# The Physical Domain – How do you stack up?

BJJ has 4 main domains of performance – TECHNICAL, TACTICAL, PHYSICAL and PSYCHOLOGICAL. This chart enables you to compare your PHYSICAL development to that published in the scientific literature. The data contained in this chart are a summary of published articles on the PHYSICAL attributes of competitive BJJ athletes from around the world. These data have been converted into simple charts where you can check your PHYSICAL attributes. To determine your numbers, some equipment maybe required. The completion of any tasks to compare to these numbers are entirely at your own risk. Please remember that these numbers are for a range of ages and weights, therefore if you are wondering why your deadlift is so rubbish it maybe that you are a 60kg athlete comparing your scores to a 100kg athlete. Therefore, these scores are best used to track your progress over time. They are not age, weight, sex or ability normalised. Warning – almost all data is collected on MALES.

## How to guide

To check yourself against these numbers, please see the example below.

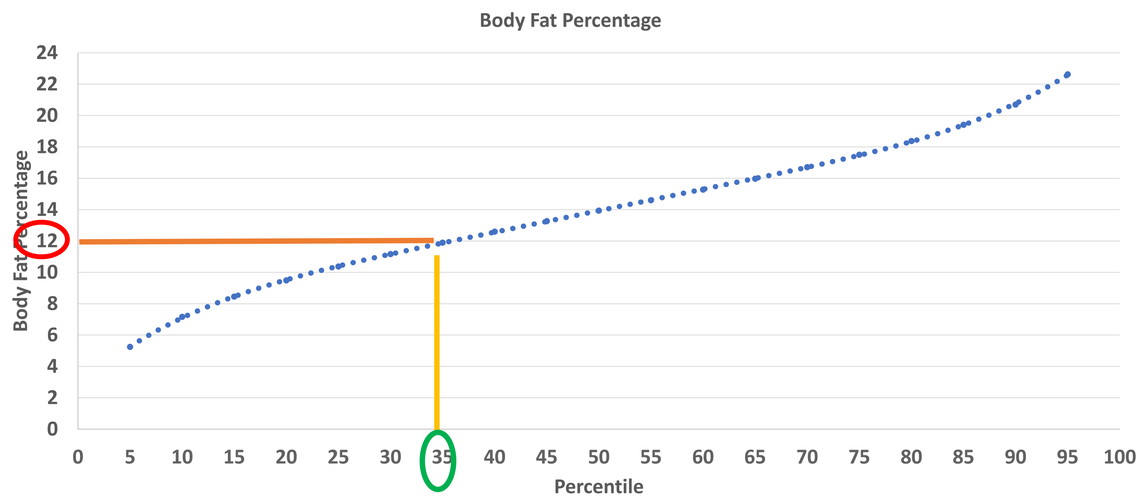
**Step 1** – obtain your value for the test or measure (in this example we use 12% body fat).

**Step 2** – find your value on the vertical axis of the graph.

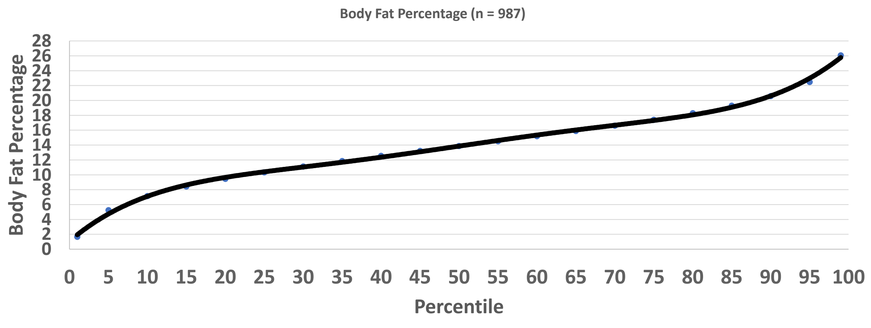
**Step 3** – trace your finger across, until you hit the graph line.

**Step 4** – trace down vertically to cross the horizontal axis.

**Step 5** – Read the number, this is the percentile equivalent. Therefore, in the example the individual is 35% percentile. This means that they are 35th in a line of 100 athletes, or top 35% of athletes. Remember 50% is average. Lower the percentile the better i.e., 5% means you are in the top 5% of athletes.

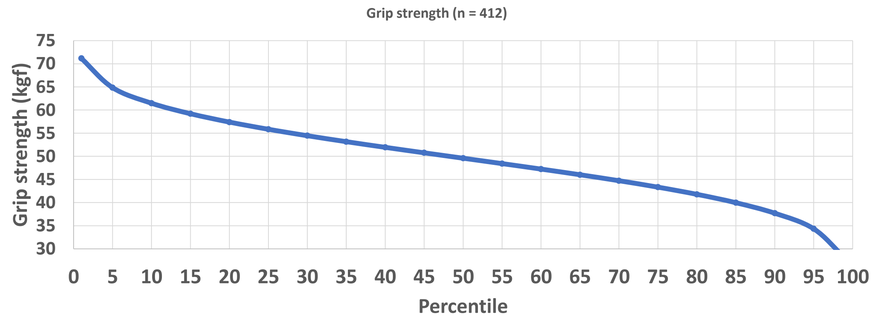



## Body Fat Percentage



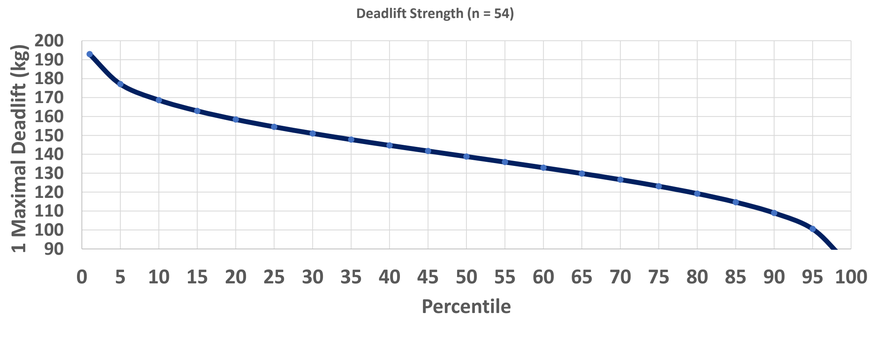

## Grip strength

One maximum isometric squeeze



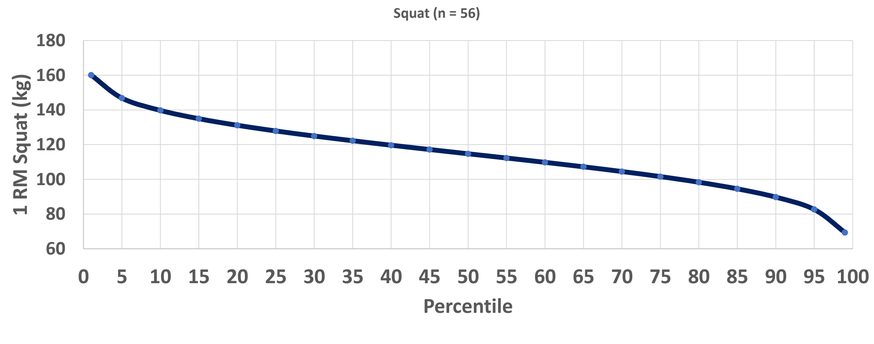

## Deadlift

One repetition maximum deadlift



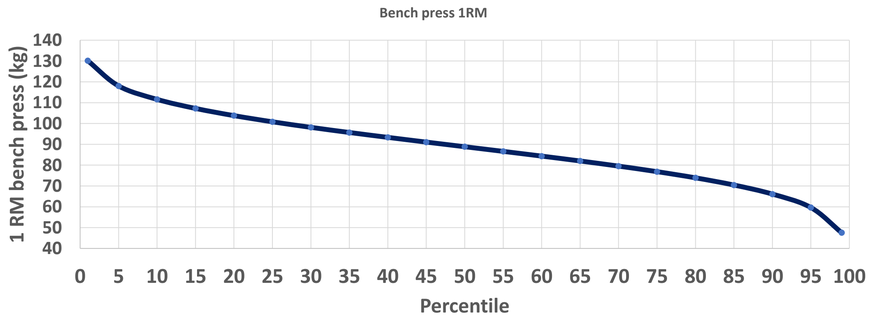

## Squat

One repetition maximum



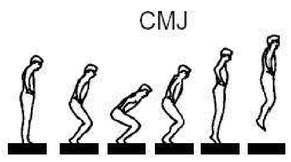

## Bench Press

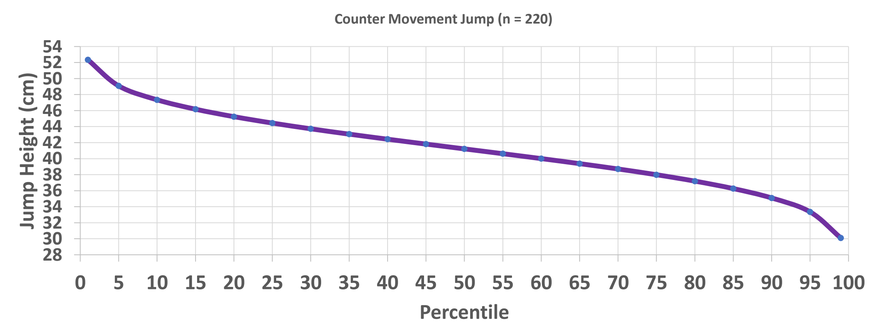
One repetition maximum




## Counter Movement Jump

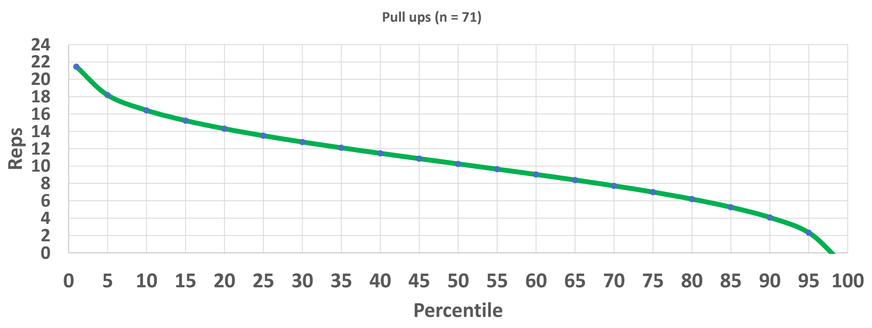
One max jump for height



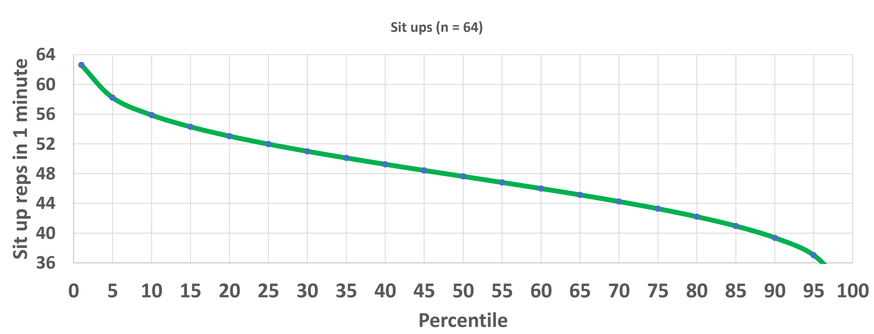

## Pull ups

Max reps



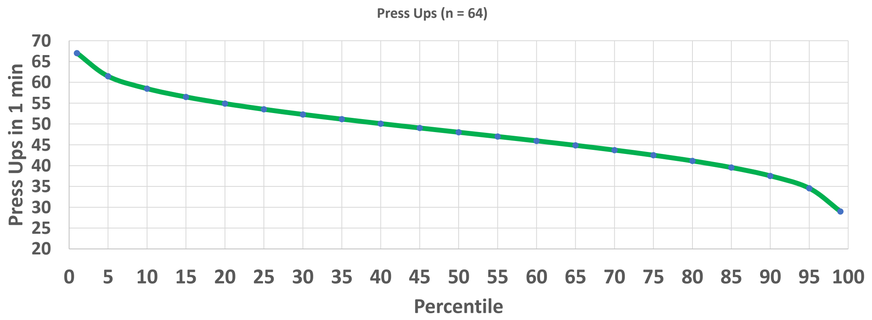

## Sit ups

Max reps in 1 minute

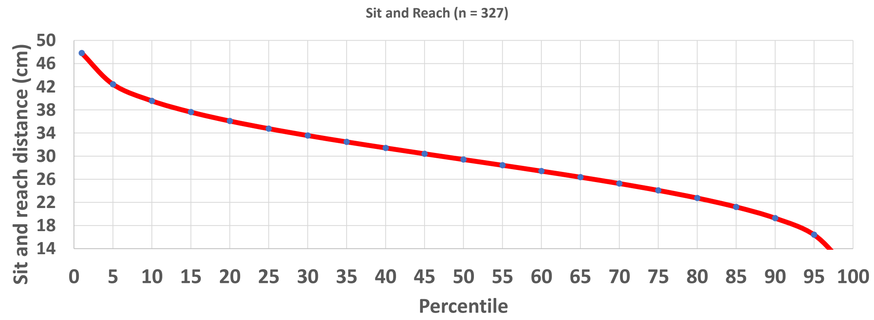

## Press ups

Max reps in 1 minute



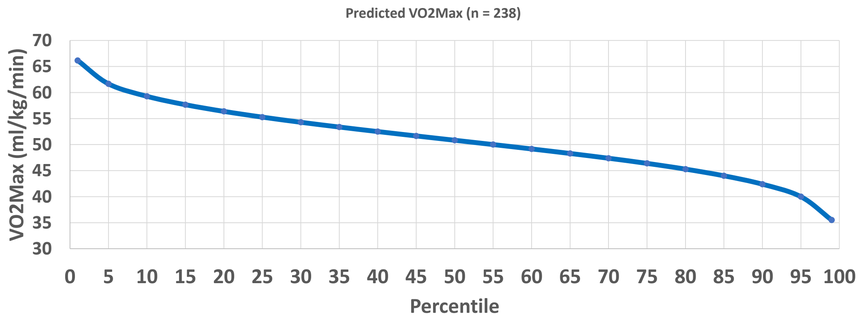

## Sit and Reach

Max reach




## Aerobic VO2 max predicted

Step ups

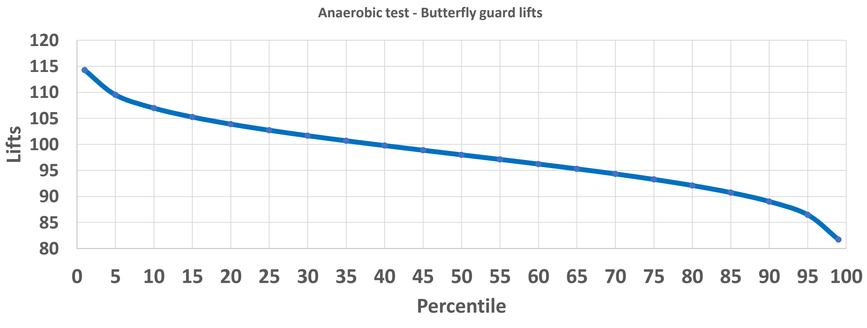


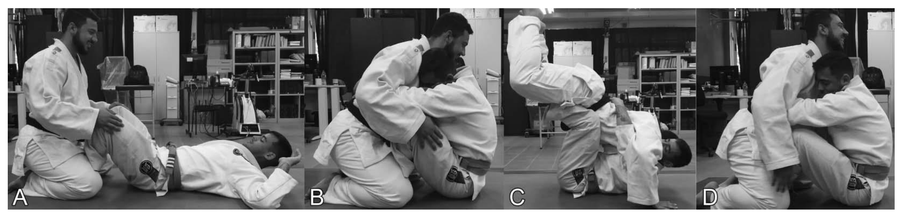

Instructions. Start a metronome 96 beats per minute. Step up and down on each beat (up, up, down, down) onto a 41cm high box for 3 minutes. After 5 seconds take heart rate for 1 minute (or 15 seconds and x 4). VO2max = 111.4 – (0.42 * HR) if Male and VO2max = 65.8 – (0.1847 * HR) if Female.

For example, heart rate is 140 beats per minute, VM2max is 52.5. Percentile is 48.

## Anaerobic butterfly guard lifts

Lift, as per the picture, as many times as possible in 60s, then rest 45s. Count reps. Repeat x 5. Add up all reps, plot on graph




Compiled by Dr Jonathan Williams. All data available on request.