

Table S1- Raw data: clinical characteristics, biochemical assessment, bone mineral density (BMD), bone marrow adipose tissue (BMAT), visceral adipose tissue (VAT), HOMA-IR and intrahepatic lipids (IHL)

| | Age | Height | Weight | BMI | Glucose | HbA1c | BMD | BMAT | VAT | Insulin | HOMA-IR | IHL |
|----|-----|--------|--------|------|---------|-------|-------|------|-------|---------|---------|------|
| 1 | 21 | 1.792 | 65.7 | 20.5 | 85 | 5.5 | 1.081 | 20.8 | 707 | 7.0 | 1.47 | 1.34 |
| 2 | 22 | 1.69 | 58.7 | 20.6 | 83 | 5.5 | 0.937 | 9.6 | 494 | 9.5 | 1.94 | 1.74 |
| 3 | 23 | 1.565 | 42.8 | 17.5 | 87 | 4.6 | 0.853 | 26.8 | 668 | 7.0 | 1.50 | 0.95 |
| 4 | 28 | 1.52 | 49.4 | 21.4 | 82 | 5.1 | 0.888 | 10.9 | 740 | 4.0 | 0.81 | 2.77 |
| 5 | 28 | 1.62 | 63.0 | 24.0 | 78 | 5.3 | 1.257 | 11.5 | 3986 | 14.0 | 2.69 | 1.22 |
| 6 | 29 | 1.63 | 48.8 | 18.3 | 96 | 4.9 | 0.935 | 15.6 | 433 | 9.2 | 2.18 | 0.65 |
| 7 | 30 | 1.75 | 61.0 | 19.9 | 73 | 5.0 | 0.937 | 27.6 | 960 | 4.8 | 0.86 | 0.93 |
| 8 | 35 | 1.60 | 77.6 | 30.4 | 85 | 5.4 | 1.050 | 22.7 | 9300 | 20.0 | 4.19 | 5.84 |
| 9 | 36 | 1.8 | 64.7 | 20.0 | 92 | 5.6 | 0.964 | 20.4 | 973 | 8.0 | 1.82 | 1.12 |
| 10 | 39 | 1.65 | 71.3 | 26.3 | 83 | 5.4 | 1.04 | 18.7 | 7483 | 3.8 | 0.79 | 0.87 |
| 11 | 41 | 1.61 | 66.3 | 25.5 | 95 | 4.9 | 1.044 | 17.7 | 4808 | 15.0 | 3.52 | 3.37 |
| 12 | 47 | 1.61 | 64.3 | 24.8 | 90 | 5.1 | 0.962 | 30.2 | 1973 | 8.0 | 1.78 | 1.72 |
| 13 | 47 | 1.50 | 65.9 | 28.8 | 92 | 5.1 | 0.858 | 39.4 | 8417 | 14.0 | 3.18 | 1.49 |
| 14 | 48 | 1.78 | 73.9 | 23.3 | 84 | 5.5 | 1.108 | 32.0 | 2378 | 4.0 | 0.83 | 1.00 |
| 15 | 49 | 1.60 | 66.2 | 25.8 | 90 | 5.6 | 0.989 | 26.7 | 5506 | 7.5 | 1.67 | 3.26 |
| 16 | 54 | 1.65 | 62.8 | 23.0 | 85 | 5.6 | 0.959 | 34.1 | 2448 | 4.0 | 0.84 | 0.87 |
| 17 | 54 | 1.72 | 97.8 | 33.0 | 105 | 6.1 | 1.165 | 34.7 | 12855 | 6.0 | 1.55 | 6.87 |
| 18 | 56 | 1.67 | 57.8 | 20.7 | 98 | 5.5 | 0.742 | 47.3 | 12108 | 9.0 | 2.18 | 0.75 |
| 19 | 56 | 1.51 | 64.3 | 28.2 | 93 | 5.1 | 0.863 | 36.2 | 12748 | 5.0 | 1.15 | 3.20 |
| 20 | 57 | 1.70 | 71.6 | 24.7 | 90 | 6.4 | 0.979 | 31.0 | 1728 | 6.0 | 1.33 | 0.56 |
| 21 | 57 | 1.72 | 74.0 | 25.0 | 96 | 6.3 | 0.970 | 52.3 | 4859 | 9.0 | 2.13 | 1.13 |
| 22 | 59 | 1.55 | 60.2 | 25.0 | 89 | 5.1 | 1.084 | 23.6 | 5328 | 4.0 | 0.88 | 1.37 |
| 23 | 59 | 1.58 | 84.5 | 33.6 | 89 | 5.5 | 0.961 | 33.3 | 12664 | - | - | 19.9 |
| 24 | 59 | 1.46 | 75.6 | 35.4 | 84 | 5.8 | 0.895 | 28.4 | 11418 | 13.0 | 2.69 | 2.43 |
| 25 | 59 | 1.58 | 93.3 | 37.3 | 91 | 5.7 | 0.869 | 18.7 | 8764 | 14.0 | 3.14 | 4.43 |
| 26 | 62 | 1.66 | 62.0 | 22.5 | 93 | 6.1 | 0.940 | 49.5 | 4699 | 7.0 | 1.61 | 5.30 |
| 27 | 62 | 1.55 | 64.0 | 26.5 | 81 | 5.8 | 0.993 | 33.5 | 16553 | 28.0 | 5.59 | 4.17 |
| 28 | 64 | 1.64 | 71.0 | 26.3 | 96 | 5.8 | 0.965 | 36.3 | 2635 | 7.0 | 1.66 | 0.84 |
| 29 | 66 | 1.52 | 57.3 | 24.8 | 92 | 5.4 | 0.784 | 52.4 | 7817 | - | - | 8.00 |
| 30 | 67 | 1.54 | 66.8 | 28.1 | 87 | 5.7 | 0.956 | 35.1 | 8698 | - | - | 3.00 |
| 31 | 68 | 1.63 | 83.6 | 31.5 | 91 | 6.3 | 1.083 | 31.5 | 5766 | 16.0 | 3.59 | 5.76 |