

Introduction

The following is not medical advice. This is not meant to replace treatments or other strategies put in place by your doctors. With permission from your doctor, you can use this guide in conjunction with your treatments. These concepts and recommendations are meant to help you improve your daily life by producing lasting results, despite having a chronic illness. Since being diagnosed with severe Crohn's disease, this topic has been very important to me. I was passionate about fitness before being diagnosed and my illness has heightened that passion. I have earned a few NASM certifications and spent years training people with and without chronic illness. All of my personal and professional experience has led to the following information. Whether you battle autoimmune disease, chronic pain, obesity, or any other nagging issue, I hope you find something of value in this guide.

The benefits of exercise are extensive and abundantly clear. The research continues to prove our suspicions that exercise plays a huge role in overall health and longevity. Consistent exercise and healthy habits can help manage and prevent chronic conditions and drastically improve quality of life. The secret to maximizing these benefits is learning HOW to exercise and how to develop positive relationship with exercise. Most of the time, general guidelines are not enough information to put together a lasting plan. Fitness for chronic illness is too individual and complicated to suggest general guidelines. You must work to find the modality and routine that best serves you and your illness. This guide is meant to help you begin this process.



Three Rules of Exercising with Chronic Illness

Working with, not against your condition is the underlying theme of all these rules. The value of acceptance and having a deep understanding of your situation is huge. These two things will help you stay positive and realistic about your goals. Some chronic illnesses have the ability to completely change your way of life. As things change, it is totally okay to reevaluate your goals and routines. The ability to be flexible leads us to the first rule.

Disease Activity Governs Intensity

Think of the state of your condition as the limiting factor for your workout intensity. As disease activity becomes more severe, intensity should decrease. This does not necessarily mean that exercise volume should decrease, only intensity. Those with inflammatory conditions must be careful with intensity and understand that exercise adds to the total stress on the body. The last thing you want is to exacerbate your condition by overtraining.

For example, consider a marathon runner who is training at a high level of intensity for an upcoming race. After a few weeks, they are feeling constantly sore and fatigued. If they experience a spike in disease activity, some adjustments should be made to the routine. Instead of running hard and trying to push through the symptoms, they should back off and allow the body to recover. Then slowly work back to a comfortable level of intensity. This person can run shorter distances or even walk the same amount of time every day. Breath hold walks are a fantastic way to challenge the lungs while keeping intensity low. They can also take a week to focus on mobility and running technique, two things often neglected by endurance runners that bring great benefit.

Another example is someone who likes heavy lifting. When the disease is active and interfering with your daily energy and strength, you



can do the same barbell squat routine as always and simply reduce weight, extend rest periods and/or reduce reps to decrease intensity. This is also the perfect time to perfect technique and improve mobility. You will notice drastic improvements in your lifts when it comes time to add more weight if you spend this time focusing on the details.

Both of these people may be concerned about losing progress during the time they are reducing intensity. The lost results from temporarily reducing intensity will be nothing compared to what can happen by overtraining and worsening a chronic condition. Just because your desired results are seemingly on hold, doesn't mean you aren't improving. You are improving your ability to control your condition and avoid setbacks, which is one of the most important goals when staying active with chronic illness.

When you feel strong and ready, slowly increase intensity. This should be done methodically and without rushing. Rushing the process is an easy way to overreach and you may be starting over. Taking your time and being patient is what the second rule is all about.

One Step Farther than Last Time

For the body to adapt, you only need to go one step farther than your current baseline. Consider a former athlete who has been battling a chronic illness and is now beginning to control the condition. This person feels it is time to become more active and increase performance. In this situation, it can be very easy to create your routine based on the workouts of your previous self. On paper, achieving this level of performance would be great, but this is almost never a good place to start. This can actually be a very depressing place once you find that you are nowhere near where you once were. This can all be avoided by those two things mentioned earlier, acceptance and understanding.



The best place to start is to perform a self-assessment and begin to construct a good program to follow. If you have trouble with this, the world is full of good trainers who have dedicated their time to helping others (shameless plug).

The first question you can ask yourself is what level of activity you are adapted to. If your body is adapted to the couch, getting out for a five minute walk is a great place to start. Eventually jump up to breath hold walks. Then interval jogs and bodyweight exercise. Then resistance training. On and on. The most important thing is that you are constantly progressing, but only when your body is ready. Your mind will play tricks on you and say things like "this is too easy" or "I can handle way more than this." Being self-aware and controlling this feeling is key to making consistent progress.

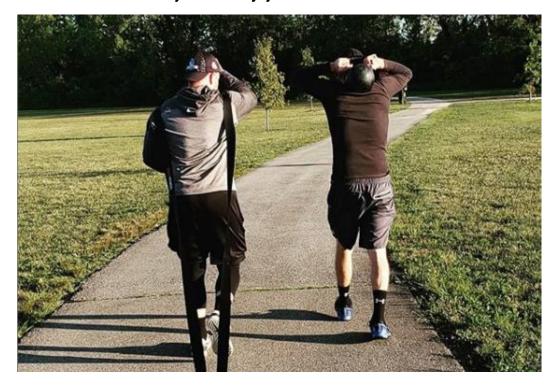


A good way to help control that voice in your head is to keep a performance journal. Write quick notes about what you did, how you felt, and what recovery was like. Next time, you can read the notes and decide when you feel comfortable kicking it up a notch. Don't ask yourself this question mid workout because your brain will often times convince you that you should do more than you actually need. Another strategy is to set performance goals instead of time based goals. For example, you will progress from pushups to bench press when you can comfortably perform twenty pushups, not next Wednesday. Next Wednesday may come and you may not be ready. In which case, your progress is a little bit slower than planned, but the plan doesn't change.

Remember that in order to adapt, you need to go just one step farther than what you are currently adapted to. If you are excessively sore and tired, you may have gone too far. Exercise should energize and boost mood, not be a burden and discomfort. Doing more that you need almost never results in more progress. It does however result in a bad relationship with fitness which is contrary to our third rule of training with chronic illness.

Focus On What You CAN Do

Having a good relationship with exercise is needed in order to see consistent results. You should never start a workout thinking about how much you hate exercise and proceed with negative energy. Over time, this almost always leads to burnout and regression. A common mistake is thinking exercise is simply a tool used to achieve some desired outcome. Movement will forever be part of human life and is more than a tool or hobby. It is one of the pillars that hold up optimal health and longevity. We often forget this when we are chasing specific goals such as improving performance or body image. If you aren't enjoying the exercise that you do, and find yourself being inconsistent for this reason, it is time to branch out and try new things. There will always be a form of exercise that you can enjoy.



Unfortunately, having to deal with chronic illness has the ability to further complicate your relationship with exercise. Some of these conditions even come with labels describing what you can and can't do. Being hit with the statement "you will never be able to do that again" is crippling. You may find yourself focusing on just that one statement for some time. It is funny how being told you cannot do something just makes the desire even stronger.

Focusing on what you can do is a much better approach than trying to do what you cannot. Even if what you cannot do is what you want the most, starting with what you can do is going to give you the best chance of achieving what you want most. Reframing your situation and applying a one step at a time approach will bring

more pride and sense of accomplishment. You will begin accumulating small victories which produce the positive energy to continue moving forward. Continuously focusing on what you cannot do results in constant failures which produce negative energy. In order to apply this in the real world, you must be patient. Just because you cannot do something now doesn't mean you will never be able to do it in the future. The last rule of training with chronic illness is all about forgetting about what you cannot do, finding exercise that is enjoyable, and doing your best every day.

Strategies for Optimizing Fitness with Chronic Illness



Now that we have spoken about some important concepts, it is time to talk about how to apply them. These are all basic strategies that can be applied to help you mesh your fitness routine and chronic illness together.

Track Some Data

This strategy is especially important for fitness beginners and people newly diagnosed with a chronic condition. This strategy also becomes more and more valuable over time, as you have more data to reference. The main goal is to learn to correlate your data with how you feel. This will be very useful in deciding how intense your workouts should be and how to structure your upcoming days. You can also begin answering questions that would normally bring anxiety and stress. I will preface all of this advice by saying they are highly individual so comparing your daily numbers to your own baseline will bring the most value. Never compare your numbers to someone else and think of these things as just optimization tools. There are many devices on the market that can be used to collect data, I will give my recommendation later.

Sleep

A good night's rest is key to recovery. If your sleep is suffering, your performance will also suffer. There is also a possibility that lack of sleep can negatively affect your condition. When you sleep, your heart rate and temperature should slowly decrease and then begin to rise again as morning approaches. If your trend looks different, or your resting heart rate never drops, this could be a sign of distress in the body. Another metric to track for recovery is deep sleep time. Deep sleep is when your body does most of the repair. Not getting enough deep sleep could be a sign that something is disturbing your sleep, such as late workouts, eating too close to bedtime or overtraining. Getting too much deep sleep could mean that your body is under recovered and struggling to keep up, possibly from your condition or from other stressors. Either way, take this as a sign that an underlying cause could be effecting your sleep and recovery.

Many aspects of sleep remain a mystery, but we do know some things for sure. When your body is overworked, you will need more sleep to repair the damage. Pairing this idea with your fitness routine can keep you on the right path. If you're exercising more often, you can give yourself more sleep to help recover. Having plenty of data to produce a good individual baseline will help you decide how much more or less sleep you can get away with. It is also a good idea to track bedtime and wake-up time. It



becomes very easy to overlook these times and forget the importance of being consistent. This is not an end all be all rule, but many people will benefit from being as consistent as possible with their sleep schedule.

Total Calorie Burn

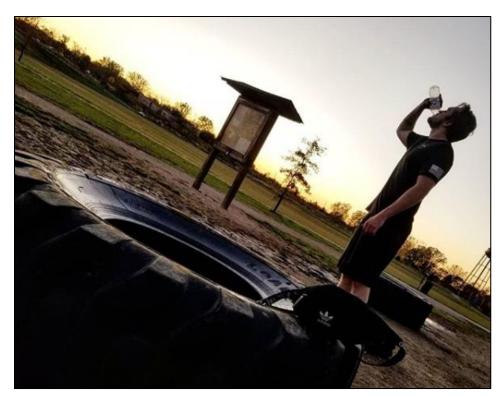
Total burn is something we should all track at some point. Once you are good enough to manage food intake and burn without tracking, you will no longer need to be concerned about tracking, but this takes some time. The main reason to track total burn is to make a connection between your food intake, level of activity and weight. You want to match your fuel with what you're asking of your engine. If you are gaining weight, it is likely that you are eating too many calories for your level of fitness. If you are losing weight, perhaps you are burning more calories than you think. Finding these number is nearly impossible without making a good

Of course there are many things associated with chronic illness that will result in weight fluctuations. One way to help this situation is to rule out the things you can control. If you know your food intake is right and you are still gaining weight, you can begin the conversation with your doctor to search for the hidden reason.

estimate or using a fitness tracking device.

Weight fluctuations can cause all kinds of distress. A person with Crohn's disease may see a weight drop and think a flare is coming. It could be that this person has been in remission with minimal symptoms and increasing level of activity over the span of months. If this person is not matching total burn with food intake, they may lose some weight. So the weight loss is likely not due to the condition but just lifestyle. The only real way to know this information is to track the numbers, or it is just a shot in the dark. Also be sure to discuss with your team of medical professionals. In this situation, having some data can help ease the anxiety associated with chronic illness.





Exercise Volume

You should track exercise volume for similar reasons that you would track total calorie burn. This is one of the best ways to control your overall intensity and recovery. Keep log of all your activities and try to connect your overall volume to how your body is feeling. If you feel over worked and fatigued, you can look to your notes and decide where you can adjust the program.

It is very easy to forget about how much daily activity you are actually doing. Accumulating exercise throughout the day can be an excellent way to get results but it can also be an easy way to push yourself too far.

Condition Specific Metrics

Some of the most important metrics to track and optimize, are ones specific to your condition. For example, blood sugar for someone with Type 1 diabetes is critical to track and optimize. These metrics are specific to your condition so must be discussed with medical professionals.

My Recommendation

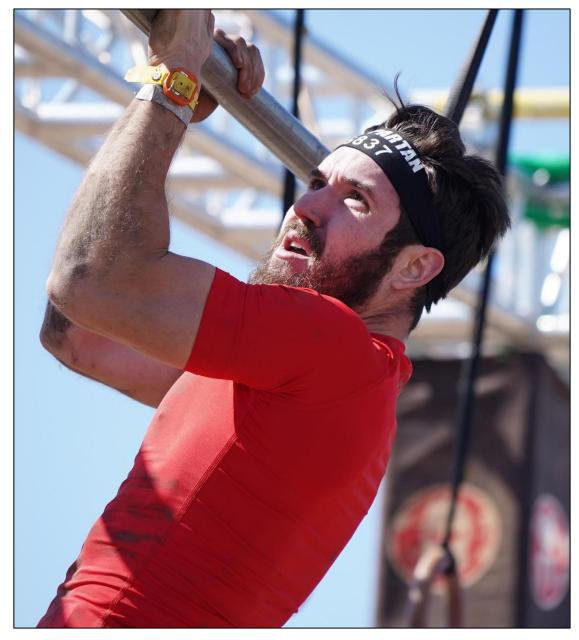
I personally use the Oura Ring. I find that this is the most accurate, affordable and simple to use device on the market. It provides you with plenty of data and scores for sleep, readiness, and activity. I have used these scores as tools to manage my daily battle with Crohn's disease. I also have a wide distribution of data showing metrics for both active Crohn's and remission from Crohn's, which is helpful for maintaining perspective.

It is important to occasionally reevaluate the things around you and decide what is bringing value and what is holding you back. Tracking data is no different. If you find that you are obsessing over specific metrics to the point of distraction from your main goals, you would probably be better served taking a break from analyzing data. You should be wary of allowing your data to make decisions for you, as opposed to making your decision based on the recommendations given to you from data.

Make Strength a High Priority

Strength is often viewed in just terms of how much weight you can lift. The truth behind strength is much more complicated than that. It plays a role in every health and fitness pursuit. For example, mobility is a combination of flexibility and strength, and durability is a combination of endurance and strength. In simple terms, being mobile is the ability to move strongly and freely without pain and injury. Being durable is simply the ability to maintain strength over time without suffering injury. The desire to be more mobile and durable will always involve getting stronger, even if it doesn't always appear that way.

Strength gains come very slowly, especially if a chronic condition has led to excessive loss in strength. This can be one of the most frustrating journeys but one that will pay the best dividends. I don't think anyone has ever complained about being too strong and having too much energy. This strategy is important for everyone but those managing a chronic illness will see massive benefits from getting stronger.





My Recommendation

Resistance training is the most effective way to gain strength and improve muscular function. Training movements with your bodyweight, resistance bands, free weights and machines are all examples of resistance training. Basically, you are asking your body to move a load that will ultimately introduce a stress to your system. This stress is sending a signal to your body that it should get stronger so that it is better prepared next time. Like mentioned before, the strength building signal only needs to be slightly larger than the previous signal in order to produce results. Larger signals do not equate to larger gains. It equates to overloading your system and ultimately stalling your progress.

The journey to strength is like a ladder you must build as you climb. And just so you know, the ladder never ends. There is always something to build upon once the previous rung is built. You will build a rung that will support you as you work to build the next one. And

you never climb up until the next rung is ready, or you risk breaking it and falling back down. This represents injury, overtraining, flares of chronic illness.

The ladder will be different because they are built by different people. This being said, there is a general hierarchy of training methods and exercises. Before you touch the weight, you must first adapt to the resistance of your own bodyweight. You can then increase resistance with bands and high level bodyweight exercise. Then you can jump up to free weights like dumbbells or kettlebells. Then you can grab a barbell! It is up to you to decide how much strength you need to suit your life, but don't get upset at me if you find yourself wanting to get stronger!



Accumulate Your Movement

Spreading your exercise throughout the day can be a great alternative to doing one full exercise session. This is also a great way to keep from pushing yourself too far since you are rarely working out for long time periods. Investing in a few pieces of equipment for your home can go a long way. Set up a doorway pullup bar and set weekly goals. Dedicate an area of the house for your bodyweight exercises. Another strategy is to exercise during commercial breaks of your favorite TV shows. Challenge yourself to keep moving and keep finding creative ways to train your body. Just be sure to track total volume since it is possible to accumulate a lot of exercise during the day.

Use High Intensity Training Sparingly

The majority of your exercise should be low intensity. This can be contrary to popular belief since the social media highlight reel always features the most impressive acts of fitness. The truth is, a fitness program for general health and longevity looks nothing like the extremes of fitness performance. You don't need to kill yourself, you just need to be

consistent and make small improvements.

Low intensity training like yin yoga, mobility training, walking, and casual hiking should fill about 75 percent of your schedule. The other 25 percent you can increase intensity to a comfortable level and work on the one step farther than last time principal. The fitness motivation culture seems to believe these numbers should be reversed.

Try New Things, Sometimes

I always recommend doing the fitness that you are most likely to continue doing, but also trying new things just to freshen up your routine. If you don't like kettlebell training, there are plenty of other things you can do. If you love slinging kettlebells, then by all means, enjoy yourself. The kicker here is, you have to stick to something long enough to get results. If you are having trouble getting results, make sure you aren't changing your program or routine every few days. You need to stick with something for many weeks or a few months and give your body a chance to adapt. Have patience!

For the sake of quantifying this, we will say 75 percent of your fitness routine should be things that produce results and that you enjoy doing. For example, big compound exercises such as deadlift, squat, overhead press and rows are always in my routine

somewhere. The other 25 percent are things that rotate in and out. Whether it be accessory exercises to improve tiny aspects or just something I want to try for fun.

Be Savage Not Average

Keeping a positive mindset is probably the most important piece of advice I can give. Being savage not average in short, is doing your best and doing what serves you best. If your condition is getting the best of you, the savage not average decision would be to take care of yourself. It would not be to ignore the symptoms and continue to press forward trying to meet goals that you set under different circumstances. But if your condition is doing great and you feel great, time to kick some ass. Being savage not average means having the ability to reassess your situation at any point in time and make adjustments to your lifestyle and training routine. It means being okay with having sucky times and using those times to work on other things. It means learning to relate with who you are inside, not with your condition. Being savage not average means controlling your life and illness, not the other way around.





Jeff Yohe - MSTB Fitness

Back in 2013, I became very ill with Crohn's disease. Up until this point, all of my challenges felt external. Graduating with an engineering degree, making the high school baseball team, saving money, competing in Jiu Jitsu. These were all challenges I had pursued on my own, because I wanted to. I had never faced an internal battle like this new challenge. And I had never faced a challenge that attacked me so viciously.

For years, my health would rise and fall like the sun. I had decent times and some exceptionally bad times. I would try to run away from the truth but over time, the disease became all consuming. I spent hours researching and trying to answer questions that will never have straight answers. I eventually had to accept my situation, which was very difficult for me. After six years of trying to control my disease, never being in remission, I was faced with an option that would forever change my life. In April of 2019, I had a loop ileostomy in attempt to save my destroyed colon.

This experience taught me a lot about myself. I learned that I am more resilient than I ever believed. I learned a lesson of humility. I have learned the value of patience. I was faced with pain and suffering that gave me a thirst for life. But most importantly, the experience brought light to the things I value most. This experience ultimately led me to change my career from engineering to helping people improve their lives through fitness and nutrition.

During the next year with an ostomy, I made improvements physically and mentally that I thought impossible. I have completed a Spartan and Savage Race. I have returned to training Jiu Jistu and Muay Thai. I have learned that my ostomy and disease do not define me. I am defined by my decisions and the person I choose to be, despite my condition.