

# MS and Exercise

by ERIC PATTERSON

# Exercising with MS: Why and How

Exercise. Exercise. Exercise. By now, you are tired of people in your life telling you how exercise will do you good. Your doctors, your friends, your family and people at work talk about exercise like it is a cure-all treatment. There is no way that it could help your MS that much, is there?

In actuality, exercise is truly one of the most important activities you can do for yourself. Not only is exercise linked to many positive benefits, *not* exercising has many negative ramifications. If you have been avoiding, ignoring or lying to yourself and others about your level of exercise, reconsider.

This article will provide you with the information needed to make a more informed choice about exercise in your life including physical benefits, mental benefits, how these benefits occur, and barriers to starting an exercise plan. Options of different exercises, sports and activities specific for your desired results will also be explored.

Forget everything you think you know about exercise and start fresh for a new perspective.

# **Physical Benefits**

The physical benefits of exercise are as vast as they are well-documented. Certainly, you don't need a refresher, but here comes one anyway.

A regular routine of exercise and physical fitness can go a long way towards improving a person's physical health and well-being. Risk of physical problems like obesity, diabetes, low back pain, osteoporosis and even some types of cancer lessens with exercise, and exercise helps maintain bone density, helps increase quality and quantity of sleep and increases lung capacity. In addition, exercise also improves healthy lifestyle habits like diet.

If your goal is to improve your physical health, exercise is the clear choice.

# Mental/Emotional Benefits

Perhaps the best introduction to the mental benefits of exercise is a story about a man who was very depressed due to his physical health. The man had been quite ill due to a serious heart condition. He was so frustrated and hopeless that suicide seemed like the only choice.

Because his heart was weak, he thought the best way to complete suicide was to run around the block as fast as he could until he his heart stopped; this way he could avoid embarrassment and the stigma attached to suicide. He took off running faster than he had in years. Several minutes into the experiment, still alive, he gave up unsuccessful.

The next day, he tried again and failed. Day after day, he tried with the same result. He failed at suicide, but

began to succeed at living. To his surprise, he discovered that he began to feel better and eventually chose to live instead of to die.

This is only anecdotal, but a good representation of the power of exercise. By running, this man was able to change the way his body worked. By changing his body, he was able to change his mind, his thinking and his feelings. With MS targeting your body, your thoughts and your feelings, exercise may be the most efficient use of your limited time and energies.

Next page: five reasons to try exercise.

# Five Reasons to Try Exercise

Are you still hesitant to try exercise? Here are five points that illustrate the low-risk nature:

#### Exercise is Cheap

In fact, most of the time it's free. Sure, you could spend thousands on the latest elliptical machine, weight training equipment or gym memberships – or you could lace up your most comfortable shoes and go for a walk outside.

No money down, no monthly fees, just you and your nearest park or sidewalk.

#### No Side Effects

Exercise has no side effects, except for a bit of soreness when you get started. Side effects of psychotropic MS drugs include dizziness, sedation, weight changes, sexual dysfunction, neurological side effects, cardiovascular problems, insomnia and raised anxiety.

Which sounds better to you?

#### More Independence

Once patients learn effective exercise behaviors, they rely on health professionals less. This creates a feeling of independence and control for you.

Often, MS seems to take away your autonomy by making you dependent on other people and things. Increased independence can lead to a great emotional benefit.

#### Exercise is Readily Available

Popular non-drug therapies can be difficult to find due to high demand. Someone in need could have to commute hundreds of miles to find an available professional and, in a worst-case scenario; the patient could go without any treatment due to inconvenience. Exercise is endlessly available due to the ability you have to modify it for your needs. The only limit is your creativity.

# **Physical Benefits**

Exercise has such positive physical benefits that it is worth trying even if it does little to improve your mental health. The holistic approach cannot be overstated here. If your mind is healthy, it will aid your body. If your body is healthier, it will aid your mind.

Next page: how exercise works to improve your mental health.

# **How Exercise Works**

What makes exercise improve mental health? The short answer is that no one knows for sure. The good news is that many smart people have spent many hours working to figure it out and they have some really good ideas. They include:

# Endorphin Hypothesis

Have you heard active people speak about exercise is very positive terms? They describe their latest race or bench press record with such enthusiasm. The positive feeling that arises after a period of exercise relates to an increase in endorphin levels in the body.

Phrases like "endorphin calm" and "runners high" describe the feeling during and after periods of exercise. Flooding of endorphin into the system yields feelings of euphoria in people.

#### **Serotonin Hypothesis**

Current psychotropic drugs target serotonin receptors in the brain to flood synapses with serotonin. More serotonin leads to improved mood and better sleep.

#### **Tryptophan Hypothesis**

Research has shown that exercise in both human and animal subjects affects the amount of tryptophan in the body. Tryptophan is the good stuff from turkey that makes you feel peaceful and sleepy following a big holiday meal.

Tryptophan is a precursor to the neurotransmitter serotonin. Because tryptophan works like serotonin, exercise produces the same effect that the current medications for depression do.

#### **Norepinephrine Hypothesis**

Much like serotonin, it appears the body releases norepinephrine into the system during exercise. With increased norepinephrine, depressive symptoms will decrease. What makes norepinephrine different is the range of positives that it brings.

When this transmitter is released, your heart beats faster allowing more oxygen to reach your brain and muscles making you think clearer and have improve strength and coordination. If concentration has been an issue, norepinephrine will be a welcomed addition.

# **Thermogenic Hypothesis**

Soaking in a jacuzzi, getting in a hot bath, sitting in a sauna and vacationing to a warm part of the world all make you feel better. This hypothesis states that exercise helps you feel less depressed or anxious simply by warming your body.

For thousands of years, people have been seeking out natural hot springs claiming they have healing properties. The ancient Greeks used bath houses to become refreshed and recuperated. Currently, some forms of cancer treatment employ whole-body hyperthermia. People undergoing this treatment report having decreased pain and an increased sense of well-being

Although no one can pinpoint exactly which hypothesis is correct, consider that combinations of several, or all, of the hypotheses are accurate. If this were true, your brain and body would gain so much from you doing so little. In terms of risk and benefit, exercise is overwhelmingly beneficial.

Next page: breaking barriers to exercising with MS.

# Breaking the MS and Exercise Barriers

Despite all the prompting and education, there are some that cannot buy into the idea of exercise. For some the barriers are physical while for others they're mental. Are you looking for ways to break through? Here's how:

#### Barrier – No Time

It is true. Life is busy. Work, family, appointments and obligations consume a lot of your day. Are you prioritizing your time, though?

How many birds did you hurl at green pigs on your smartphone today? How many status updates did you read through? How many selfies did you take and how many episodes of that 15-year-old sitcom did you binge on?

Many people put off exercise in the name of relaxation, when exercise is the best thing you can do to relax. Sitting on the couch is a neutral experience. Trade it in for a positive one.

#### Barrier – No Energy

You are tired. MS leaves you feeling fatigued and worn down. Depression and anxiety leave you the same way.

Rather than waiting until you have energy to exercise, decide to exercise to gain energy. People typically report feeling more alert, focused and energized following a work out. The first step is difficult but each one after gets easier.

#### Barrier – I Don't Know How

Exercise does not have to be a one-size-fits-all endeavor. Approach the situation with the mindset that any exercise is better than no exercise. As long as you do something that you enjoy and find appealing, it is a success.

# Barrier – It Hurts Too Much

You should never continue any exercise program that causes significant pain, and make sure to ask your doctor what types of exercise would be best for you. It's also important not to overdo it. If you have had no exercise for an extended period, do not sign up for a 12 mile, muddy obstacle course.

Start very slowly and progress. Trying too much too soon will leave you sore and demotivated to try again. When done in moderation, you will feel invigorated and relaxed.

#### Barrier - No One Will Exercise with Me

Working out as a team is always a great idea to boost motivation and add accountability, but not everyone has a list of people that want to exercise the same way at the same time and intensity that they do.

If you do not have a partner, learn new ways to hold yourself responsible. Establish rewards for yourself after completing established minutes or days of exercise. Be your own motivation.

#### Barrier – I Have Mobility Issues

Many people with MS have mobility issues. One of the many advantages of exercise is the way it can be modified. Exercise looks and feels different for different people. Start with exercises in your comfort zone before breaking out and pushing your boundaries. Perhaps exercise will greatly reduce your limitations.

#### Next page: what exercises are for you?

# What Exercises Are For You?

Deciding on what exercises to do can be as difficult as finding the motivation to exercise in the first place. Here are some good options for beginners:

# Stretching

Whether you do simple stretches learned in grade school or a complex series of progressive muscle relaxation stretches, stretching will aid with flexibility and range of motion by loosening tight, painful muscles.

Stretching will also improve your performance in other exercises.

# Aerobic

These exercises provide your muscles with oxygen and nutrition. Think walking, biking and swimming, while seeking out low impact options like elliptical trainers. These exercises help with energy, stamina and reduce pain. The repetitive movements help induce meditative states that limit depression and anxiety.

Aerobic exercises can be intense so work to find an appropriate balance. Start with lower intensity for lower durations and add along the way.

#### **Weight Training**

Lifting weights is not only for football players. Stronger muscles don't need to work as hard as weaker muscles which will leave you with more energy after a task is completed. Start with light weights and lower repetitions.

### Yoga

Yoga helps build endurance and strength while improving sleep and concentration. Search for gentle, MS-friendly yoga classes, videos or lists of poses online that seem possible for your skill level. Tai chi is another option that provides similar benefits.

#### Housework

No one likes running the vacuum or dusting the furniture but there is an aspect of exercise involved. Making these activities a priority will give you the physical benefit as well as the pride associated with maintaining a clean home.

#### Conclusion

Exercise is one of the best things you can do for yourself. If you eat a healthy diet, get appropriate sleep at night and exercise often, your physical health, mental health and overall well-being are bound to improve.

Know your barriers to push through them. When you find the type of exercise that works for you, you will have success. With that success, your life will be closer to what you want it to be.

You cannot stop MS but you can make the other aspects of your life better with exercise.