Exercise, 1983... the Possible and the Impossible – Part 1

An improvement in appearance is probably the primary objective for a majority of people involved in exercise, with an improvement in health being the second most common goal... but both of these results are really side-effects of an improvement in functional ability, or should be.

Viewed logically, exercise can be performed for only three possible reasons... one, to improve functional ability... two, to maintain an existing level of functional ability... three, to prevent a loss of functional ability.

Until and unless the actual cause and effect relationships involved in exercise are clearly understood, and accepted, impossible goals will be sought by many of the people now interested in exercise, and little or nothing more than frustration will be produced... while attainable results of very real value will be overlooked.

Proper exercise is far more than a desirable part of life... proper exercise is literally a requirement for a normal life. A requirement that has been largely overlooked until recently. A highly controversial requirement even now... and while I certainly cannot even hope to end the controversy, perhaps I can put the subject of exercise into some sort of rational perspective.

Supposedly scientific opinions on the subject of exercise can be quoted to support almost any viewpoint you can think of, so it must be clearly understood from the start that the field of exercise still remains far more an art than a science.

Science is supposed to be an unbiased search for the truth, with total disregard for the consequences... "let the chips fall where they may". Which sounds good in theory, but falls far short of the mark in practice; primarily, I believe, because science has been prostituted by both commercial and political considerations. The scientists in Hitler's Germany have bee strongly condemned for lending their supposedly scientific support to some of the outrageous theories of the time... and they should have been condemned, and some of them should have been hanged. And some were.

But all of that is past, right?

Wrong. The prostitution of science did not start in Nazi Germany, and it did not die with Hitler. In spite of all their selfrighteous claims to the contrary, the scientific community as a whole has been a tool of the politicians for centuries... and don't be naïve enough to expect any meaningful change of direction in the future.

If you are perfectly happy with the government, if you like the schools, if you are satisfied with the international situation, if you have total confidence in the economic future... then you should also be pleased with the scientific approach to government; but if it appears that some of these areas of important human involvement leave a bit to be desired, then perhaps you should ask yourself just why you should place much confidence in any other area of science.

There are exceptions, of course... the scientific community is made up of many thousands of individuals, the good and the bad, the smart and the dumb, the true and the false. All expressing their opinions... or supporting the opinions of somebody else.

And that is the key word... "opinions".

And all I can do is give you my opinions. Not the facts, there are very few real facts in most areas of human thought. Certainly not in the field of exercise. Having given you my opinions, then you will form your own opinions... and you should; but you should also remember that your opinions are not facts, are also subject to error... and you should not hesitate to change an opinion when the evidence of your own experience indicates that it is wrong.

Which sounds simple enough, but which in practice seems to be nearly impossible for most people. Primarily, I suspect, because changing a strong opinion requires admitting a mistake.

Someone once said... "We learn, when we learn, only from experience, and then only from our mistakes. Our successes merely serve to reinforce our superstitions".

Somebody else said... "Success comes from good judgement, good judgement comes from our experience, experience comes from bad judgement".

So now I am going to try to give you an outline of my own opinions on the subject of exercise... opinions that I now hold as a result of my own experience, beliefs that I have formed over a period of more than forty years of direct and personal involvement in exercise, during which time I have made thousands of mistakes. Mistakes that taught me most of what little I know now... or believe I know.

The first mistake I made was believing that somebody out there knew something of value on the subject of exercise... and perhaps they did, but if so then I was never able to find them.

Final results prove nothing... until and unless a result is viewed in context, then the method that produced that result cannot be judged. How long did it take? What did it cost? Was the result worth the effort and expense?

In spite of the fact that I have worked an average of at least sixteen hours a day, seven days a week, for more than forty years... I have always considered myself to be a basically lazy person. Most of my work has been somehow involved with attempts to find easier ways to do things... or faster ways to do things, even if they weren't easier. I have been in a terrible hurry for as long as I can remember, even though I usually didn't have the slightest idea of just how I was going to use the time that I was trying so hard to save.

Th opinions that I have formed on the subject of exercise have all been direct results of my laziness... my desire to produce good results from exercise without the necessity of devoting a large part of my time and energy towards this one goal. I am also impatient by nature, and I cannot stand any type of work that never seems to produce results, a job that is never finished.

I must see progress towards a final goal, and when I fail to see a fairly rapid rate of progress I soon start to suspect that something is drastically wrong with the methods I am using.

I am very curious, but I have learned from frequently bitter experience that the advice of self-proclaimed experts is generally worthless; so I try to find out the nature of things for myself, which unavoidably leads to many mistakes... in my case, in the field of exercise alone, thousands of mistakes. The most important of which mistakes I will attempt to warn you about in this article.

Some of my mistakes were results of the fact that I was trying to accomplish things that were simply impossible... impossible for me, as an individual. The fact that somebody else can produce a certain degree of results does not mean that you can do the same... and it does not mean that the method used to produce those results was the best method, or even a good method.

The range of human potential is almost infinite... some can attain a particular goal rapidly and rather easily, and having done so will then usually consider themselves to be experts on the subject. Worse, a lot of other people may consider themselves to be experts, and attempt to follow their advice. Advice which may or may not be well intended, but is almost always worthless.

Millions of words are published on the subject of exercise every year, most of the articles and books being a rehash of things that were first published forty or fifty years ago... things that weren't true then and are not true now.

The very few things of value that are known on the subject of exercise could probably be covered in adequate detail in a few thousand words... everything else is explanation, or opinion, or worse.

Some few things are self evident... if you don't exercise, you become weaker.

Thus, it might appear that if you do exercise you will become stronger... but in practice this does not always happen. It should, and sometimes it does, but not always.

If you are performing exercise for the purpose of becoming stronger, and you should be... then you should show an almost constant rate of improvement in your strength. Until you reach a level of strength that very closely approaches your individual potential for strength.

But I personally doubt that even a dozen individuals have ever reached that limit... which, if true, means that most people stop growing long before they get anywhere close to their potential. Stop growing in spite of the fact that they continue to exercise for years, in never-ceasing efforts to increase their strength.

Exercise cannot produce an increase in strength, but it certainly can produce a loss of strength. Exercise can produce absolutely nothing of value, but it can stimulate the production of a number of things of very real value. So, you certainly must exercise if you want to increase your strength, or even if you want to maintain an existing level of strength... thus, the situation boils down to an attempt to determine the best type of exercise, the most productive frequency of exercise, and the proper amount of exercise.

Exercise that does not involve overload will not stimulate growth... and that is not an opinion, that is a fact. But just how much overload is required? How often? Those are questions that can only be answered on an individual basis, and then only as a result of trial and error.

My own experiences have led me to the firm belief that very little in the way of exercise is actually required to stimulate a rapid rate of growth... and I also believe that most people who are involved in exercise still make the mistake of performing far too much exercise. Thirty or forty years ago, a man whose name now escapes my memory wrote the following... "Perhaps we should be trying to determine just how little exercise we actually require, instead of trying to find out how much exercise we can tolerate."

Common sense tells me that I no longer possess the potential for growth that I had thirty or forty years ago, yet I can now produce a faster rate of growth than I could then... and I can do so as a result of about ten percent of the amount of exercise that I performed then.

About a year ago, Vic Tanny walked into my office... that being the first time that I had seen or talked to him since 1947, more than thirty-four years. One of the first things he told me was that he still remembered that I produced a faster rate of growth than anybody else he had ever known, before or since.

I spent a few weeks training in Vic's gym in Santa Monica, California, in 1947... but I left because I was not satisfied with the results that I was producing. To me, my results were poor... to Vic, my results were almost unbelievably good. Now, thirty-five years later, I can start from scratch and produce better results than I produced then, and I can do so while devoting less than two hours a week to exercise.

So, it is obvious to me at least that the results of exercise are not produced in proportion to the amount of time devoted to exercise. Over the years I have steadily reduced the amount of time that I devote to exercise, and so far I have improved the production of results each time I have reduced the amount of my exercise.

Starting immediately, I am going on a program that consists of only five exercises, and I will stick with this program for a period of several months; performing only one set of each of the five exercises during each of three weekly workouts... workouts that will require about fifteen minutes each; a total training time of less than one hour weekly.

The first exercise will be squats performed on a Duo-Squat machine, using as much weight as possible and working up to one-hundred repetitions before increasing the weight... fifty reps each leg.

The second exercise will be pullovers performed on a Pullover machine, again using as much weight as possible and working up to a maximum of ten repetitions before increasing the weight.

The third exercise will be performed on a forty-degree Chest machine, with an increase in resistance when I can perform ten repetitions in good form.

The fourth exercise will be lateral raises performed on a Double Shoulder machine... the first movement only; still using a maximum resistance and trying for ten repetitions in good form.

The last exercise will be performed on a Lower Back machine, using as much resistance as possible while working up to fifteen repetitions in good form.

In the event that I am less than pleased with my results, the first thing I will change will be to reduce the number of exercises in one of the three weekly workouts... in that case, I will perform the squats during only two of the three weekly workouts.

Since I have not worked my legs meaningfully in more than twenty years, it will be interesting to see what happens to my legs now... but I will be very surprised if they fail to grow at an extremely rapid rate. No direct work at all will be performed for my arms... no curls of any kind, no triceps work of any kind, no presses, no pulldowns; so it will also be interesting to see just what happens to my arms... but again, I will be very surprised if they fail to grow.

None of which is meant to imply that I am not in favor of exercises for the arms, nor that I believe that the best possible degree of results for the arms can be produced without working the arms... quite the contrary. I am well aware that no muscle will display the best possible rate of growth unless it is stimulated by direct exercise. But since I have worked my arms hard on an irregular basis for more than forty years, and since I have a pretty accurate idea of just how well they respond to direct exercise, I am simply curious to see how they will respond without any direct exercise.

During the last several months I have been maintaining my weight steadily at approximately 170 pounds, while eating practically nothing... two very small meals a day. And while I will not change my diet now, yet I fully expect my weight to increase fairly rapidly to at least 185 pounds... at which level I should be about as lean as I can get and about as big as I can get without increasing my intake of food. From that point on I will gradually increase the amount of my food, in an attempt to permit additional muscular growth while not adding any fatty tissue.

I have not weighed more than two-hundred pounds since 1956, a period of twenty-six years, and I am curious to see if I can weigh that much now while maintaining a low level of fatty tissue. Maybe I can, and maybe I cannot, but it will be interesting to find out.

I have never used drugs of any kind and I will not use them now, nor will I consume anything in the way of food supplements. I do not expect my daily consumption of calories to ever go above 1,800... yet I expect to gain weight steadily and fairly rapidly. At the moment my caloric intake is on the order of approximately 1,100 a day, and that will not be increased until I feel that I am as lean as I am now capable of becoming.

So, I fully expect to increase my bodyweight, and increase it fairly rapidly... without increasing my intake of food. A result that some people consider to be impossible; but in fact a result that is not only possible but highly desirable... desirable for several reasons.

If I am able to increase my bodyweight by approximately fifteen pounds while continuing to consume a diet that has merely been maintaining my existing bodyweight for the last several months, then it will be obvious that two things have happened... first, my muscular weight will have increased... second, my present level of fatty tissue will have been reduced.

Impossible? Some people, including a few of the present crop of self-appointed experts in the field of exercise, would have you believe that it is impossible to produce such a result... but a careful look at the actual numbers involved makes it obvious that it is possible.

As I mentioned earlier, I have maintained my present weight of approximately 170 pounds for the last several months while consuming an average of about 1,100 calories a day... and I have done so with little or nothing in the way of a change, in either my muscular mass or my level of fatty tissue; which simply means that I actually require only 1,100 calories a day... because, if I required more then I would have lost weight, and if I required less then I would have gained weight.

During the next ninety days I intend to continue with my present diet, so I will require a total of 99,000 calories during that time just to maintain my present weight. But I also expect to add about 20 pounds of muscular mass during that time... which will increase my caloric requirements; and since I will be training during that period I will require additional calories to provide the energy for my workouts.

Altogether, I will need a total of about 118,800 calories. 99,000 calories just to maintain my present weight... plus 12,000 calories that will be required to add 20 pounds of muscular mass... plus 7,800 calories that will be needed for the energy consumed during my workouts.

So... if I consume 99,000 calories during that time, and if I also consume five pounds of my existing level of fat, which will give me an additional 17,500 calories, then I will have a total of 116,500 calories available. A short-fall of only 2,300 calories.

No allowance has been made in the above calculations for the fact that the twenty pounds of muscular mass that I expect to add will also require additional calories, so in practice I will probably have a short-fall of about 9,000 calories during a period of ninety days... but that is only an average of a hundred calories a day, a shortage that can be met in either of two ways; by increasing my intake of food by an average of 100 calories a day, or by consuming more than my starting level of fatty tissue.

Since I do not intend to increase my diet during the first ninety days, then my actual gain in bodyweight may be a bit less than fifteen pounds; if I do increase my muscular mass by twenty pounds, and I will be very surprised if I don't, and if I am required to consume a total of seven and a half pounds of my fatty tissue in order to provide the required calories, then the net result will be a gain in bodyweight of only twelve and a half pounds... which is really a better result than a gain of fifteen pounds, because the gain in muscular mass will be the same in either case but the loss of fatty tissue will be greater.

So, in theory, it certainly is possible... and since I have done much the same thing several times during the last fourteen years, I also know that it is possible in practice as well as in theory. The only real difference this time will be the fact that I will not be doing any direct exercise for my arms, nor any exercise that involves my arms.

And, secondly, this will be a very brief program of exercises... no more than an hour of weekly training time.

Later, after I have satisfied my curiosity regarding the results of this type of very brief program of exercises, I will start adding exercises for the areas of the body that are being neglected in this program... and, at that point, I will probably have to increase my intake of food, but it will be increased very slowly and only in proportion to what I consider to be my actual requirements at the time.

I may be able to reach a body weight of 200 pounds in less than a year, and that is my goal... but in order to do so I will have to add a total of at least 40 pounds to my muscular mass, while simultaneously reducing my starting level of fatty tissue by about ten pounds, for a net gain in bodyweight of approximately 30 pounds. And at no time during that period will I ever consume more than 1,800 calories per day. Nor will my total weekly training time ever exceed two hours.

In contrast, nearly thirty years ago, while trying to accomplish much the same goal I devoted twelve hours a week to my training, and I consumed a total of 18,000 calories a day for a period of several months; during which time I gained only about twelve pounds.

I was overtraining to the point that a rapid rate of muscular growth was simply impossible, even though I was certainly stimulating growth... and I was overeating to the point that my digestive system could not cope with the quantity of food that I was consuming. Which was a fortunate state of affairs in at least one sense; because, if I had been able to utilize that amount of food, I would have quickly turned into a circus fat-man. Which was not my goal.

And just how do you consume 18,000 calories a day? By eating four huge meals a day, plus drinking three gallons of buttermilk a day... that's GALLONS, not quarts. And while I was dumb enough to stick with that routine for several months I was also lucky enough to avoid the possible consequences... probably because my system was overloaded to the point that very little of the enormous amounts of food I was consuming was actually being utilized.

Now, a great deal older and hopefully a bit smarter, I can produce far better results by training about ten percent as much as I did then, while eating less than ten percent as much as I did then. Which is fortunate, for at least two reasons... because I am quite sure that I literally couldn't stand to train that much now... and because, at today's prices, I doubt I could afford to each that much now.

So, it took me a long time to reach my present opinions on the subject of exercise... a long time, a great deal of experience, a lot of trial and error, and a bunch of mistakes; some of which mistakes I may be able to help you avoid. It took me many years to learn that the results of exercise are not produced in proportion to the amount of exercise, that more is not necessarily better. I also had to learn the hard way that your body only needs a certain amount of food, that anything extra in the way of calories will simply be wasted if you are lucky... or converted to fat if you are not so lucky.

And I also finally learned that you cannot judge your progress on the basis of changes in your bodyweight; since it is easily possible to gain weight while losing muscular mass, or to lose weight while gaining muscular mass.

It has been my observation that most young men are anxious to gain weight, while most older men are even more anxious to lose weight... and I have also noticed that both groups usually go about it in the wrong way; the younger men end up adding more fat than muscle, while the older men lose more muscle than fat... primarily because both groups are trying to judge their progress on the basis of change in bodyweight.

Some of the current crop of supposedly miraculous diets are advertised as being capable of producing a loss of fifteen or twenty pounds a week... and they may be capable of doing so, if you are interested in losing that amount of muscular tissue in that period of time; but they damned sure cannot come anywhere close to producing that much loss of fat in even a month, never mind a week.

A pound of fat contains approximately 3,500 calories... so, if I ate absolutely nothing, it would take me more than three days to burn up enough calories to reduce my present level of fat by only one pound. Yet, if I was silly enough to go on a total fast for three days, I might lose several pounds of weight... less than a pound of fat, and several pounds of muscular tissue.

If you are really interested in losing weight fast, and don't care what you lose, then you might try letting a rattlesnake bite you... about thirty years ago, I lost 28 pounds within a period of 24 hours as a result of a rattlesnake bite; which rate of loss, since the actual loss was primarily fluids, is supposed to kill you... and it almost did kill me. And some of the diets that are now on the market are doing much the same sort of thing, except that some of the people using these diets are being killed.