My First Half-Century in the Iron Game
One step forward, two steps back. While it is certainly true that things have changed in the field of exercise during the last fifty years, it is also true that most of those changes were moves in the wrong direction.

Fifty years ago, most of the commonly-accepted theories in this field were wrong; today, almost all of these same myths are still widely accepted; and, in the meantime, hundreds of other superstitions have taken root. So we are now stuck with most of the old myths and a lot of new ones.

As a science, the study of exercise physiology was supposed to solve all of the problems in this field, and many people believe that it has; but in practice the study of exercise physiology has had little or nothing in common with true science. Thousands of supposedly scientific studies have been performed, and the claimed results of these studies have been published in several journals; but almost all of these studies were performed with tools that were incapable of performing any of their intended functions. The unavoidable result being that these studies were worse than worthless; worse because they were misleading.

Accurate measurements of strength are an absolute requirement for the purpose of determining changes in strength that were stimulated by exercise; but truly meaningful measurements of strength proved to be far more complicated than the people performing all of these supposedly scientific studies believed.

In a broad sense, there are only two categories of subjects: some subjects (religion, sexual choices, perceptions of beauty, among many others) are based upon individual differences of opinion; which is an acceptable situation, since these subjects cannot be measured; but another category of subjects can be measured, and are thus not based upon opinion. Such subjects can be meaningfully evaluated by an understanding of basic physics, and thus not influenced by differences in opinion.

Or, in fact, should not be influenced by differences in opinion; the problem here resulting from the fact that very few people are even aware of the basic laws of physics, and ever fewer people understand these actually simple laws. Thus we do have differences of opinion in many cases where any such differences are nothing short of insanity.

Nobody in the world clearly understands gravity; but most people are at least aware of it, and it can be both measured and demonstrated. Yet, in the field of exercise physiology, most of the so-called experts continue to ignore the effects of gravity. So what? Because gravity has a very meaningful effect upon the results of most strength-testing procedures.

Friction is another factor that is clearly established by the laws of physics, and a factor that also effects the results of most strength-testing procedures; yet friction continues to be ignored, or even denied, by most of the people in this field. The result being that their test results are biased to such an extent that they are worthless for any purpose.

A third factor that produces bias in the results of strength tests is stored energy; another factor that is based upon simple laws of physics and that can be clearly demonstrated in an undeniable fashion; and this is also a factor that is still being ignored by most of the supposed experts in this field.

And just how much error is introduced into the results of strength tests by these factors? Gravity can bias strength-test results by several hundred percent. Friction can bias results to an equal degree. And stored energy can bias results to an almost unbelievable degree; in one actual test, stored energy introduced three errors into the results, one error of 13 percent, a second error of 30,000 percent, and a third error in excess of 240,000 percent.

With very few exceptions, all of these critical factors have been ignored in the thousands of supposedly scientific studies that have been performed during the last fifty years; so all of that research was worthless, and any theories based upon that research are misleading at best.

In addition to the problems outlined above, two other factors have biased the test results during almost all of these studies; the equipment used for most of these studies did not provide isolation of the joints that were being tested, so it
was impossible to determine just which muscles were being tested; secondly, most of these studies were based upon measurements of impact forces rather than upon measurement of torque, and there is no relationship between impact force and torque.

Far too complicated to understand? No quite the contrary; if you can read simple English, and if you can at least understand basic math, then you are capable of clearly understanding all of the points mentioned above.

Then why have these factors been ignored by the experts in this field? Because most of these people were not experts; having been taught by an earlier generation of people who in fact knew little or nothing about exercise, they simply accepted what they were taught without question.

Once accepted, myth is very difficult to remove.

Remember; less than a hundred years ago, the scientific community believed that heavier-than-air flight was impossible. Which raises a question: were these people unaware of things like birds? Or did they believe that birds were inflated by helium? Fifty years ago, very few in the scientific community believed that flight in space was possible.

A very large part of this continued ignorance is a direct result of the so-called peer-reviewed scientific journals; which are supposed to assure that anything published in a journal is true, but which in fact generally have an opposite result. Things that are believed (right or wrong) are usually published, because they support the bias of the people who review all studies that are submitted for publication; while anything that is different is usually rejected for publication, because it puts the lie to the bias of the reviewers.

Even a moment of consideration should make it obvious that the very idea of a peer-review journal is based upon an impossibility: if something is new, then how many people are there who are qualified to judge it? How many peers did the Wright Brothers have? Or Edison? Or Einstein? Or Tesla? Or hundreds of others?

Almost without exception, the people who have changed the world have been laughed at, or ignored, by the scientific community; because their ideas did not agree with then-accepted scientific opinion.

In the meantime, while ignoring facts that could be demonstrated in simple manners, these same scientists continued to believe many things that were nothing short of ridiculous.

Too strong? Quite the contrary, not strong enough; while it is certainly true that a few things (damned few) of value have resulted from the work of scientists, it is also true that most of the things of value that have been discovered during the last several centuries came from people who were not a part of the scientific community. The Wright Brothers were bicycle mechanics, Einstein was a patent clerk, Edison went to the eighth grade, Tesla had almost nothing in the way of formal education.

During the last twenty-odd years, hundreds of people who were interested in the field of exercise physiology have asked me where they should go to school in order to study to their greatest advantage; without exception I told them that I did not know, and then added that regardless of where they studied most of what they would be taught was simply not true.

Which is not meant to imply that I believed that I had all of the answers; quite the contrary, I was clearly aware that I had few if any answers; but I also knew that most of the answers then being taught were untrue.

Some things are obvious, others are not: it is certainly obvious that exercise is capable of stimulating increases in both muscular size and strength, but is not obvious just how or why this occurs. And it is also obvious that it does not always occur. So why does it work for some people but fail to work with others?

A hundred young men selected at random can be exercised in an identical fashion, but the results will certainly not be identical. Why not? Because of individual differences in the subjects; individual differences that were not even suspected a few years ago, differences that are not totally understood even today. But at least some of these differences can now be identified, are now understood and can be measured.
Properly exercised, almost anybody can increase both strength and muscular size to an enormous degree; but some few individuals have the potential for far more than a usual level of size and strength, and the average person has no chance to compete against such individuals regardless of how they train. Yet, for the last fifty years, most of the muscle magazines have gone to great lengths in their attempts to convince people that “anybody can do it.”

True: almost anybody can improve; but everybody cannot improve to the same degree. Believing otherwise has produced an enormous amount of frustration and heartache.

Believing otherwise (having been convinced otherwise) has also produced great wealth for a few people in this field while producing nothing of value for millions of other people. Buy this, buy that, do this, do that, and you too can look like Arnold. Sure!

While Arnold is certainly a result of his training, his results were also a result of his genetic potential; the fact that it worked for him does not mean that it will work for you. Playing basketball will not make you seven feet tall; but if you want to compete in basketball today then you better be seven feet tall. To reach the top in almost any athletic activity today it is necessary to be a freak, because you will be competing with people who are freaks.

I have been reading the scientific literature in this field, and in several other fields, for nearly sixty years; have read tens-of-thousands of supposedly scientific articles and thousands of books; and with very few exceptions these articles and books were simply untrue.

So, if you cannot rely upon the scientific literature for help in this field, then just where can you go for meaningful information? For a start you can read the following series of articles that I will write for IRON MAN; during the next year or so I will carefully go over everything that is now known on the subject or exercise performed for the purpose of increasing strength and muscular size. For best results from exercise, several points must be clearly understood and applied; taken collectively, these points are sometimes intimidating to some people, but looked at individually these points are actually quite simple.

While I cannot provide a solution to any possible problem, I can clearly distinguish between facts and opinions in many important areas; and I can also demonstrate the errors that are now being largely ignored in many current theories and practices.

Nautilus, which I introduced twenty-three years ago, was a giant step forward in the field of exercise; but I sold my controlling interest in Nautilus seven years ago, and since then have devoted all of my time and resources to the development of meaningful testing tools in the field; and we have discovered and proven far more of value in this field during the last seven years than all of the results of the work of thousands of people that was performed during the preceding several centuries. Discoveries that were made possible by the fact that we now do have meaningful tools for measurements of true strength; tools that were not available to anybody earlier.