Pumping Iron Can Cut Your Diabetes Risk

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Exercise is a well-known tool for helping to prevent type 2 diabetes, but typically the focus is on *aerobic* exercise.

While this certainly has its place, especially in the form of high-intensity interval training, another form of beneficial exercise is often overlooked: strength training.

Strength Training Significantly Reduces Your Diabetes Risk

Men who engage in regular strength training slash their type 2 diabetes risk, and the benefit increases with the amount of strength training per week, according to new research.¹ For instance:

- Men who did strength training for 1-59 minutes per week reduced their risk by 12 percent
- Strength training for 60-149 minutes a week lowered risk by 25 percent
- Strength training for at least 150 minutes a week lowered risk by 34 percent

Weight training reduced diabetes risk independent of aerobic exercise. But when the strength training was combined with aerobic exercise, the benefit grew even more, with men engaging in more than 150 minutes of aerobic exercise and at least 150 minutes of strength training per week experiencing a 59 percent reduced risk of type 2 diabetes.

And the news gets even better. Among men already diagnosed with type 2 diabetes, a second study revealed that regular physical activity could extend their lifespan. Even moderately active men with diabetes had a 38 percent lower risk of dying from any cause, and a 49 percent lower risk of dying from heart disease, than sedentary men.²

Why is Strength Training so Effective?

There is no doubt that building your muscle mass with strength training should be one of the goals of your fitness routine. It's even been found to lower your cancer risk by 40 percent,³ in addition to the diabetes benefits mentioned above. As far as exercise for diabetes goes, it works so well because it is one of the fastest and most powerful ways to lower your insulin and leptin resistance. If you have type 2 diabetes, or want to prevent it, you need to address the *root* of the problem, which is NOT your blood sugar levels, as most conventional physicians would have you believe.

As Dr. Ron Rosedale wrote in this classic article, if you follow the misguided belief that diabetes is a disease of blood sugar, you are likely destined for premature death. Taking insulin is one of the WORST things you can do, as it will actually make your insulin and leptin resistance worse over time. Dr. Rosedale, an expert on leptin physiology and one of my early mentors in this area, developed the appropriate acronym -- D.I.E. -- to illustrate what's happening in conventional diabetic treatment.

Doctor Induced Exacerbation

Yes, most doctors make diabetes worse and accelerate the death process. I've explained the mechanics of insulin resistance and the role of leptin and insulin before, but let's review it again.

- Leptin is a hormone produced in your fat cells. One of leptin's primary roles is regulating your appetite and body weight. It tells your brain when to eat, how much to eat, and most importantly, when to stop eating. And leptin tells your brain what to do with the energy it has. Leptin is largely responsible for the accuracy of insulin signaling and whether or not you become insulin resistant.
- **Insulin**—Sugars and grains raise your blood sugar. When this happens, insulin is released to direct the extra energy into storage. A small amount is stored as a polysaccharide called glycogen, but the majority is stored as your main energy storage supply—fat. Insulin's major role is *not* to lower your blood sugar, but rather to store the extra energy for future times of need. Insulin's effect of lowering your blood sugar is merely a "side effect" of this energy storage process.
- Insulin resistance: Insulin resistance occurs when your body becomes resistant to the hormone insulin. Any time a cell is exposed to insulin it is going to become more insulin resistant. If you eat too many sugars and grains, it provokes insulin surges and every time you provoke an insulin surge it exposes your body to more insulin. Just like walking in a dark room where it is difficult to see, after awhile your vision accommodates, your pupils dilate and you can see much better. Similarly, when your body is exposed to excess insulin soon it no longer responds to it properly and becomes insulin resistant.

Exercise is one of the most effective ways to regain insulin sensitivity and reverse insulin resistance -- and this is true for both high-intensity aerobic *and* strength training workouts.

Weight Training Can be an Aerobic ... and Anaerobic ... Workout

Research over the past several years has really revolutionized the way we look at exercise. Not only have researchers found that traditional aerobic exercise is one of the *least* effective forms of exercise, it's also one of the most time consuming, and could even be counterproductive. You're really getting the least amount of bang for your buck when you spend extended amounts of time running on a treadmill.

High-intensity interval training such as Peak Fitness, on the other hand, has consistently risen to the top as the most effective and efficient form of exercise.

While the fitness industry divides exercise into categories such as anaerobic, aerobic and cardiovascular training, fitness experts like Dr. Doug McGuff and Phil Campbell point out that in order to actually access your cardiovascular system, you have to perform mechanical work with your muscle—and can do that on an elliptical machine, on weight training equipment, or using free-weights. So truly, weight training isn't *just* strength training, it's a cardiovascular workout.

To better understand this, you need to know that your heart has two different metabolic processes:

- 1. The aerobic, which require oxygen for fuel
- 2. The anaerobic, which do not require any oxygen

Traditional strength training and cardio exercises work primarily the aerobic process. High-intensity interval training, such as Peak Fitness, on the other hand, work your aerobic AND your anaerobic processes, which is what you need for optimal cardiovascular benefits. You're actually getting MORE benefits from high-intensity training than you do from aerobic/cardio, in a fraction of the time—all because you're utilizing your body as it was designed to be used.

Even more astounding, according to Dr. McGuff you only need *12 minutes* of Super-Slow type strength training *once a week* to achieve many of the same benefits as you would with Peak Fitness!

If You Have 12-15 Minutes, You Can Fit in a Phenomenal Strength-Training Workout

There are many different ways you can go about lifting weights, but one version that seems to work well for many people is called Super-Slow Weight Training. By slowing everything down, you're actually turning it into a high-intensity exercise. The super-slow movement allows your muscle, at the microscopic level, to access the maximum number of cross-bridges between the protein filaments that produce movement in the muscle.

I recommend using four or five basic compound movements for your exercise set. One sample set could be:

- 1. Pull-down (or alternatively chin-up)
- 2. Chest press
- 3. Compound row (A pulling motion in the horizontal plane)
- 4. Overhead press
- 5. Leg press or squat

These exercises can be done using either free weights or machines. The benefit of using a quality machine is that it will allow you to focus your mind on the effort, as opposed to on the movement. Select a weight that is light enough so you can do at least eight repetitions, but heavy enough so you can't do more than 12. If you can squeeze out more than a dozen reps, then switch to a heavier weight.

Here's a general summary of how to perform each exercise:

- Begin by lifting the weight as slowly and gradually as you can. In the video below, I
 demonstrate doing this with a four-second positive and a four-second negative, meaning it
 takes four seconds, or a slow count to four, to bring the weight up, and another four seconds to
 lower it. (When pushing, stop about 10 to 15 degrees before your limb is fully straightened;
 smoothly reverse direction)
- 2. Slowly lower the weight back down to the slow count of four
 - Repeat until exhaustion, which should be around four to eight reps (once you reach exhaustion, don't try to heave or jerk the weight to get one last repetition in. Instead, just keep trying to produce the movement, even if it's not 'going' anywhere, for another five seconds or so. If you're using the appropriate amount of weight or resistance, you'll be able to perform four to eight repetitions)

 Immediately switch to the next exercise for the next target muscle group, and repeat the first three steps

This workout will take no more than 12 or 15 minutes. For a demonstration, please see the video below. Please note that I am NOT demonstrating classic Super-Slow training, but rather hybrid version that uses a count of four rather than the standard ten-count, which is *still* far slower than most people lift weights.

You Can Avoid Becoming a Diabetes Statistic

This may surprise you, but one in four Americans has some form of diabetes or pre-diabetes. But you don't have to become one of them. Even if you've already been diagnosed with type 2 diabetes, there's still hope. As mentioned earlier, to reverse the disease, you need to *recover* your body's insulin and leptin sensitivities, and the best way to accomplish this is through proper diet and exercise. There is no drug on the market that can correct leptin signaling and insulin resistance.

Adhering to the following guidelines can help you do at least three things that are essential for successfully preventing, treating, or reversing diabetes: recover your insulin/leptin sensitivity, help normalize your weight, and <u>normalize your blood pressure</u>:

- Severely limit or eliminate sugar and grains in your diet, especially <u>fructose</u>, which is far more detrimental than any other type of sugar. Following my Nutrition Plan will help you do this without too much fuss.
- Exercise regularly. As mentioned, I recommend a comprehensive program that includes some Peak Fitness exercises along with Super Slow strength training.
- Avoid all synthetic trans fats.
- Get plenty of omega-3 fats from a high quality, animal-based source, such as krill oil.
- Optimize your vitamin D levels. Recent studies have revealed that getting enough vitamin D can have a powerful effect on normalizing your blood pressure.
- Optimize your gut flora. Your gut is a living ecosystem, and the more beneficial bacteria it contains, the stronger your immune system will be and the better your body will function overall. Fortunately, optimizing your gut flora is relatively easy. You can reseed your body with good bacteria by eating fermented foods (like natto, kefir, raw organic cheese, miso, and fermented vegetables) or by taking a high-quality probiotic supplement.
- Address any underlying emotional issues and/or stress. Non-invasive tools like the Emotional Freedom Technique (EFT) can be extremely helpful and effective.
- Get enough high-quality sleep every night.
- Monitor your fasting insulin level. This is every bit as important as your fasting blood sugar. You'll want your fasting insulin level to be between 2 and 4. The higher your level, the worse your insulin sensitivity is.
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