My First Half-Century in the Iron Game
Testing Strength: Part Three

Treatment protocols utilized for the purpose of rehabilitating musculoskeletal injuries cannot be evaluated until and unless you can determine just what, if anything, has changed, the direction of change, better or worse, and the degree of change. If a man who previously could not walk can later walk, then obviously he has improved, but it does not follow that any of the treatments that were utilized actually helped him in any way. It has been estimated that about seventy-five percent of the supposed “cures” that occurred following some sort of medical treatment were results of spontaneous improvements, would have occurred with no treatment of any kind. But, in almost all such cases, the treatment that was used is given credit for the cure.

A very similar situation exists in the field of exercise: people perform dozens of different exercises and they get bigger and/or stronger, then they jump to the conclusion that their training program is ideal; when, in fact, it is very likely that at least half of their training was wasted and that part of it was counterproductive. The two most common mistakes in exercise are a failure to train hard enough, thereby not stimulating growth, and training far too much, thereby literally preventing growth by overtraining. In the case of exercise, at least, it does not follow that if some is good then more is better. Rather than trying to determine just how much exercise you can tolerate, you should be trying to find out just how little exercise you actually need. And, if you are trying to increase muscular size and/or strength, then you actually need very little exercise, providing only that your exercise is proper, is properly chosen and properly conducted; which, in practice, is damned rare.

Even a listing of all of the stupid theories about exercise that are now being touted by some, or all, of today’s crop of self-proclaimed “experts” would run to a length of a hundred pages or more, and trying to explain just why all of these theories are stupid would require at least 10,000 pages; which, even if accomplished, would serve no purpose because very few, if literally any, people would even bother to read it and because anybody who did read it would be more confused after reading it than they were initially. Many people can, and do, read very lengthy books in order to amuse themselves, but people who can absorb much, of any, of the information contained in a long book that was supposed to educate them are about as common as hen’s teeth. Just why do you believe that so much repetition was involved in teaching back in the days when they were still trying to educate people in this country? Because such repetition is a requirement for teaching, since almost everything that you read only once will usually be quickly forgotten, and will seldom, if ever, be understood. Regardless of any prior training or experience, airline pilots are given very tough practical flight tests every six months, and they are required to demonstrate their skill; failing to do so, they are fired. And, even with such continuous retraining and testing, they still make mistakes that get a lot of people killed far more often than we would like.

In the case of flying, we can measure the results, thereby making it possible to evaluate the pilot’s abilities, or lack of same. Unfortunately, in the case of exercise, it is not so easy to measure the results, and thus it is very difficult to evaluate the exercise being used. I have been a pilot for nearly sixty years, have flown everything from helicopters to jumbo jets for a total of more than 30,000 hours, and have been directly involved with exercise for about the same length of time, and yet I am still learning in both fields; as recently as yesterday I finally figured out the answer to a question that has been bothering me for about ten years, a question that arose because of an observation that I could not explain. FACT: static strength and dynamic strength are directly related, thus increasing either one will increase the other one to exactly the same degree. Nevertheless, we have encountered a few subjects who appeared to be losing dynamic strength while gaining static strength, and, until yesterday, I could not explain these occurrences. Now I can.

If we test the fresh strength of such a subject with a static testing modality and his fresh static strength is 100, and if we then have him work to a point of momentary failure in an exercise with 80 pounds of resistance, he may be able to perform ten repetitions and then cannot continue, so, obviously, his fresh dynamic strength has been reduced by fatigue; but, then, if we immediately test his static strength we may find that it has increased to a level of 110, is then ten percent
higher than it was when fresh. So dynamic strength is down while static strength is up; which, initially, was a very surprising result, although, now, having seen many such examples, we are no longer surprised by them.

But, yesterday, I finally figured out at least part of the answer to this question: dynamic strength has been reduced by an increase in muscular friction resulting from fatigue, but muscular friction has no effect on static strength. Which solves part, but not all, of the question, since I still cannot explain the immediate increase in static strength following a hard exercise continued to failure. It happens, we have seen many such examples, but still cannot explain just why, or how, it can happen. If you can answer the second part of that question then you are a better man than I am, Gunga Din. Or a smarter one.

Another question that I have not been able to answer to my own satisfaction concerns the muscles that rotate your torso: in a MedX Torso-rotation testing and exercise machine, we anchor both the pelvis and the legs in such a manner that twisting the body involves a rotary movement around the axis of the spine; in effect, the pelvis and legs do not move, while the torso, head and arms do move. In such a machine, when you have rotated your torso as far as possible towards your left, it appears that the muscles of the left side of your body produced the movement, while muscles on your right side were stretched.

But, about fifteen years ago, while I still owned Nautilus, we built a different torso-rotation machine; in that case we anchored the upper torso and moved the legs. If, in that machine, you moved your legs as far as possible towards your right, then it appeared that the movement was produced by muscles on your right side. Yet, in both cases, moving only the torso or moving only the legs, the finishing position was the same in both cases, so it does not seem to make sense that the muscles on one side were involved in one case but not in the other case. Figure that one out if you can; personally, after about fifteen years of thinking about it, I still do not understand it. And, please, do not suggest that we can answer that question by using EMG readings; you can wipe your ass on EMG readings, all they produce is a bunch of lines on a piece of paper that nobody can understand. About twenty-four years ago, we wired up a dead man and then produced EMG results by moving his limbs; readings that damned sure did not result from muscular function. The only worthwhile result I have ever seen from EMG tests was one which clearly established the existence of internal muscular friction: the amplitude of the reading was greater during positive work, and much lower during negative work with the same level of resistance; because, while lifting the weight the muscles had to overcome both the resistance and their own internal friction, while the friction helped them when the weight was being lowered back down.

But, of course, no scientist would ever agree with that above statement since none of them are even aware that muscles have friction, and would deny it if you suggested it to them. After all, it was not their discovery, thus it obviously cannot be true. And then you wonder why I consider scientists, as a group, to be the dumbest people on the planet? Exceptions? Almost certainly; and someday I hope to meet one.

Agents of the FBI frequently use the expression . . . “Follow the money.” And a similar statement that has been around as long as I can remember says much the same thing . . . “Whose ox is being gored?” Certainly not all, but quite a long list of scientists connected with the field of exercise have approached me in attempts to get me to give them research funds, and they usually make it clear that any results of their research will support any theories that I want; in fact, such people are nothing except outright whores, interested only in stuffing their own pockets. Then, after I politely refuse to give them any money, they invariably react in exactly the same way: immediately start attacking both me personally and all of my stated opinions. It appears to be impossible to convince such people that I have no desire to prostitute their research projects, that, instead, my interests are limited to attempts to determine the truth, the facts, whatever they turn out to be. Nor will they ever believe that I will sincerely thank anybody who can demonstrate that any of my opinions are wrong; if people can prove that you are a fool, then, regardless of their motivation for doing so, they have, in fact, done you a favor.

In theory, the practice of science is supposed to be a totally unbiased search for the truth, letting the chips fall where they may; but in practice, scientists who actually conduct themselves in that fashion are rare almost to the point of nonexistence.
The relative standing, the position in the pecking order, of a scientist is usually based upon the number of supposedly scientific papers that he has published in supposedly scientific journals, only the number of such papers being considered with no regard for what these papers actually say. Several years ago I wrote a 40-page paper that mentioned for the first time in print at least a dozen important factors that were very important even if, as they were, they were still unknown to the scientific community in general; and while none of them had anything at all to do with that paper, several wanted to be listed as co-authors, and one was disturbed by the fact that I refused to break up the information in such a way that about twenty different papers could be published instead of only one paper.

Now having read literally tens-of-thousands of supposedly scientific papers on the subject of exercise, I have found only two that were even true and/or had any slightest value, and, of course, both of them have been ignored by the scientific community in general. In fact, most of the published papers are based upon a so-called “review of the literature,” and involve no original research at all: instead, some asshole reads everything he can find related to the subject, and then attempts to form new theories based upon his totally uninformed opinion of the stupid statements of a lot of other assholes. If that is “science,” then I am too stupid to understand the term.

So if it is your desire to find supposedly scientific theories to support your own ideas, not to worry, because you can find published papers that support any crackpot idea that you can come up with, plus a very long list of other stupid theories that you would probably never dream up. And, for every paper supporting any given theory, you will find others that are violently opposed to it. So, by carefully selecting your “references,” you can appear to “prove” just about any damned thing.

Several people have pointed out in print the fact, and it is a fact, that no paper authored by me has ever been published in any of the thousands of supposedly scientific journals, thereby “proving,” they imply, that nobody in the scientific community agrees with any of my opinions; but they never bother to add several other facts, one being the fact that I have never bothered to send any of my articles to a scientific journal in an attempt to get it published there, knowing in advance, as I do, that any article by me would not be published, would be rejected because I refuse to “follow the rules,” will not let my work be judged by a bunch of arrogant, stupid, biased, semi-idiots who know less than nothing about the subject being discussed.

Having been submitted to a supposedly scientific journal for publication, an article (“paper”) must first be accepted by the journal’s editor, who in invariably a person with nothing in the way of an understanding of the subject, although he invariably considers himself an “expert,” and if he accepts the paper, which is highly unlikely if it is something new in its field, new in the sense that he never heard of it before, then he sends copies of the paper to each of several supposedly unbiased “experts” in that field, and these people then accept it or reject it, but are not required to give their reasons for rejecting it. Then, in the highly unlikely event that it is accepted for publication, all of these supposed “experts” demand that the article be changed, rewritten, edited, twisted, distorted, to such an extent that it is then impossible to understand just what was stated, and, of far more importance to these reviewers, so that the paper does not prove just how stupid they are, does not put the lie to their own stupid theories.

All of which factors, taken together, make it all but impossible to publish anything of any slightest value, or truth, in a supposedly scientific journal. If, instead, your paper merely restated a long list of lies and stupid statements made by other assholes in the scientific community, then it will probably get published, and then will probably be ignored by everybody until the end of time; which outcome is probably good, because republishing outright bullshit helps nobody.

But are the scientists really that stupid? Yes. Stupid beyond your ability to understand the term. In general, they are also lazy, greedy, willing, even anxious, to do literally anything that might appear to serve their purposes; in short, they are no different from most of your relatives and associates, they are simply people with all of the failings and shortcomings that the term implies. Exceptions to those general rules being so rare that you can count them on the fingers of one hand. But surely I have not met every scientist on the planet, have I? No, nor have I hit my thumb with every hammer on the planet, but have hit it with enough hammers to understand the characteristics of hammers in general.
Given the number of possibilities, it should be obvious that I have literally no experience in any of a vast majority of fields in which scientists are involved, but I have had a lot of experience in a number of such totally unrelated fields, exercise physiology, medical treatment of poisonous snake bites, motion-picture photography, aviation, the capture, transportation, care, feeding and breeding of a wide variety of exotic wild animals, manufacturing and several other fields, and, so far without a single exception, I have found that almost all of the scientists involved in any of those fields fall into the same pattern, stupidity, greed, arrogance, envy, laziness and a total lack of any meaningful understanding of their supposed field of claimed expertise. So, in general, if you have a problem, ask an expert what to do and then do the opposite of anything he suggests; that may not solve your problem either, but you can be damned sure that any suggestion by an expert is bullshit, worthless at best and dangerous at worst.

Hundreds, perhaps thousands, of people have asked me where to go to school in order to learn something of value about exercise, and I have invariably informed them that I cannot answer their question, since, to my knowledge, no such school exists. Such is life in an insane society.