Tables

| Table 1. Participant characteristics. | | | | |
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|  | Experimental group | | Control group | |
|  | Female | Male | Female | Male |
| *n* | 6 | 5 | 4 | 4 |
| Age (yrs) | 23.4 (2.9) | 25.7 (5.8) | 24.1 (3.5) | 25.5 (5.5) |
| Body mass, (kg) | 64.0 (9.2) | 77.5 (8.0) | 63.7 (0.5) | 76.0 (7.0) |
| Stature (cm) | 167.8 (8.1) | 177.2 (3.3) | 166.0 (3.7) | 181.8 (5.0) |
| Body mass index (kg m-2) | 22.7 (2.7) | 24.7 (2.7) | 23.2 (1.1) | 23.1 (3.2) |
| Body fat (%) | 30.8 (30.8) | 25.1 (25.1) | 30.3 (30.3) | 17.9 (17.9) |

| Table 2. Primer sequences and average performance. | | | |
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| Symbol | Transcript name | Sequence | Mean Cq (SD) and efficiency |
| rRNA47S ETS | 45S pre-ribosomal RNA | F: 5'-CTGTCGCTGGAGAGGTTGG-3' | 27.3 (1.9), E = 1.84 |
| R: 3'-GGACGCGCGAGAGAACAG-5' |
| rRNA45S ETS | 45S pre-ribosomal RNA | F: 5'-GCCTTCTCTAGCGATCTGAGAG-3' | 24.0 (2.2), E = 1.89 |
| R: 3'-CCATAACGGAGGCAGAGACA-5' |
| rRNA45S ITS | 45S pre-ribosomal RNA | F: 5'-TCCGAGACGCGACCTCAG-3' | 12.2 (2.2), E = 2.14 |
| R: 3'-TCGCCGTTACTGAGGGAATC-5' |
| rRNA5.8S | 5.8S ribosomal RNA | F: 5'-ACTCTTAGCGGTGGATCACTC-3' | 15.7 (1.9), E = 1.96 |
| R: 3'-GTGTCGATGATCAATGTGTCCTG-5' |
| rRNA28S | 28S ribosomal RNA | F: 5'-TGACGCGATGTGATTTCTGC-3' | 10.7 (1.8), E = 2.07 |
| R: 3'-TAGATGACGAGGCATTTGGC-5' |
| rRNA18S | 18S ribosomal RNA | F: 5'-TGCATGGCCGTTCTTAGTTG-3' | 10.3 (2.9), E = 1.98 |
| R: 3'-AACGCCACTTGTCCCTCTAAG-5' |
| rRNA5S | 5S ribosomal RNA | F: 5'-TACGGCCATACCACCCTGAAC-3' | 17.1 (2.2), E = 2.00 |
| R: 3'-GGTCTCCCATCCAAGTACTAACC-5' |
| RPL32 | Ribosomal protein L32 | F: 5'-AAGTTCCTGGTCCACAACG-3' | 22.0 (1.6), E = 1.93 |
| R: 3'-CGGCACAGTAAGATTTGTTGC-5' |
| RPS6 | Ribosomal protein S6 | F: 5'-TTGAAGTGGACGATGAACGC-3' | 22.3 (1.7), E = 1.96 |
| R: 3'-GGACCACATAACCCTTCCATTC-5' |
| UBTF [1,4] | Upstream bindning transcription factor | F: 5'-CCGATTCAGGGAGGATCACC-3' | 28.4 (2.7), E = 1.87 |
| R: 3'-ACCTCCTTCGTAGTGGCATC-5' |
| UBTF [2,3] | Upstream bindning transcription factor | F: 5'-CGGCCAGATGAGATCATGAGAG-3' | 28.0 (1.8), E = 1.88 |
| R: 3'-GGGTGGACTTGGTGATACCC-5' |
| MYH7 | Myosin heavy chain 7 (MHCslow) | F: 5'-AGGAGCTCACCTACCAGACG-3' | 19.5 (2.3), E = 1.93 |
| R: 3'-TGCAGCTTGTCTACCAGGTC-5' |
| MYH2 | Myosin heavy chain 2 (M | F: 5'-CCAGGGTACGGGAGCTG-3' | 18.0 (1.9), E = 1.99 |
| R: 3'-TCACTCGCCTCTCATGTTTG-5' |
| MYH1 | Myosin heavy chain 1 (M | F: 5'-GGCCAGGGTTCGTGAACTT-3' | 22.0 (2.5), E = 1.94 |
| R: 3'-TGCGTAGACCCTTGACAGC-5' |
| Lambda | Lambda external reference | F: 5'-Proprietary-3' | 22.2 (2.0), E = 1.98 |
| R: 3'-Proprietary-5' |

| Table 3. Total RNA as a predictor of muscle growth. | | | | | |
| --- | --- | --- | --- | --- | --- |
| Model | Coefficient | Estimate | SD | Lower 95% CI | Upper 95% CI |
| Model 1 | Intercept | 2.55 | 2.23 | -1.68 | 7.28 |
| Time | -0.02 | 0.28 | -0.57 | 0.55 |
| Pre | -0.12 | 0.10 | -0.34 | 0.07 |
| Sex (Male) | 1.24 | 0.66 | -0.05 | 2.51 |
| **Mean Total RNA** | **-0.33** | **0.28** | **-0.85** | **0.27** |
| **Mean Total RNA increase per session** | **0.28** | **0.10** | **0.08** | **0.48** |
| Between participant variation | 0.56 | 0.38 | 0.03 | 1.49 |
| Between participant:leg variation | 0.55 | 0.30 | 0.04 | 1.17 |
| Residual SD | 0.93 | 0.15 | 0.69 | 1.26 |
| Model 2 | Intercept | 2.59 | 2.32 | -1.73 | 7.44 |
| Pre | -0.13 | 0.10 | -0.34 | 0.06 |
| Sex (Male) | 1.25 | 0.66 | -0.06 | 2.64 |
| **Mean Total RNA** | **-0.32** | **0.29** | **-0.86** | **0.29** |
| **Mean Total RNA increase per session** | **0.28** | **0.10** | **0.08** | **0.49** |
| Between participant variation | 0.57 | 0.38 | 0.03 | 1.46 |
| Between participant:leg variation | 0.56 | 0.29 | 0.05 | 1.18 |
| Residual SD | 0.91 | 0.14 | 0.67 | 1.23 |
| Model 3 | Intercept | -0.20 | 0.58 | -1.32 | 0.98 |
| Sex (Male) | 0.95 | 0.59 | -0.31 | 2.10 |
| **Mean Total RNA** | **-0.40** | **0.27** | **-0.93** | **0.13** |
| **Mean Total RNA increase per session** | **0.31** | **0.10** | **0.09** | **0.51** |
| Between participant variation | 0.45 | 0.33 | 0.02 | 1.27 |
| Between participant:leg variation | 0.63 | 0.30 | 0.05 | 1.21 |
| Residual SD | 0.92 | 0.14 | 0.68 | 1.24 |