

NUTRI-SPEC



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THE NUTRI-SPEC LETTER

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From:
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Dear Doctor,

There is much of value to be obtained from this series of Letters on the benefits of proper exercise. The truths you have acquired can enrich your life, the lives of your family, and the lives of your patients. However, if I had to pick out the single most important theme of these Letters, it relates not to the benefits of proper exercise but to ...

THE COSTS OF IMPROPER EXERCISE.

There is a very fine line between beneficial exercise and damaging exercise, and, that line is drawn much closer to zero exercise than it is to high volume training. Any day that you over train is ...

A DAY YOU TAKE A GIANT STEP TOWARD DEATH.

Your patients know no one but you who appreciates how little exercise it takes to achieve full benefits. And, after this letter you will appreciate just how severe the damage can be from even a little too much exercise.

The presumption among those who promote exercise is that those who stay fit will live a much healthier, and therefore longer life. In the forty years since my teens, I have been in the "exercise for long life" camp. I still am, but in the past 20 years I have come to realize that what constitutes beneficial exercise is entirely different than the exercise programs sold to the general public. The truth is that there is absolutely no objective evidence supporting the claims that either "aerobic" "cardio" exercise, or sets and reps strength training will add one day to your life.

In fact, the evidence is quite the contrary --- the exercise plans that we have all come to believe in are pure myth --- actually doing more damage than good, and thus shortening our lives. If you choose to blindly believe in exercise mythology, then accuse me of speaking heresy; but if you are willing to abandon your belief system in favor of the truth, read on.

I can best convey my personal position on exercise by quoting from the Preface of your NUTRI-SPEC manual:

Perhaps the most significant realization of my life is that reality is not the way I wish things to be, nor the way they appear to be, but the way they actually are. The pursuit of truth, then, can only be effected objectively.

I really wanted to believe that my running 3 miles four times a week was going to lengthen my life. I really wanted to believe that strength training with emphasis on the negative/eccentric contraction was going to maximize my muscular development. One day, like a bucket of ice water thrown in my face, it came to me that my wishing I had the best personal exercise regimen possible did not make it so. Yes, I have learned the lesson (with respect to exercise, with respect to nutrition, with respect to all aspects of life) that benefiting from the pursuit of truth requires being objectively perceptive enough to recognize the truth when it is staring you in the face; then being honest enough to acknowledge that truth, even when it contradicts prior beliefs. I am now telling you in no uncertain terms, that running three miles four times a week is the road to destruction, and ultimately to death. Strength training involving multiple sets, or assisted reps, or negative accentuated reps, is the sure road to catabolic ruin.

None of the “experts” appreciate (or want to appreciate) the extreme catabolic stress caused by high volume workouts. If you are not achieving gains from your workouts, then surely (they believe) you need one more strength training workout per week, or an extra mile added to your runs. They cheer for you, they crack the whip on you, they promise you a heavenly body, and the fountain of youth. “No pain, no gain!” All the while, they have not a shred of objective scientific evidence supporting their stance. Now, you are thinking, “Wait a minute! There are countless studies showing how people who exercise live longer, and have lower incidence of cardiovascular disease.” Sorry, that is simply not true. I myself once wanted to believe that such studies existed, but they do not. Let me explain.

None of the studies done by the exercise industry to promote the health and longevity benefits of exercise involve controlled testing. They

are all epidemiological studies. What does that mean? It means you look at two populations, one that exercises and one that does not. Sure enough, those who exercise have less heart attacks, less disease of any kind, and tend to live a little longer. “Aha!” I once exclaimed in chorus with the exercise establishment, “Clearly, these studies give us proof that exercise will lengthen our lives.” Nope. Any honest scientist will chuckle and point out to you that such is an erroneous jumping to conclusions.

CORRELATION DOES NOT PROVE CAUSATION.

These epidemiological studies do not show that exercise makes us healthy. They show that being healthy makes us exercise. In other words, those of us who are less robust, tend to avoid exercise like the plague. Those of us who are healthier (either due to genetic potential or to healthy childhood and adolescent development) are brimming with vitality and tend to enjoy exercise. The simple truth is that those who have less vital reserves tend not to exercise, and, have a higher rate of morbidity and mortality. Those with higher vital reserves enjoy exercise more, get sick less often, and perhaps live a little longer ...

DESPITE THE DAMAGING EFFECTS OF THEIR EXERCISE.

The only way to do a controlled study investigating the hypothesized longevity benefits of exercise, would be to take a large population of young adults meeting very specific criteria regarding health, fitness, body fat composition, cardiac function, etc, etc. Then, divide your population into two equal groups; group A is put on a specific exercise plan, while group B is absolutely forbidden to exercise. For the next 60 years, both groups must eat exactly the same food, get exactly the same amount of sleep, be exposed to exactly the same amount of light, work at the same jobs, have as close to possible the same family life, and ...--- you get the idea. After 60 years write up a report on the morbidity and mortality of both groups. Obviously, such a study has never been done nor will ever be done. In the absence of such a study, all that research shows us is that people with enough vitality to exercise, also have enough vitality to resist disease and death better than the average person.

While there are no controlled human studies on the long-term benefits/costs of exercise, there have been some absolutely ingenious studies done on the effects of exercise on laboratory animals. I could quote for you from a long list of studies, but my absolute favorite is:

Longevity of exercising male rats: effects of an antioxidant supplemented diet. Holloszy. Mech Aging Dev, 2001.

I particularly like this study because it answers so many of our questions about exercise, and, the relationship between exercise and nutrition. Here is what the researchers did:

1. They started with a special strain of rats bred for their tendency to spontaneously exercise on running wheels.
2. They took two groups from this rat population and confirmed what has been demonstrated repeatedly over the past several decades --- that food restriction increases rodent life span. [Side note: While this longevity benefit of food restriction is true of rodents, it is not true of humans or any other primates.] The two groups of rats were kept in an environment with no opportunity for running wheel exercise. One group was fed at liberty, the other group was given restricted rations. The food restricted group lived much longer than the free feed group.
3. Next, they took two groups of rats, one of which was kept sedentary (as in the food restriction phase of the experiment), and the other was given free access to running wheels. Did exercise increase the life span of the rats as much as food restriction? Oh my, no! Free access to exercise (not forced exercise, but purely voluntary) not only did not increase the life span of the rats as much as food restriction, it did not increase the life span of the rats at all; it actually decreased their life span.
4. The experiment was repeated with exercising rats being given all possibilities of free feeding or caloric restriction and no matter how it was done, exercising decreased life span.
5. The best feature of this study was not just that it showed what happened in response to exercise, but why. The researchers very carefully monitored oxidative stress in the exercising rats. The shortened life span of the exercising rats could be entirely explained by an increase in oxidative stress. When supplemented with antioxidants, the exercising rats showed much less oxidative damage, and their lives were not as severely shortened.

Wow!

Does that study clarify for you what I have said to be the single most important theme of these Letters? The amount of exercise we need is much, much less than we have been lead to believe, and the costs of even a little too much exercise are severe. Remember, these rats were not forced to exercise; they were not at the health club plodding endlessly on treadmills out of guilt; they were not trying to live up to the

health and fitness standards imposed by the media, or by an exercise industry promoting its own self interests; they were not trying to lose a little flab around the middle to look better at the beach. These rats were exercising just for the fun of it --- and even at that were killing themselves.

Conclusion? If you are exercising five times a week, you are flirting with disaster. Three or four workouts (assuming they are high quality, not high volume) is the way to go. Keep your workouts ultra high intensity and ultra low volume. If you exercise with a low body temperature you are dying a slow, miserable death. Also --- even with the most thoughtfully designed regimen of Grizzly Bear Intervals and Grunt and Growl Strength Training, you must protect yourself from oxidative damage. Three Oxy Power daily is our standard recommendation for anyone on the Diphasic Nutrition Plan. For those enriching the quality of life with exercise, six Oxy Power per day are essential. Remember --- you exercise to enrich your life, not to destroy your vitality. The only way to be assured that exercise is working for you and your patients is with the protection of six Oxy Power daily.

Now that we understand that exercise is not going to lengthen our lives, let us focus on the potential for exercise to enrich the quality of our lives. How can I be so sure that high intensity, short duration exercise is the key to maximum gains and minimum catabolic damage from exercise? Again, I could quote countless studies, but I can give you one that is particularly revealing:

Skeletal muscle fatigue in normal subjects and heart failure patients. Is there a common mechanism? Lunde, et al. Acta Physiol Scand. 1998.

As a preliminary to describing this study I should make you aware that, as surprising as it may sound, the mechanism by which muscles fatigue has never been thoroughly explained. For years it was thought it had something to do with lactic acid build up, but that is not the case. Neither does it have anything to do with pH changes. Some thought it had to do with fatigue at the neuromuscular junction. All those theories and many more have been invalidated. This study looked at muscle fatigue while remaining cognizant of two fundamental premises; A) skeletal muscle fatigue develops gradually in all forms of exercise (both high intensity and low intensity), and, develops more rapidly in heart failure patients. B) The fatigue mechanism is still not known, but has definitely been localized to the muscle cells themselves.

This study made what I think is a major breakthrough regarding exercise physiology. The researchers showed that there are actually two entirely unrelated fatigue mechanisms, one mechanism for fatigue in

high intensity exercise, and a completely different biochemical process for fatigue in response to low intensity long duration exercise. Furthermore, the failure mechanism in low intensity exercise is exactly the same pathological mechanism by which heart failure patients fatigue. Here is specifically what the study showed.

1. In response to high intensity exercise there is gradual muscle cell membrane depolarization due to sodium and potassium membrane exchange.
2. In response to low intensity exercise there is a loss of calcium and magnesium exchange control. This is how heart failure patients fatigue. In other words, low intensity, long duration exercise causes the same pathological intracellular chemical imbalances that are found in heart failure patients.

This pathological calcium excess and magnesium insufficiency is the rationale behind calcium channel blocker and beta blocker medications; it is also part of the biochemistry of thyroid insufficiency and many other chronic disease states. Yes, I have been saying for months, low intensity long duration exercise makes you tired, sick, and old before your time. If you want invigoration along with a long, rich life, do your Grizzlies, your Grunt and Growls, and feed yourself with Oxy Power.

Many more references will be supplied in next month's Letter confirming the efficacy of high intensity short duration exercise, as well as the futility and destruction that derives from low intensity high volume workouts.

Sincerely,

Guy R. Schenker, D.C.

Our Special this month: two **FREE** Oxy Power with every 10 you buy.