

BASICS, INTERVAL, STRENGTH, FLEXIBILITY AND WHAT TO DO IF YOU HATE EXERCISE

By Mark Hyman, M.D.(The following comes from *The UltraMind Solution*.)

Exercise is essential for good health. It is the best antidepressant and anti-anxiety medication available. It reduces inflammation, improves mood, balances neurotransmitter function, and increases neuroplasticity and neurogenesis, just to mention a few of the positive effects it has on your brain.

If exercise could be put in a pill, it would be the biggest blockbuster medication of all time. Unfortunately, today, nearly half of Americans live a sedentary lifestyle and 88 percent don't get enough exercise. No wonder we have an epidemic of broken brains!

At a minimum try to commit to 30 minutes of vigorous walking every day. However, more is better, and for those of you who want a more comprehensive exercise regimen (which I strongly encourage), here are some guidelines.

AEROBIC CONDITIONING: THE BASICS

- Do 30 minutes of aerobic conditioning exercise at least five days a week
- Aerobic conditioning is anything that gets your heart rate up consistently between 70–85 percent of your maximum heart rate. To calculate your target heart rate, subtract your age from 220, and then multiply the resulting amount by .70 to .85. For example, if you are 45-years old, subtract 45 from 220, which is 175, and then multiply that by .70 and .85. In this case, your target heart rate would range from 122 to 148.
- Use a heart rate monitor; it can help you maintain your pace. I recommend Polar heart rate monitors—you can find out more at www.polarusa.com.
- Add interval training three days a week, if possible (see below). If you are over 30 years old, you should have a complete physical exam before starting an interval-training program.

INTERVAL TRAINING: WHAT IT IS AND HOW TO DO IT

Interval training is short bursts of high-intensity exercise followed by a longer period of lighter exercise (what we called wind sprints in high school, or what the Swedes call fartlek or "speed play"). While interval training was designed for maximizing professional athletes' performance, the average person can greatly benefit from it as well.

I recommend it. It is a powerful (and time-saving) way to get and stay in shape, both mentally and physically.



Benefits of Interval Training

- 1. Improves overall fitness level or the ability to utilize oxygen. The more oxygen we use, the more calories we burn.
- 2. Increases post-exercise fat burning and calorie expenditure, even at rest or sleep.
- 3. You can exercise for less time and achieve greater fitness, weight loss, and brain health benefits.
- 4. You can naturally increase growth hormone levels, BDNF (the super fertilizer for your brain), and improve insulin function, which promotes fat burning and muscle and brain building.

HOW TO DO INTERVAL TRAINING

What follows is a step-by-step overview of how interval training works. There is a version for people who are just beginning to exercise, as well as, for those who are a little more advanced and have been working out regularly already.

If you don't fit either of these categories (i.e., if you can't walk for 30 minutes at 3.5 mph), then you should build up your aerobic exercise program before you start incorporating interval training. Start by walking vigorously for 30 minutes every day, as prescribed in *The UltraMind Solution*.

Beginners (someone who could walk for 30 minutes at 3.5 mph)

- Step 1. Warm up: 5 minutes of walking at 3.5 mph.
- **Step 2.** Speed up and walk at 4.0 mph for 60 seconds.
- **Step 3.** Slow down and stroll at 3.0 mph for 90 seconds.
- **Step 4.** Repeat the previous 2 steps 5 more times.
- Step 5. Finish with 5 minutes of walking at a comfortable pace to cool down.



Advanced Interval Program

- **Step 1.** Warm up: 5 minutes of jogging or cycling at the lowest possible percentage of your all-out effort.
- **Step 2.** Run or cycle for 60 seconds at about 85 to 90 percent of your all-out effort. Your leg muscles should fatigue within about 1minute. (Basically, the speed you'd run or cycle at to save your life equals 100 percent of your all-out effort. From there, adjust how fast and hard you work so your output reflects the recommended percentage.)
- **Step 3.** Slow down to 60 percent of your all-out effort for 90 seconds. (Make sure you slow down to this very light pace.)
- **Step 4.** Repeat the previous 2 steps 5 more times.
- **Step 5.** Finish with five minutes at 60 percent of your all-out effort to cool down.

BUILDING UP YOUR BRAIN AND YOUR MUSCLES: STRENGTH TRAINING

It's also good to do something to stop the inevitable loss of muscle that happens with aging. One exercise I have my patients perform in the office is to stand up out of a chair without leaning forward or using their arms. It is incredible how many people (even younger people) have lost so much muscle that their thighs can't even lift their body weight off the chair without some help. Try it yourself now.

Strength training helps to increase muscle size and strength and increases the number of mitochondria in your body (they are found in the highest concentration in muscle cells and the brain), which are essential for energy production and optimal brain function. It can also boost your metabolic rate so you burn more calories at rest or sleeping.

Find something you like, maybe vary it, but try something. Using your own body weight, stair climbing, push-ups, or squats can be great. Finding a gym and using weights is another way to build muscle. If you have never lifted weights, be sure to get some help from the fitness trainer in the gym to use proper technique, form and avoid injury.

Ideally, you want to build up to two sets of eight to ten repetitions of an exercise using a weight that leads to muscle fatigue for each major muscle group. A 20-minute routine two to three times a week can cover all the bases. Who doesn't have 40 to 60 minutes a week to invest in his or her health and boosting brain power?



STAY FLEXIBLE

A stiff body usually reflects a stiff brain. And keeping flexible with stretching prevents injury and general pain from any other type of activity. With some types of regimens, you can even achieve aerobic exercise, strength training, and stretching all in one workout.

To stay flexible, here is what I suggest:

- Try to stretch for at least five minutes before and after every time you exercise.
- Do 30–60 minutes of whole body stretching twice a week.

Exercise will help you stay mentally and physically fit by exerting yourself daily. But, as I discussed throughout The UltraMind Solution, all things in the body and mind require balance. Relaxation is as important as exercise. And it is a skill you need to learn as well.

IF YOU HATE TO EXERCISE: PLAY!

I have a confession to make. I hate to exercise. Play, absolutely, but exercise? Uggh you will almost never find me in gym.

I do many different things which keep me fit and I encourage you to explore all the fun things you may enjoy and save exercise for those times when you just can't find a way to play on your own or with someone else.

ACTION ITEM: EXPLORE PLAY

Here are my favorite ways to play:

- Turn down the shades, turn up your favorite tunes and dance with abandon
- Play a game (tennis, squash, tag, capture the flag, basketball, soccer, volleyball)
- Join a sports league where you can do regular games with others of your skill level
- Find a friend to bike, walk, run, hike or dance with
- Do seasonal exercise cross-country ski in winter, snow shoe, swim in a pond in the summer, walk on the beach. Keep it varied and interesting
- Do classes. Group exercise makes it easier spinning, dance, etc.
- Do something different every day or at least every week.

To learn more tips on how to exercise, see Dr. Hyman's programs *UltraMetabolism* and *The UltraMind Solution*.