

NUTRI-SPEC



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THE NUTRI-SPEC LETTER

Volume 16 Number 3

From:
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March, 2005

Dear Doctor,

28 !!!

I counted them! In the gargantuan athletic and fitness club where my 4th and 5th grade boy's basketball team plays its league games there are, under one roof, in addition to two basketball courts, an indoor soccer field, four tennis courts, an Olympic swimming pool, cages for baseball and golf swinging, and a strength training room equipped for everyone from frail female flingers to monstrous macho musclemen,

2 ROWS OF 14 ...

hi-tech exercise contraptions serving countless hundreds of ...

PITIFULLY PATHETIC PLODDERS.

So eager are the misinformed to waste their time and energy on useless treading, cycling, skiing, stair climbing and other acts of tedium that ...

**I HAVE NOT ONCE SEEN ONE OF THOSE
INSTRUMENTS OF SELF-TORTURE UNUSED.**

Rather, there is a line waiting for the privilege to be reduced to the status of laboratory rat, wired to the gizmo's sophisticated electronics for feedback on time, distance, pulse, and calories, while executing a workout pre-programmed by one of the club's "fitness experts." My attention is particularly captured by the zombie-like expressions on the faces of these semi-conscious beings as they plod endlessly to nowhere

while only partially distracted from their misery by the TV they are wired to. What I find especially disconcerting is that when the tedium ends and the weary plodder drags himself off the machine ...

THE ZOMBIE-LIKE EXPRESSION NEVER LEAVES ...

as he staggers to the locker room. One evening as I strode through the plodding room on my way to the hoops court a woman crawled listlessly off her torture mill, and I almost shot off my smart mouth with ...

**“EXHILARATING, HUH?!
MAKES YOU FEEL LIKE A MILLION BUCKS,
DOESN’T IT?!”**

If only she knew --- there is a better way.

In contrast to the ever popular (and ever demoralizing) aerobic exercise routines, Grizzly Bear Intervals would give her more weight loss by far, more cardiovascular benefits, and would do so in a fraction of the time invested in exercise. Moreover, the Grizzly Bear Intervals would give her tremendous metabolic effects, and leave her feeling like she could conquer the world, rather than like a rat that has been run on a treadmill for endless hours.

Everyone who goes on an aerobic exercise program wants to talk about the number of calories burned while exercising. All the treadmills and other exercise contraptions will give you digital printouts of how many calories you are burning at the moment, how many calories you are burning per hour, how many calories you are burning per minute, how many calories you have burned since you started your workout, and so on and so on. I hope you have learned from these Letters that calories burned during exercise is a totally meaningless number.

If you run three miles as fast as you possibly can, you burn 300 calories. In doing so you deplete your blood sugar and your glycogen reserves, and barely begin to tap into fat reserves. The hunger stimulated by the decrease in blood sugar is nearly irresistible, and you are almost certain to consume 300 additional calories --- negating those burned while running. There are metabolic effects from the three mile run that persist for as much as a day after the workout, but just a fraction of the metabolic benefits that come from a high intensity, Grizzly Bear Interval workout. Add Grunt and Growl Strength training to Grizzly Bear Intervals and the added muscle will keep that metabolic fire burning all day.

Not only calories burned, but fat burned during exercise is a major part of the aerobic exercise myth. Aerobic exercise simply does not access the fat burning system. If you go on a brisk walk and you are somewhat overweight, you may begin to burn additional fat calories after a half hour. More typically, it is 45 minutes before you even begin to burn fat. Most people who walk for their workouts go on walks of a half hour to an hour duration, just long enough to lower sugar and glycogen reserves, but not long enough to burn meaningful amounts of fat. Even jogging has to be done for a long time before one shifts significantly into a ketogenic metabolic pathway.

The question many of you have asked is, “If the exercising person needs to deplete glycogen reserves first before going into fat reserves second, wouldn’t it make sense to do long duration, low intensity aerobic exercise in order to deplete those glycogen reserves so the body will access fat stores?” My answer is that this question expressly identifies the major problem with aerobic exercise. It is precisely because aerobic exercise depletes glycogen reserves first, and then finally (sometimes not until after the exercise for the day is ready to be terminated) begins to tap into fat reserves that low intensity, long duration exercise is inferior. It is high intensity, short duration exercise that provides the metabolic stimulus to mobilize and utilize fat reserves right from the first moment of effort.

Recall from your physiology classes years ago that the respiratory quotient is the perfect measure of fat burning vs sugar burning metabolism. When the respiratory quotient is high (approaching 1.0) the carbon dioxide given off per unit of oxygen consumed in energy production is very high, indicating a high percentage utilization of sugar. When the respiratory quotient is low (approaching 0.7) the subject under study is burning a high percentage of fat in preference to sugar, and thus giving off less CO₂.

Your patients with a glucogenic tendency run a high respiratory quotient anyway, so low intensity, long duration plodding type exercises are particularly devastating for them. These are the individuals most subject to running blood and brain sugar down to nothing while burning virtually no fat as they plod endlessly to nowhere. Tired, sore, grouchy, and craving sugar is typically how they respond to a workout. Your ketogenic type patients do not feel as badly after long duration, low intensity exercise as your glucogenic types, and yet they will still burn very little fat in the long term. Their bodies perceive the long duration workouts as an unrelenting stressor, a cue to shut down metabolic activity and hormonal output to conserve (-- the same shut down caused by fasting or even low calorie diets). High intensity, short duration exercise, on the other hand, has a stimulating effect on metabolism by

first giving a strong catabolic push that in turn stimulates a powerful anabolic response. In other words, high intensity, short duration exercise gives you a very high amplitude diphasic metabolic cycle.

Victims of the aerobic exercise myth like to point to distance runners, skinny as a rail, as examples of how we can burn fat by running long distances. If they would just look over to the other side of the track, at the sprinters, they would see athletes who are every bit as lean (though not skinny) as the distance runners, and who maintain that extremely low body fat with about one zillionth of the work of the distance runners. If you are running to lose weight, gain strength, improve metabolic efficiency, and gain vitality, stick to the Grizzly Bear Intervals, and forget the plodding. [Side Note: Regarding those skinny distance runners: Severe coronary artery disease is the leading cause of death among marathon runners. Their superior “fitness” does not protect them in the least from heart disease, but rather stresses and weakens their hearts.]

As we look at the history of the exercise industry as it capitalized on the aerobic exercise boom, we see the production of ever more “advanced” treadmills, stair climbers, cross country ski machines, and so on. People do not count Cooper’s aerobic points any more; exercising at a target heart rate has become the gold standard of the aerobic exercise industry. While that type of low intensity, long duration workout is certainly better than watching television and drinking beer, it will not achieve exercise goals. Plodding along at your target heart rate will improve the health of your vasculature somewhat, and will have some (though minimal) benefits for the heart. But for the most part it will just make you tired, hungry, grouchy, and cold.

**THIS IS PRECISELY THE EXERCISE PLAN
THAT HAS FAILED MILLIONS
OVER THE LAST SEVERAL DECADES.**

After the exhilaration of losing a few pounds initially, people tend to plateau on this plan and very quickly give up in frustration, or, continue on in frustration. Either way, there is minimal cardiovascular benefit and virtually no metabolic benefit. To really strengthen your heart, to really become lean, to really increase vitality, you must use Grizzly Bear Intervals.

Who came up with this idea of a “target” heart rate, anyway? Credit those who promote plodding as an effective exercise --- the manufacturers of exercise equipment, and the owners of health clubs. Exercising at that contrived and absurd target is a plan that has been easy to promote for big profits. There is enough scientific evidence published to keep the myth alive, but all the scientific studies prove is

that putting in your mileage on a treadmill or track is better than nothing. But exercising at any heart rate would be better than nothing. Why settle for better than nothing when for much less time invested you could maximize fitness gains?

There is no such thing as a target heart rate (except in the minds of wishful thinking plodders). If you want a real target heart rate set a ...

TARGET HEART RATE RECOVERY TREND LINE.

Then, run Grizzlies until you exceed it ... then go home and burn fat for days.

There is another component to the target heart rate myth, and that is that it is dangerous to exceed your target heart rate. People have been bamboozled into thinking they might drop dead of a heart attack if they carelessly exceed their target. Nonsense. It is essential to exceed your target heart rate to get the metabolic effects of exercise. And furthermore, it is safer by far to run Grizzlies than to run a stress test on a treadmill.

VOLUME WILL STRAIN THE HEART BEFORE INTENSITY WILL.

Those who run for their “cardio” workouts have ...

NO OBJECTIVE INDICATOR ...

telling them when enough is enough. How long should they plod along at their target heart rate? If running 2 miles is good, is running 4 miles better? Is it twice as good? Should they run until too tired? too bored? until lunch hour is over? Many run for a specified length of time as recommended by a fitness expert based upon --- nothing ---- except a consensus reached among other experts.

None of the experts appreciate the extreme catabolic stress placed upon the heart by low intensity, long duration exercise. More on that in next month’s Letter, but for now suffice it to say that the oxidative stress on the heart from prolonged “aerobic” exercise, or even the medium intensity, medium duration of “aerobics” classes and tapes, is severe, and ...

THAT CATABOLIC DAMAGE IS CUMULATIVE.

All those doing “aerobic” “cardio” workouts are damaging their hearts long-term, and many have reached the brink of short-term disaster. The only workout more dangerous than plodding along at a target heart rate

is to exercise at that rate and then finish the workout by kicking in with a sprint at the end --- HEART ATTACK RISK is extreme.

Now compare the safety of ignorant, self-destructive plodders to those who do Grizzly Bear Intervals. Three to six bursts of output lasting 30-90 seconds, with rest in between, while recovery heart rate is carefully monitored --- provides all the benefits of exercise, while giving a clear, objective indicator of when it is time to quit for the day. As strenuous as Grizzlies are, they give the security of protection from over training, and certainly from myocardial crisis. At the first sign that the heart is struggling to recover, it is time to go home.

Feel fine, but the body is fighting off a cold? Heart rate recovery trend line will be broken very quickly ... go home. Short of sleep the last few nights? Pulse trend line will be broken much sooner than usual ... go home. Worried about meeting that deadline at work? Pulse will fail to recover after a surprisingly low volume of exercise --- go home. Prevent the catabolic damage; protect the heart; live long and live well.

Grizzly Bear Intervals + Grunt and Growl Strength Training = 2 to 5 workouts weekly = strong (but brief) catabolic stress from each workout = equally strong and quickly completed anabolic rebound = maximum benefit from exercise (with no cumulative catabolic stress on the musculature, or on the heart).

[AND WATCH THE BODY TEMPERATURE --- If it is low or high do not even begin a workout.]

Give your patients what they need to WIN the exercise game. They will love you for it.

Sincerely,

Guy R. Schenker, D.C.