

## USAWA (Age Adjusted) Lynch Factor – Part II

### **Bodyweight Factors:**

Hoffman – 1930's Bob Hoffman, based on  $2/3$  power law favored heavier athletes

Austin – Updated Hoffman with allometric  $3/4$  power law

O'Carroll – Developed by Mike O'Carroll utilizing bodyweight, normalizing to  $75\text{kg} = 1.000$  and a non-lean mass of  $35\text{kg}$ .

Lynch – Based on O'Carroll, but modified non-lean mass to a formula of  $39.53 - (300/W) - (3000/W^2)$  to correct for lighter lifters.

Sinclair – Developed in 1978 from the performance of top-level weightlifters

Schwartz – Developed by Lyle H. Schwartz for powerlifting in the 1970's, introduction of the bench press made formulas used for weightlifting less fair

Wilks – Developed by Robert Wilks, the CEO of Australian Powerlifting

Robi – Developed by Former IWF Technology Director Robert Nagy, the points are calculated on the actual world records in the category and the point value of a result equal to a World Record is the same (1000) in all bodyweight categories.

The point of this walk down memory lane is to emphasize that for nearly the past 100 years we have sought to compare heavier and lighter athletes, with varying degrees of success. With larger sample sizes the statistical analysis gets better. With new lifts (powerlifting vs weightlifting), a new comparison model needed to be developed for fairness. Prior to standardization of the lifts, 19<sup>th</sup> century showman compared themselves on theatrical performance.

As the USAWA has gone from 110 lifts in 1987 to 221 in 2022, we have likely pushed the boundaries of the lifts that can reasonably be compared with the Lynch model. However, lacking an alternative, how are we to proceed? We could use different adjustments for different classes of lifts. We could get rid of the adjustment entirely and reason that any advantage heavier athletes have in the bench press will be offset by a disadvantage in the Inman mile or Pull-up.

It would be reasonable to argue that a 100 pound athlete could not be fairly compared to a 225 athlete in the hip lift. However, Warren Lincoln Travis and other old-time weightlifters whose memories we strive to keep alive did not modify their challenges for heavier and lighter athletes.

Personally, I have gone from the 90kg class to the 95kg class due to an increase in body fat and not an increase in lean muscle mass.

I prefer getting rid of the adjustment entirely. Given the breadth of athletes I have met in the last year, I would argue that heavier athletes are just as likely to be burdened by body fat as they are to have additional lean muscle mass. This is also more in line with the USAWA Mission Statement.

This article and the previous article are focused on an overall comparison/winner. Records should still be kept by age and bodyweight class. Male and Female, Junior, Senior and Master champions should be recognized in sanctioned events.