0.8 | 0.3924 |
| LP (%-Change) | Time | 2, 24.4 | 51,0 | < 0.0001 |
| LP (%-Change) | Sex×Time | 2, 24.4 | 2.1 | 0.1430 |
| LP (%-Change) | Group×Time | 2, 24.4 | 1.2 | 0.3202 |
| LPD (%-Change) | Sex | 1, 13.2 | 3.1 | 0.1003 |
| LPD (%-Change) | Group | 1, 13.2 | 0.5 | 0.5112 |
| LPD (%-Change) | Time | 2, 24.7 | 31,0 | < 0.0001 |
| LPD (%-Change) | Sex×Time | 2, 24.7 | 5.4 | 0.0117 |
| LPD (%-Change) | Group×Time | 2, 24.7 | 0.5 | 0.6420 |
| BP = Bench Press, LP = Leg Press, LPD = Lat-Pull Down, DF Den = Degrees of freedom denominator  Pre to Mid- and Post 1-RM strength relative change, analyzed using repeated measures three-way linear mixed model | | | | |

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| **Table 4. Hormonal Response Absolute Values – Linear Mixed Model Effect Tests** | | | | |
| **Variable** | **Fixed Effect** | **DF. DF Den** | **F Ratio** | **P value** |
| Testosterone | Sex | 1. 68.8 | 575.8 | <0.0001 |
| Testosterone | Group | 1. 65.7 | 1.8 | 0.1818 |
| Testosterone | Time | 4. 67.7 | 0.8 | 0.5417 |
| Testosterone | Sex×Time | 4. 67.7 | 0.8 | 0.5587 |
| Testosterone | Group×Time | 4. 67.7 | 0.3 | 0.9084 |
| T/SHBG | Sex | 1. 64.9 | 836.4 | <0.0001 |
| T/SHBG | Group | 1. 65 | 13.2 | 0.0006 |
| T/SHBG | Time | 4. 63.4 | 1.0 | 0.4068 |
| T/SHBG | Sex×Time | 4. 63.4 | 0.6 | 0.6457 |
| T/SHBG | Group×Time | 4. 63.4 | 0.3 | 0.8652 |
| GH | Sex | 1. 66.2 | 8.1 | 0.0059 |
| GH | Group | 1. 67.3 | 0.1 | 0.7843 |
| GH | Time | 4. 65.1 | 4.9 | 0.0017 |
| GH | Sex×Time | 4. 65.1 | 1.2 | 0.3106 |
| GH | Group×Time | 4. 65.1 | 0.8 | 0.5164 |
| T/SHBG = Ratio between testosterone and sex-hormone-binding globulin. i.e. bioavailable testosterone. GH = Growh Hormone. DF Den = Degrees of freedom denominator  Hormonal response analyzed using repeated measures three-way linear mixed model | | | | |

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| **Table 5. Hormonal Response Relative Change – Linear Mixed Model Effect Tests** | | | | | |
| **Variable** | **Fixed Effect** | | **DF. DF Den** | **F Ratio** | **P value** |
| Testosterone (%-Change) | | Sex | 1. 64.0 | 0.8 | 0.3793 |
| Testosterone (%-Change) | | Group | 1. 62.3 | 0.4 | 0.5498 |
| Testosterone (%-Change) | | Time | 4. 61.2 | 2.7 | 0.0400 |
| Testosterone (%-Change) | | Sex×Time | 4. 61.2 | 0.1 | 0.9754 |
| Testosterone (%-Change) | | Group×Time | 4. 61.2 | 0.0 | 0.9961 |
| T/SHBG (%-Change) | | Sex | 1. 58.4 | 9.6 | 0.0030 |
| T/SHBG (%-Change) | | Group | 1. 27.0 | 0.4 | 0.5143 |
| T/SHBG (%-Change) | | Time | 4. 58.2 | 3.5 | 0.0126 |
| T/SHBG (%-Change) | | Sex×Time | 4. 58.2 | 0.7 | 0.5825 |
| T/SHBG (%-Change) | | Group×Time | 4. 58.2 | 0.2 | 0.9320 |
| GH (%-Change) | | Sex | 1. 33.9 | 17.3 | 0.0002 |
| GH (%-Change) | | Group | 1. 25.2 | 25.4 | <0.0001 |
| GH (%-Change) | | Time | 4. 34.0 | 10.5 | <0.0001 |
| GH (%-Change) | | Sex×Time | 4. 34.0 | 2.2 | 0.0856 |
| GH (%-Change) | | Group×Time | 4. 34.0 | 5.5 | 0.0015 |
| T/SHBG = Ratio between testosterone and sex-hormone-binding globulin. i.e. bioavailable testosterone. GH = Growh Hormone. DF Den = Degrees of freedom denominator  Hormonal response analyzed using repeated measures three-way linear mixed model | | | | | |