

**Supplementary Table S2:** Body fat (FAT) in kg and Fat-free mass (FFM) in kg, after corrections for excess hydration and relative bone mass

C12: at of Control (baseline) period

S12: at week 12 of semistarvation

S24: at week 24 of semistarvation

R12: at week 12 of refeeding

R20: at week 20 of refeeding

NA : data not available

| Subject no. | FAT_C12 | FAT_S12 | FAT_S24 | FAT_R12 | FAT_R20 | FFM_C12 | FFM_S12 | FFM_S24 | FFM_R12 | FFM_R20 |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 122         | 4.1     | 0       | 0       | 0       | NA      | 61.2    | 52.1    | 41.8    | 47.4    | NA      |
| 123         | 6.6     | 2.3     | 1.8     | 2.6     | 11.9    | 58.0    | 53.5    | 44.2    | 47.2    | 56.7    |
| 119         | 11.0    | 6.2     | 1.7     | 5.1     | 14.4    | 55.1    | 48.3    | 41.7    | 43.8    | 57.2    |
| 120         | 13.8    | 8.8     | 3.1     | 4.7     | NA      | 56.7    | 48.9    | 42.5    | 44.6    | NA      |
| 129         | 6.0     | 1.3     | 1.8     | 4.6     | 11.8    | 59.5    | 54.8    | 44.3    | 48.1    | 57.8    |
| 130         | 13.5    | 8.8     | 8.6     | 7.0     | NA      | 52.2    | 48.7    | 39.0    | 44.5    | NA      |
| 126         | 17.1    | 8.4     | 5.1     | 5.7     | NA      | 66.1    | 60.7    | 48.5    | 53.6    | NA      |
| 127         | 5.5     | 2.9     | 2.1     | 3.4     | 12.5    | 58.6    | 49.6    | 41.5    | 45.4    | 54.1    |
| 22          | 9.3     | 3.5     | 2.7     | 5.7     | NA      | 55.6    | 50.3    | 41.0    | 44.0    | NA      |
| 23          | 11.9    | 5.2     | 3.1     | 6.0     | 12.3    | 57.1    | 50.6    | 42.4    | 45.7    | 56.8    |
| 19          | 8.8     | 2.7     | 1.8     | 3.9     | NA      | 61.6    | 54.8    | 42.7    | 47.1    | NA      |
| 20          | 6.6     | 3.6     | 0.5     | 3.8     | NA      | 58.0    | 50.3    | 41.8    | 45.9    | NA      |
| 29          | 8.4     | 5.1     | 5.6     | 6.2     | NA      | 62.5    | 49.4    | 41.7    | 47.9    | NA      |
| 30          | 8.1     | 6.5     | 3.2     | 7.1     | NA      | 59.8    | 51.1    | 43.2    | 46.7    | NA      |
| 26          | 6.5     | 0.5     | 1.4     | 3.7     | 12.7    | 64.7    | 57.6    | 45.5    | 51.6    | 63.4    |
| 27          | 11.2    | 2.5     | 0.9     | 3.5     | NA      | 63.8    | 58.3    | 48.3    | 50.3    | NA      |
| 4           | 4.4     | 1.4     | 0       | 5.3     | 10.5    | 57.5    | 49.0    | 41.8    | 47.8    | 55.6    |
| 5           | 19.0    | 9.5     | 4.6     | 7.5     | NA      | 61.4    | 55.1    | 45.9    | 50.2    | NA      |
| 1           | 10.6    | 3.6     | 2.5     | 5.1     | NA      | 66.4    | 61.3    | 47.9    | 53.7    | NA      |
| 2           | 12.3    | 7.7     | 2.5     | 6.6     | 15.5    | 61.0    | 52.4    | 47.0    | 50.6    | 58.7    |
| 11          | 11.1    | 6.1     | 2.1     | 6.1     | NA      | 55.1    | 48.3    | 41.7    | 46.9    | NA      |
| 12          | 11.2    | 4.8     | 3.6     | 5.4     | NA      | 69.6    | 63.9    | 52.2    | 56.6    | NA      |
| 8           | 5.3     | 0       | 0       | 4.1     | NA      | 59.2    | 53.9    | 41.9    | 49.1    | NA      |
| 9           | 8.0     | 0.6     | 2.2     | 5.1     | NA      | 64.7    | 59.8    | 49.2    | 53.9    | NA      |
| 104         | 4.9     | 4.2     | 2.2     | 6.0     | 13.7    | 63.1    | 52.4    | 43.4    | 50.2    | 61.9    |
| 105         | 7.2     | 3.9     | 0.6     | 7.3     | NA      | 61.4    | 52.6    | 45.1    | 48.8    | NA      |
| 101         | 11.4    | 4.0     | 3.4     | 10.7    | 14.8    | 52.9    | 49.6    | 40.6    | 42.7    | 51.7    |
| 102         | 13.3    | 7.4     | 3.3     | 10.4    | NA      | 54.3    | 48.9    | 42.6    | 46.8    | NA      |
| 111         | 8.8     | 2.9     | 2.7     | 9.2     | NA      | 54.0    | 49.2    | 40.7    | 46.1    | NA      |
| 112         | 6.0     | 2.8     | 2.9     | 8.4     | 10.2    | 55.6    | 47.7    | 40.4    | 46.0    | 54.2    |
| 108         | 6.8     | 3.8     | 1.8     | 5.9     | NA      | 60.0    | 53.6    | 46.0    | 49.5    | NA      |
| 109         | 20.2    | 15.2    | 10.8    | 14.2    | 21.3    | 58.7    | 50.2    | 42.0    | 46.2    | 55.9    |