reasons. Because they are so completely different, they cause the body to adapt in two completely different ways. These extremes represent a continuum, with a heavy set of 3 more closely resembling 1RM in its adaptation, and a set of 10 sharing more of the characteristics of a 20 RM. Sets of five are a very effective compromise for the novice, and in fact for the advanced lifter more interested in strength than muscular endurance. They allow enough weight to be used that force production must increase, but they are not so heavy that the cardiovascular component is completely absent from the exercise.

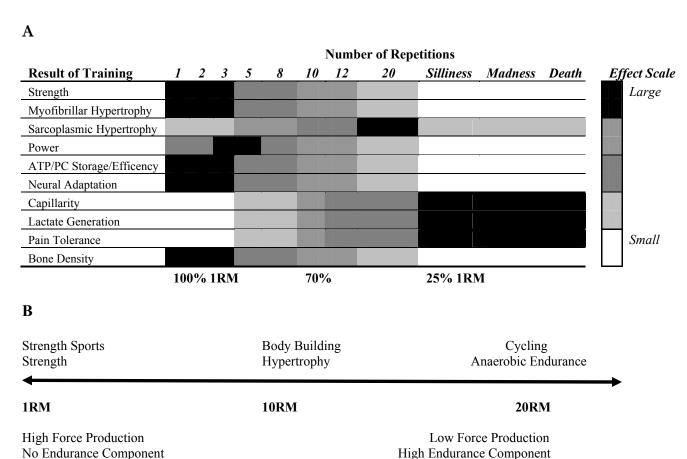


Figure 7. (A) Just as in running, different volumes of training (repetition schemes) produce different results. For example, in the continuum above, the largest gains in strength result from low repetition work, in the range of 1-3 repetition maximum. Conversely, the largest adaptation in lactic acid tolerance occurs at the very high end of the repetition spectrum. Coaches and trainers must be very explicit in what their training goal is and select specific repetition schemes to meet those goals. (B) The strength continuum, in more general terms.

Back-off sets

It is occasionally useful to increase work volume by doing additional sets after the work sets are completed. These sets are done with a lighter weight, and are referred to as **back-off sets**. They can be done with the same number of reps, or a higher number, depending on the reason for doing them or the effect desired. If there were technique problems with work sets, a couple of back-off sets with 80% of the work set weight and 150%