

MUSCLE GENES

Research clarifies why people respond differently to weight training

To be honest, we find it laughable that just about anybody and everybody who has an opinion about how *you* should train has published the *secret* on the Internet. The obvious implication is that if you train that way, you will reap enormous benefits in strength, size, and power. Many of you might therefore be tempted to pick one of your sport's most accomplished athletes and train the way he or she does. You reason that if *that* person trains that way and is a top performer, then you, too, will increase your performance via that training approach. But what is most obvious is that following these training routines does *not* turn you into a superathlete. And it is apparent to all our readers why these routines do not work as promised: most of them do not adhere to the latest scientific developments. On the other hand, if you and your training partner both followed the same routine, without fail one of you would make more gains than the other. Why is that? Now we know, and as you enlighten yourself, you will come to realize that the only way to train is the way dictated by science, not Mr. or Ms. Guru.



Even if you followed this Olympic champion's training routine to a T, you probably would still not get as strong. The reason is microRNA.

Original Research

Davidson, P., et al. High responders to resistance exercise training demonstrate differential regulation of skeletal muscle microRNA expression. *Journal of Applied Physiology* 110:309-317, 2011.

Power Key: muscle size, RNA, weight training, protein synthesis