Suffering from joint pain can prevent you from doing everyday tasks like moving groceries from your car to your home. A cascade of both physical and mental damage can occur if there is no plan of action to manage it. I hope this book helps you to develop a plan of action along with your health care professional that will give you the basic knowledge and understanding of how to manage your joint pain. You deserve to be able to live your life without any preventable physical limitations as long as you are engaged in your process of healing.



Ernest J. Allen NSCA-CPT B.S.



# STAY AHEAD OF THE GAME AND AWAY FROM PAIN

Your Guide to Managing the Aches and Pains of an Active Lifestyle



**ERNEST "COACH E." ALLEN** 

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"This book is dedicated to Andrew, Amanda, and Jamesa – My three WHY's"

# TABLE OF CONTENTS

Introduction1
Chapter 1
What are the Main Causes of Joint Pain in Active Adults and
Athletes?
Section One: Strength Imbalances8
Section Two: Inactivity Due to Lifestyle and Career
Choice
Section Three: Nutrition and Hydration12
Chapter 2
Solutions to Help Manage and Eliminate Pain
Section One: Seek Professional Help18
Section Two: Improve the Quality and Consistency of
Your Nutrition and Hydration22
Section Three: Increase your Physical Activity29
Chapter 3
Recovery and Maintenance
Section One: Mindset / Rest / Recovery
Section Two: Mobility and Flexibility Training41
Section Three: Dynamic Stretching & Myofascial Release
(Foam or Trigger Point Rolling)42
Section Four: Conventional Treatments to Reduce Pain
and Inflammation47
Conclusion55
Final Thought

# INTRODUCTION

In this book we will explore ways of improving joint mobility and managing the aches and pains that creep up on us as we age and try to lead an active lifestyle.

# This is a guide for:

- Active Adults
- Aging Athletes
- Weekend Warriors

This guide was written for those that need to stay mobile in order to maintain a healthy active lifestyle. One of the main issues that people that lead an active lifestyle are the limitations due to joint pain and overuse injuries. I'm one of those people, I played college and professional football for over thirteen years in the NFL briefly and the AFL and the arena football league.

I am a fairly active person, I train 3-4 times per week, but sometimes I push the envelope with my training, and I tend to lose my training time to aches pains, especially in my knees, ankles and sometimes my lower back.

These aches and pains have caused me to have to layoff or limit my weightlifting and cardio training for a couple days or sometime a couple of weeks. Depending on the time that I have before I plan on resuming my training schedule. I have to either take over the counter medicine if I want to shorten the time of the training layoff or maintain a healthy lifestyle, in regards to my nutrition and, how I approach my rest in recovery in an effort to reduce my the inflammation and pain that sometimes accompanies running jumping and lifting. As a I former professional athletes it's difficult to find a balance between training in a progressive manor, which means increasing the volume (meaning the number of repetitions and sets for each exercise) and the intensity (meaning the amount of weight and resistance that is applied to each exercise) as I did when was in my 20's and 30's. Now that I am older, my current level of physical ability can be somewhat limited due to overuse injuries and corrective arthroscopic joint surgeries that occurred during my career as a professional athlete.

As I go along this journey as a "Masters Athlete" (as some would refer to me as at this point) I continue to learn more how my body reacts to different training and treatment methods for managing my joint pain, and that help me maintain my current activity level and, in some cases, improve my results from leading a active lifestyle. One of my main issues is maintaining a healthy weight but I digress, but we will save that for another discussion (I love cookies). In the upcoming chapters of the book, we will look at several ways that could help you maintain an active and challenging lifestyle by managing your joint pain and limiting the pain and discomfort sometimes that is experienced from maintaining a healthy active lifestyle. One of the main issues I faced as an athlete was being healthy for the next game, this issue has switched up a bit and now the goal is can I manage my joint pain and discomfort enough to train 3-4 times per week.

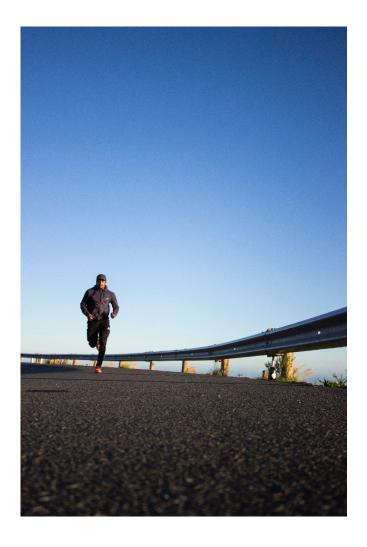
I am now in my late forties and the goal moving forward is to be able to run a marathon or two and begin running obstacle course races like I have done in the past. The last race I ran was the Spartan Sprint which was several years ago in 2017. A few of my clients and I ran several races in 2017, and I felt really good for the most part after the race, I could walk and move around pretty freely without any

major issues of pain in my joints and I was able to train several days after the race at a pretty good volume and intensity. Over the years, through my research as a coach/trainer and as an ex-professional athlete, one of the hardest parts of managing my joint pain is maintaining a balanced nutrition and hydration habit that is congruent with me maintaining a healthy weight and remaining active enough to pursue any physical activity that I want to experience.

Over the years I have had to take both over the counter and some prescription medications (anti-inflammatory medications, which we will which will cover later in the book) to manage my joint pain. As I mentioned before, I believe the use of these types of pain management tools (along with an active recovery plan) should be based on the time needed to prepare to participate in a specific physical activity and how long it will take you to recover after the physical activity. As I continue to practice as a trainer/coach I learn more about joint health, and more about how individuals respond to different treatments and modalities that relieve and manage joint pain.

The goal is to help "athletes" of all ages live a happy, healthy, and active life, and to find a balance between a relatively high-level physical activity (depending on your physical ability) and managing joint pain and discomfort with limited use of prescription and or over the counter anti-inflammatories medications with more natural remedies that don't conflict with the body's healing natural response.





# CHAPTER 1

# WHAT ARE THE MAIN CAUSES OF JOINT PAIN IN ACTIVE ADULTS AND ATHLETES?

here are a number of issues that can cause joint pain in active adults or what are considered 'Weekend Warrior Athletes" by some. These issues can be based on lifestyle, career, in some cases genetics, overuse/ old injuries, and the list goes on. In this chapter we are going to look at three of the most common issues that could cause joint pain. There are dozens of causes, but we are going to focus on just three for the sake of time and my attention span to write this book and your attention span to read it. These three issues are based on my experiences as a college and professional athlete for over 17 years and as a trainer coach for the last 7 years. I have had 7 of arthroscopic knee surgeries (6 on my right knee and 1 on the left knee), one surgery on my A/C joint

in my shoulder and one surgery on my left ankle, both to remove bone spurs and damaged structures within the joint due to wear and tear of overuse, and strength imbalances caused compensating for injuries.

# Section One: Strength Imbalances

From day one we start to roll over in our crib, and then we progress to crawling on the floor, then we walk and run. At this point we are blank slate, a clear canvas for learning movement and developing our physical and mental awareness of our body. When we are young and as our muscles, bones, and nervous system develop, movement and range of motion is not a major issue. We can squat, jump, run, and move pretty much without restriction and with no pain. But as we age, we can become more sedentary (based on our lifestyle and or career) our movement becomes a bit more restricted and limited due to every day wear and tear. Let me take a step back, as children and up into our teens this restriction in movement can be limited and eliminated if we are allowed 'Free Play" and we participate in sports. I will expand more of that issue in my book called Building a Stronger Kid: Lift and Learn – Principles of Youth Strength Training.

Getting back to the issue of strength imbalances; strength imbalances occur as we grow and age and can be caused by compensating for an old injury, limited joint mobility, learning incorrect movement patterns, or a combination of all of these. In my career as a professional athlete and my experience as a trainer and coach, the majority issues of strength imbalances can be caused by joint immobility, and specifically complex joint structure of the ankle, hip, and shoulder. As noted by two of the top individuals in the field, Gray Cook and Mike Boyle, strength and mobility issues in these three complex joint areas can result over-compensation of movement and strength imbalances to occur in the anterior (front of the body) and the posterior (back of the body) muscles responsible for the mobility of the joint, which could possibly cause joint pain in the surrounding joints. For example, when there are joint and immobility issues in the ankle and or hip the knee joint usually suffer. Also if the T-spine has mobility issues this can set off a chain reaction of strength imbalances in the upper back and shoulder area of both in the anterior and the posterior muscles of torso and cause pain and dysfunction in the lower back(L-spine) and neck (C-cpine), which are surrounding joints of the T-spine.

One of the other issues that can lead to joint **pain** is overuse; basically, repeating the same movement repetitively. This is a major issue in certain positions in sports like pitchers in baseball, quarterbacks in football, or golfers just to name a few. Overuse without the proper training, mobility and flexibility work (of which I will go into detail later in this book) will lead to overcompensation, which produces strength imbalances and in most cases pain and injury.

# Section Two: Inactivity Due to Lifestyle and Career Choice

It has been said that sitting is considered to be the new smoking, and one of issues that develops is loss of mobility in the hip joint and overactive muscles in the hip flexor. This also leads to weakening of the abdominal muscles, and tightening of the hip flexor complex which may cause lower back pain among other joint issues. Experts estimate that up to 80% of the population will experience some form of back pain at some time in their lives, whether that be from sciatic pain or from nerve irritation or structural damage to the disks of the spine. These issues are compounded and the pain and discomfort that

accompanies them causes the individual to become sedentary, which sets forth a pattern of inactivity that leads to weight gain, loss of interest in physical activity, and possible metabolic challenges such as diabetes.

Back pain accounts for more than 264 million lost workdays in one year—that's two workdays for every full-time worker in the country. Most individuals compensate for the injury by adjusting their movement and walking patterns which may cause strength imbalances which may cause the injury to progress and further limit the physical health of the person. It may be possible to prevent these issues from happening from the start. Physical activity (with the help of a physical therapist and or a certified Coach/Trainer) in most cases can be one of the remedies that could help the healing process both mentally and physically.

Simple changes like using a standing desk or walking on your lunch break can lead to creating the changes needed to help keep. Later in this book I will outline some possible exercises that may help improve your mobility and flexibility and help manage the discomfort and pain associated with being inactive. Movement is MEDICINE.

# Section Three: Nutrition and Hydration

This might be the most ignored aspect of joint health. Inflammation is a major issue, and it can be caused by an unbalanced diet and a lack of proper hydration. I am not a doctor or a nutritionist but as a trainer and a coach with basic fundamental knowledge I understand that there a certain food that can cause joint inflammation. Also, levels of hydration have been shown to have an effect on the health of the cartilage that helps cushion your joints, especially in between the vertebrae in the spine.

Another issue is over consumption of sugar, which has been shown to increase inflammation in the body. I am not saying that if you eat one or two cookies your knee will swell up, but what I am saying is that consistent sugar consumption may cause you to increase your chances of joint pain due to inflammation. I love cookies (and most of my will family tell you it's my vice/addiction) and I use a system of cycling my sugar consumption every 8 to 10 days, due to the fact that my body responds to my eating habits every 10-15 days. Whatever I eat consistently will show up in 10-15 days, and that will result in weight loss, gain or my weight will remain the same (sometimes I like to rhyme). This system of cycling refined sugar that I used

was developed organically over the last 10 years and is my anecdotal plan to manage. There are nutrition plans and suggestive food items that have been used to reduce inflammation in the body for centuries, and I will cover those later in the book with my own meal plan that I developed over 10 years ago to help me manage my joint pain in my final three years playing professional football. With all that said please contact a licensed and reputable dietician to advice you on your nutritional choices in regards to managing your sugar intake.

There are other factors that can lead to joint pain that I have not listed due to the lack of time and attention span to write this book. These are but a few of the possible issues that could lead to joint pain, and the majority of the issues we are suffering from that might result in joint pain are manageable without the use of pain relievers and overblown treatment methods (Cryotherapy) and possibly preventable. In chapter 2 we are going to look at some solutions that may address these three main issues:

- 1. Strength Imbalances
- 2. Inactivity
- 3. Nutrition and Hydration

We are going to look at some holistic methods of managing joint pain and some more conventional forms of treatment and preventative methods that are available. As a current sufferer of joint pain due to my past career and lifestyle I believe in a balance of holistic remedies and solutions along with some conventional ones. The main objective is to create a game plan to help you manage your joint pain. In my opinion the method or methods of choice should be based on your understanding of the method. You game plan should also take into account the time you have available to treat and recover from the injury or chronic pain, and your patients and ability to stay consistent with chosen course of action for treatment.



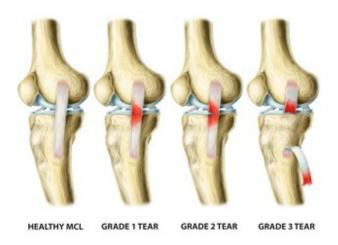
# CHAPTER 2

# SOLUTIONS TO HELP MANAGE AND FLIMINATE PAIN

am from the old school and I used to subscribe to the old remedy of "rub some dirt on it" until I had my first arthroscopic surgery on my right knee in 1997. The joint pain I was suffering from in my right knee was due to an old injury from my sophomore year as a high school football player. I suffered a second-degree sprain of my MCL. See below for the different grade levels of tears and their severity.



# Medial Collateral Ligament injury



This was back in 1988 before the current age of specialized sports medicine. I was putting in an immobilizer for several weeks, and then put through several weeks of halfass "physical therapy" conducted by a part time volunteer athletic trainer that the high school athletic department hired to come in twice a week. This lack of proper treatment has led to me overcompensating for the injury and having to this day two degrees of separation on the Medial (the inside area of the knee) which has led to numerous issues from strength imbalances to other degenerative issues in my right knee. As I continued to play, my MCL healed somewhat incorrectly, leading to 2

dregrees of separation in the lateral area (the outside area) of joint. This caused the joint to be misaligned causing uneven wear on my lateral meniscus, which led to popping and clicking in the joint and the eventual need for surgery to clean up the damaged cartilage within the joint.

I have pictures of the procedure which are cool to see. With all that said I am sure that if I had suffered the same injury today, I would have probably had a better outcome than the two degrees of separation that I have in my knee to this day and the additional (2) arthroscopic surgeries to repair my torn meniscus that I had over the last few years of my playing career.

Ok let's get back to looking at some solutions to help manage joint pain and possibly prevent it, we are going to look at three possible solutions. I am not a doctor or a licensed healthcare professional, but these are possible solutions that I have researched, tested and I currently use. These are the solutions I have applied to my game plan for my training program and lifestyle that have helped me limit my use of pain medications which has helped me lead a pretty active lifestyle and be productive as a trainer and coach without physical limitations.

# Section One: Seek Professional Help

## Licensed Medical Professional

In order for you to create a plan of action to manage your joint pain you have to know what you are dealing with in regard to the area that is injured which is causing the joint pain. That is why it is very important to consult with a medical professional, like an orthopedic doctor or specialists. Not all of these orthopedic doctors are the same and most specialize in one particular area diagnosis and treatment. You don't want an orthopedic doctor whose specialization is knees diagnosing and recommending treatment for your lower back.

This brings me to another issue which is usually orthopedic doctors who specialize in injuries to the spine are almost mentioned separately from an orthopedic doctor whose specialty is the knee, hip, ankle, or shoulder etc. Most doctors who have diagnosed, treated and have operated on me specialize in the common areas where athletes are injured, which area:

- Shoulder
- Hip
- Knee
- Ankle

Two of the doctors that operated on me were specialized in the hip, knee, and ankle. In my opinion, this was due to the area's proximity to each other. As I mentioned earlier in the book, usually when the hip and or ankle have strength imbalances due to a mobility issue or injury, the joint in the middle suffers, which is the knee. With all of that said, seeking out the counsel and advice of an reputable and competent orthopedic specialist you can trust is the first step that you should take when creating your plan to manage your joint pain.

## Certified Personal Trainer

After you have consulted with an orthopedic doctor you may be given a prescription to see a Physical Therapist (depending on your diagnosis and insurance) in order to treat and correct the issues of strength imbalances, joint immobility and limited muscular flexibility which may be causing your joint pain. In most cases this works out great, however when the prescription is complete or in a worst-case scenario you are not given the option to see a physical

therapist, you are on your own. This is where a knowledgeable, well trained, practicing Personal Coaches/ Trainer (like I am, here at Atlas Pro Training LLC) comes in.

There is a saying that a Personal Coaches / Trainer is only as good as his or her ability to apply their certification to the clients they server, and just like most professions, not all Personal Coaches / Trainer are created equal. Some Personal Coaches / Trainer specialize in various types of training, from weight loss, training a specific group of individuals within the population (i.e. Masters Athletes or what some conceder the elderly population). This is where the education, the certification, his or her practical experience, and in most cases life experiences of your Personal Coaches / Trainer should be in alignment with what you need to help you improve your strength, mobility, and flexibility. The programming that your Personal Coach / Trainer create should also help you manage your joint pain and get you back to your active lifestyle in a timely manner with your health and performance goals in mind.

Learning the proper way to work out or what I refer to it training, is key to helping you manage your joint pain and

maintain a healthy lifestyle going forward. There are no overnight cures. Without a plan of action to become stronger and more mobile physically, no form of medicine or surgery will keep your joints healthy long term. You need to maintain a healthy balance of physical activity, rest and recovery.

# Licensed Massage Therapist

This could be one of the best decisions you could make and could pay off in the long run. With that said, you should have an idea of what you need in order to get the most benefit from massage therapy. Therapeutic massage usually involves deep tissue and trigger point release work. In most cases, muscular imbalances and flexibility issues, which can cause muscles to be tight and restricted, are usually the cause of mobility issues within the joint, of which they are closest in proximity too.

For example, pain around the kneecap can be related to a strength imbalance in the quadriceps and the hamstrings, where the quadriceps are the dominate stronger muscle group of the leg and the hamstrings are weak and not activating properly during certain movements (such as a lunges, squatting, running) causing the kneecap to be pulled out of the grove of the femoral joint of the knee.

Muscles tighten due to neurological impulses that are the result of injury or repetitive use within a flawed movement pattern. Do your research and find a professional reputable and competent massage therapist who specializes in the therapeutic type of massage you are looking for. Swedish massages are common, but there are also more therapeutic therapists that have experience with helping active individuals recover from injury with a focus on improving the flexibility and mobility of the individual. Look up Massage by ME here in Orlando Flroida; they are one of the best at helping active adults maintain a active lifestyle through massage therapy.

# Section Two: Improve the Quality and Consistency of Your Nutrition and Hydration

Your nutritional habits set the tone for your health and performance, and give you the proper forms of macro nutrients(i.e. carbohydrates, fats and proteins), for energy (carbohydrates and Fats), building blocks to recover from injury (Proteins) which also can help improve your muscular and neurological function, along with other essential functions of the human body that I don't have the attention span to go to in this book.

Here is a simple scenario, let's say for example you are out for a nice Sunday afternoon jog; the sun is out and you are in a zone, then the unexpected happens, your foot gets caught in a crack in the sidewalk, you trip and when you try to regain your balance you twist your knee and ankle, and you hear a pop. You fall to the ground in pain; your knee blows up and swells up instantly. When an injury occurs to the tissues of the body (especially the joint) the body's response is in most cases to send in reinforcements to start the healing process as soon as possible in the form of inflammation. The damaged cells release chemicals including histamine, bradykinin, and prostaglandins.

These chemicals cause blood vessels to leak fluid into the tissues, causing swelling. This is a painful but a necessary evil in the process of healing and is an acute (short term) response but can possibly become chronic (long term) if it goes untreated. With that said, your nutrition, along with the mobility/flexibility and strengthening program created by one of the professionals mentioned earlier in the book, can play a huge role in increasing your chances of healing during the remolding process within the injured joint, possibly preventing this issue from becoming chronic.

There are foods that may increase inflammation in the body, and there are foods that help reduce inflammation in body. We want to consume the food that decreases and limits inflammation, and specifically for the sake of these book foods that limit inflammation in the joints.

# Examples of these foods are:

# Non-inflammatory Foods

- Avocados
- Quality Protein sources i.e. Fish rich in Omega 3's, Eggs, etc.
- Spices: Turmeric, Black Pepper Corn, Curcumin
- Ginger
- Olive oil
- Beets
- Swiss Chard
- Garlic
- Red Beets
- Carrots
- Green Leafy Vegetables i.e. Spinach, Kale, Collards etc.
- Lemons

# **Inflammatory Foods**

- Processed Meats Hotdogs, Lunch meat, etc.-Nitrate Rich Foods
- Some Dairy- some may disagree with this due to some studies that show dairy may cause inflammation in some individuals.
- Fatty Red Meats
- Margarine and other spreads that are high in trans-fat or partially hydrogenated oils
- Alcohol
- Vegetable Oils
- High Sugar Consumption

There are many more, but for the sake of my limited attention span, Google is there for you to explore.

Here are two juicing drink recipes that my girlfriend who happens to be a Registered Nurse Practitioner introduced this juice recipe to me earlier this year. The juices may be an acquired taste, but they have helped me and many other individuals with different joint aliments by managing joint pain and inflammation due to poor food choices which can cause gout flares and differences. But one caveat is that you must use a real juice extraction appliance and not a

"Magic" Bullet, blender, or food processor, because the goal is to extract all of the liquid and nutrients from the pulp of the whole fruit and vegetable peel and all, which should insure you receive the maximum benefit from the juices.

# **Dolor Joint Juice Recipe**

Directions: Use whole fruits and vegetables with skin.

- Wash fruit and vegetables with a mixture of 1
  part white food grade vinegar 2 parts warm
  water. Ex: 1 cup of vinegar and 2 cups of water
- 2. Dry the fruits and vegetables thoroughly
- Gather the additional spices of Turmeric and black pepper corn
- 4. Use a clean Juicer; such as the Juicer Centrifugal Juicer Machine Wide 3" Feed Chute Juice Extractor or a similar juicing appliance
- 5. Then start the process of juicing one fruit of vegetable at a time.

# **Ingredients:**

- Fresh Turmeric (Root) 10 pieces
- 2 whole Green Apples Sliced
- 2 whole Lemons Sliced
- 1 tablespoon of Pepper Corn
- 15 whole carrots
- 15 Celery Stalks
- 3 beets
- This recipe makes approximately 4-8 16 oz of fluid. bottles of juice.

# Blueberry Mango Smoothie Recipe

## Directions

- Combine all ingredients in a blender and blend on high until smooth.
- 2. Pour...and enjoy!

# Ingredients

- 1 cup frozen blueberries
- 1 cup frozen mango
- 1 cup spinach
- 1 teaspoon chia seeds
- 2 bananas

- 1 tablespoon raw apple cider vinegar
- ¼ cup raw honey
- ¼ cup green tea
- 1 cup ice cubes

\*Please note that there are no scientific studies to prove the anti-inflammatory benefits of consuming this juice, but there is some anecdotal and limited evidence suggests that these ingredients combined can help manage inflammation within the body.

Your hydration and water-intake also helps during the healing process. Water is one of the main components to cells. It helps with the development and growth of new cells during the remolding process, dehydration slows this process down and delays the healing process. Water helps the body deliver oxygen and nutrients to the cells. There are several thousand recommendations in regard to the correct amount of water you should drink.

For the sake of time, we won't go into the details. I would suggest that you should try to drink a minimum of 64-132 fl. oz per day and possibly increase that amount based on your daily activity level. Improving your nutrition and hydration can pay off in the long run and allow your body to heal faster and perform more efficiently.

# Section Three: Increase your Physical Activity

There is scientific evidence that the more you move you can improve your health and reduce your risk of several different types of cancers, and heart disease. Did you know that the health of your joints is very dependent on your movement? Not just the frequency or the volume of your movement, but the quality of your movement. This is dictated by several factors, like your genetics (the body that your parents gave you), and if you have any strength imbalances that have developed due to your lifestyle or choice of work as I mentioned before.

We are going to look at the fundamentals of how movement can improve your joint health from the standpoint of structures within the joint, like the **cartilage** (the tissue that is the cushion between the bones), **ligaments** (the tough bands that hold the joints together) and **tendons** (the tough bands that attach the muscles to the bones). These three joint structures are the main elements that help the joint move and protect the joint from the stress caused by everyday wear and tear heavy use during exercise. We will look at each structure separately and briefly see how movement can help you maintain

healthy joints as you age. Most of this information is based on both scientific and anecdotal evidence, but the only way to prove it to yourself is to get moving and make it a priority to be consistent.



## Cartilage

When you think about it this is an amazing material. Here is a brief description of what is contained in the structure of cartilage:

"Cartilage is made up of specialized cells called chondrocytes. These chondrocytes produce large amounts of extracellular matrix composed of collagen fibers, proteoglycan, and elastin fibers. There are no blood vessels in cartilage to supply the chondrocytes with nutrients.

Instead, nutrients diffuse through a dense connective tissue surrounding the cartilage (called the perichondrium) and into the core of the cartilage. Due to the lack of blood vessels, cartilage grows and repairs more slowly than other tissues."

Author: Dr. Ananya Mandal, MD Reviewed by Sally Robertson, B.Sc.

Not to get too nerdy (I am a true nerd when it comes to health and performance), but this will help explain how movement is essential to the health of your joints. Consistency and medical attention (based on the amount of damage that is evident) is key to helping try to repair the joint. There is no way to truly reverse the damage that is already done to the cartilage in the joint, but there are procedures using stem cells to repair the cartilage in the joint. The scientific evidence is not clear due to the limited history of this procedure, but the anecdotal evidence is very promising. In the meantime, you can decrease the wear and tear on the joints by moving in a more correct, aligned fashion with the help of a medical professional or a knowledgeable trainer.

In addition to this discussion let's look at how movement can stimulate the healing process and help maintain healthy joints. Some studies have shown that due to the fact that there is no direct blood supply to the cartilage in the joint, movement can help stimulate the healing process, and may help with the repair of the cartilage by aiding in the remolding process and limiting unwanted scar tissue from developing and causing limited range of motion in the joint. There is also a supplement called glucosamine hydrochloride that helps in the healing and remodeling process - not cartilage regeneration within the joint. This may also be possible with the use of controversial medical procedures like stem cell treatments, where stem cells are directly injected into the joint in an effort to encourage the growth and repair of the damaged area of the joint. With all that said, correct movement may be the common factor in repairing and preserving joint health which can helping you maintain healthy joints.

#### Ligaments

The ligaments are structures within the joint that are the connective tissues that hold everything together. Ligaments are very strong and can withstand a lot of abuse, to a point. The most common ligament everyone knows

about is the ACL or anterior cruciate ligament within the knee joint responsible for stabilizing rotational movements at the knee that occur during cutting and pivoting activities, and is also a secondary restraint to the knee hyper extending or in laymen's terms bending in the opposite direction. Injuries to the ACL to it account for a good percentage of season ending injuries in all sports. With that said, when a ligament is damaged (not completely torn) it can form scar tissue in an effort to repair itself, but the scaring of the ligament can cause the joint to become ridged and lose range of movement and can cause other issues in the joint. When a ligament has been repaired surgically or through immobilization for a short time, the healing and remodeling process requires movement. This maybe the best aid that can help the ligament repair itself in and regaining joint mobility. That is why when you sprain your ankle, during the rehab process you could given mobility exercise to do, and in some cases strengthening exercises to help maintain the strength of the stabilizing muscles around the join. In order maintain good joint mobility and structural flexibility of the ligaments, a game plan of movement could be the key to long term joint health.

#### **Tendons**

These structures are responsible for connecting the muscles to the bones and are responsible for housing specific nerve structures called the golgi tendon organ that "help" protect the muscle from damage by sensing the amount of tension the muscle is exerting itself by inhibiting the muscles movement. Tendons are very tough bands of tissue and can withstand a good amount of tension, and therefore it is uncommon for these structures to "rupture" or tear. When there is a rupture of the tendon that occurs in the joint that usually means that the tendon has torn away from the bone. The usual causes of a ruptured tendon are direct trauma; decreases in blood supply to the joint due to advanced age and or inactivity and being out of shape and deconditioned.

As we age our tendons become more ridge and this rigidity can be compounded if you are not active. This is another case where the statement made by Gray cook that I mentioned earlier in this chapter – MOVEMENT IS MEDICINE – is a true statement in regard to the health of your tendons. The anecdotal evidence suggests that the move you move, the more efficient blood is circulated through the body, helping provide nutrients and oxygen

to the joints and their structures, and specifically the tendons. This may help tendons maintain their strength and flexibility. There is evidence that movement is a key factor in helping maintain your joint health, helping the body heal correctly during the remodeling process, and helping improve the circulation of blood to the joint helping provide oxygen and nutrients to the joint.

So, you should move often, and be active in the effort to help your joints function as efficiently as possible. Like the saying goes Move it or lose it or in this case... Move it or you could tear it.





# CHAPTER 3

#### RECOVERY AND MAINTENANCE

## Section One: Mindset / Rest / Recovery

am not a self-help guru, nor am I a deeply spiritual person. But, over time and in my life, I have come to understand the connection between the mind and body. I understand how that connection can help you manage pain and allow you to do things that you never thought possible just through your beliefs and how you apply yourself to the process of healing. In this chapter we are going to look at several methods to help you manage pain in an effort to make your recovery permanent or help you manage your joint pain so you can have a better quality of life.

Regardless of how you see pain relief or cures for pain, there is a connection between your mind and body that is essential to the healing process and can either be an asset

or a liability to the outcome you are looking for when you are trying to eliminate joint pain. We know that all pain impulses come from the brain, alert us and warn us that there is something wrong and whatever it is we need to stop doing as to not cause damage to the body. Pain is there for us to protect us from further injury. With that said, our response to pain can be managed through how we view our pain – our mindset.

When I played sports professionally, I remember my rookie year, I was in the NFL at the time and there was a veteran player in the training room before practice getting treatment on his knee, he was talking to another player and the trainer giving him treatment. I remember him saying that ten years ago he would have not even come in to get treatment for his particular injury (believe it was his shoulder). As he said as he ages his body heals slower than it did when he was younger. Being a rookie, this statement subconsciously became the narrative I carried with me for years.

Going into my 10<sup>th</sup> year playing professionally in the AFL, and after 5 arthroscopic surgeries on various joints of my body to repair overuse issues, I began to challenge that narrative and changed my approach to how I treated my

body and my mind. Because when you are injured (especially in a competitive environment) your mind set is to manage the pain and heal as quickly as possible, and sometimes we ignore the pain and continue to do things that hinder the process of healing, such as not getting proper treatment for the injury, or not getting the proper amount of sleep that encourages and helps the healing process. Getting back to my throwback story, as you know back then pain management consisted of using medicine the majority of the time to help you recover from inruy and to help mage the pain you where experiencing. The mode of operation back then (over 20 years ago) was to give you some pills and or an injection, go to treatment, get ice and stem (electrical stimulation) and repeat this cycle until you were well enough to play and as a last resort have surgery and take even more pills and or get injections. At that time I was coming off 4 arthroscopic surgeries in four years, I had my ankles scoped, both knees "scoped" two years later, and my shoulder scoped one year later.

At that point I was 33 years old and I needed a new approach to how I handled injuries to my joints. I began to look into a few holistic ways of managing the injuries and the joint pain that accompanied it. It started with my mind and how I handled the treatment of the pain. I

would meditate, I would focus on my breathing. There is a deep nasal breathing technique that helps the body produce nitric oxide that helps regulate bold pressure and boosts the immune system; two of the main factors that can have a positive effect on the healing processes within the body.

I changed my mind set in regard to how I viewed treatment and the medicine I took to manger the pain during the inflammatory process, which is an essential process which I described earlier in this book. I stopped taking the pills before bed and after I woke up. I was mindful of my nutrition. I eliminated food sources that encouraged inflammation. I started implementing mobility and flexibility training into my training routine, and I got at a minimum 8-10 hours of sleep every night.

I went on to play three more seasons, siging one of the largest contracts at the time in the AFL and being one of the league leaders in the sack over the next four years. Your mindset and how you approach rest and recovery sets the tone for how your body responds to your treatment. So, don't just take a pill and sit on the coach and wait for the pain to stop. Seek out medical treatment, get moving, be mindful of your nutrition and get quality rest without

your cell phone in the bedroom. This is not the total answer to helping you manage and or eliminate joint pain, but it will help go in the right direction.

# Section Two: Mobility and Flexibility Training

I have motto – If you **Move Better, You Train Better**. Mobility and flexibility are the foundations of moving better. After you see a medical professional (if you need to too) and have been assessed and treated, a plan to improve your mobility and flexibility should be created to address any strength imbalances and alignment issues. This may have developed over time due to your lifestyle or due to an injury. In most cases, you can make small tweaks that can pay off in the long run in regards to your joint health.

Your plan should be based on your needs and should be created specifically to fit your needs — no cookie cutter programs! The foundation of your mobility program should be based on a comprehensive assessment, performed by a competent, knowledgeable, and reputable physical therapist and or Coach/trainer. The assessment should assess the mobility of your ankles, hips, and shoulders. The assessment should also look at your

posture, gait which is the position of your lower extremities (hips legs and feet) while you are stationary and during movement. Make sure your Coach/Trainer that you hire to help you with your pain management and recover understands the three main systems of Biomechanical movement (Skeletal, Muscular and Neurological systems), and how these systems interact with each other to produce movements, the foundations of Kinesiology.

# Section Three: Dynamic Stretching & Myofascial Release (Foam or Trigger Point Rolling)

These three modalities will help you improve and maintain your joint mobility for as long as you include them in your exercise program, or in your active lifestyle. We will look at each of these modalities individually and briefly discuss their function and how these tools can help improve joint mobility and muscular flexibility. There is no one modality that is the answer to all mobility issues, but when they are combined and used in a systematic fashion, they will help you maintain your joint mobility and flexibility. I was introduced to dynamic stretching over 14 years ago in 2005 by a friend of mine, Chuck

Wolf. I began to train with him after having arthroscopic surgery on my left shoulder.

After I recovered from my surgery I began to train with Chuck, at the time I had no idea what I was doing but I noticed that it helped me move better and my range of motion in my lower body was very much improved. I made some impressive gains in the weight room, my upper body strength improved, and this was after having arthroscopic surgery to remove bone spurs from my AC joint. My balance improved and I felt excellent going into training camp in 2006, I had a great training camp and one of the best seasons of my career. Fast forward to 2011 two years after I retired from playing football, I was over 320lbs (I love food.... especially cookies). I was in bad shape. I have several failed attempts at maintaining a training regimen, but my lifestyle at that point was based on excuses of why I could not exercise.

I was in the process of closing down my first company, and I was stressing myself out about things that were out of my control. I began to sweat, and my heart was racing, not to mention I had a painful bout with sciatica in my lower back. I was a mess physically and mentally.

One day in my office I picked up a book that included and DVD, it was called CORE Performance by Mark Verstegen of Athletes Performance now known as EXOS.

This book and program changed my life and set me on my current quest to learn and train. This book reintroduced me to dynamic stretching, the foundation of the training program. Over the next 12 weeks I faithfully followed the program to the letter, and by the end of the program I had lost 15lbs my sciatica was gone, and I was feeling great. My balance was great, my old injuries that used to bother me were not even an issue. I was able to run, jump and lift better than ever.

I also implemented several other modalities like PNF stretching (Proprioceptive Neuromuscular Facilitation) which I will touch on in the second volume of this book. With all that said, dynamic stretching was and is the foundation of my own training program and my training programs for my clients. Dynamic stretching sets the tone for the training session and if programmed correctly is meant to prepare the body for some of the specific movements that the trainee will be executing during the session. This also allows for the trainer to assess the movements of the individual to see if there are any issues

in regard to pain that the individual is dealing with. Dynamic stretching is a key component in improving strength imbalances that may be causing issues within the joints.

As you can see, I am a true believer in dynamic stretching and the value that it brings to a training program. It works at improving joint mobility in a holistic fashion, which can be the key to long-term joint health. I was introduced to foam rolling or the technical term myofascial release along the same time I was introduced to dynamic stretching back in 2005. Combined, these two modalities are essential to improving and maintaining joint health, mobility and muscular flexibility.

Myofascial release or Foam rolling is the active manual manipulation of fascia, the tough collagen-based tissue beneath the skin that covers your skeletal muscles and internal organs from head to toe. There are four classifications of fascia tissue according to the layer in which it is located or by its anatomical location. The four are superficial fascia, deep fascia, and visceral or parietal fascia. For the sake of this book, we are referring to the superficial fascia when we a discussing myofascial release. Fascia connects all connective tissues, which means the

muscles, bones, tendons, ligaments, and blood. It holds the entire body together and allows these structures to move in concert without friction or restriction.

During heavy bouts of exercise, micro-traumas occur within the muscular tissue and fascia casing tears. As micro-traumas heal scar tissue forms, one way to smooth out the scars within the tissue is foam rolling or static stretching. When scar tissue is not remolded and or smoothed out, these adhesions can become permanent, causing mobility and flexibility issues and limiting your range of motion, which is not good for the health of your joints. Side note: Scientists have recently found that fascia has its own circulatory system that transports fluids throughout the body. This is huge due to the fact that it may change the way medical treatments are administrated and give medical professionals the ability to see how diseases travel and spread throughout the body, which may treatment methods providing additional improve pathways to target diseases.

I apply both myofascial release and dynamic stretching in a fashion where dynamic stretching is applied to improve joint mobility and myofascial release is applied to improve the overall muscular flexibility. Myofascial release takes the place of static stretching at the beginning of most of training the sessions here at my training facility in Orlando Florida, Atlas Pro Training LLC, and is based on the needs of the client.

# Section Four: Conventional Treatments to Reduce Pain and Inflammation

# The use of over-the-counter pain relievers - NSAIDS & Natural Holistic remedies

Most of the strategies and modalities that I have mentioned in this book have been more on the holistic side. But in some cases, the use of man-made pain treatments is needed and can be very effective if taken in moderation and according to the instructions. I have taken pain relievers for over twenty years. The first time being when I was a senior in college and was recovering from a back injury and an ankle sprain during training camp.

The first game of the season was 2 weeks away, and the team doctor prescribed ibuprofen – 800 mg pills. I'm not sure if they work effectively, but they damped the pain long enough for me to heal up for the first game of the season on ESPN, a nationally televised game. As my

playing career progressed and I played professionally, I was given several types of anti-inflammatories. There were a few were I had to go in weekly to get my blood pressure, and other tests done just to ensure that I was not suffering from one of the many side effects that came along with consuming that particular medicine.

Just for the sake of understanding, I am going to briefly explain the three most common types of medicine that I have experiences taking to relieve pain and inflammation. The first is Ibuprofen (Advil), Naproxen (Aleve), and Acetaminophen(Tylenol). Most people think that all pain relievers are the same, but they are not. Two of the medicines that I mentioned earlier are not technically considered pain relievers at all. There are medicines that are classified to limit and or prevent inflammation; they called non-steroidal anti-inflammatory (NSAIDs) Ibuprofen and naproxen fall under this category and are not true pain relievers in the sense where they limit or prevent the neurological responses that case pain. Simply put NSAID's block the inflammatory response that occurs from injury or irritation within the body. The one true common pain reliever is acetaminophen or which is know by it over the counter name Tylenol.

Acetaminophen is an actual pain reliever that works in the brain to inhibit pain signals that originate from injury.

I should note that any time you restrict the body's natural response there could be additional issues that could occur. That is why there is a limit to how much of the NSAID's, non-steroidal anti-inflammatory drugs (NSAIDs) Ibuprofen and naproxen, that you can consume in 24hour period and believe me you don't want to go against these recommendations unless you don't mind possibly causing damage to your stomach and other internal organs. With acetaminophen there is a limited damage that can occur in comparison with NSIAD's when taken on a daily basis, but limitations according to the labeling should be followed. Now that we've got that out of the way let's look at how, when used correctly, these medicines can help you manage pain and help you maintain mobility and joint health.

Just in my experience I believe that consuming pain relievers and NSIAD's should be based on the amount of time you have to heal. For example if you have a limited time to heal up before you r next training session, or a physically competitive event, these medicines can help you limit and or manage your joint pain, which can allow you

to perform without pain improving your results and performance.

There are also holistic pain-relieving remedies that are available, these take a bit longer to relieve pain, and because it takes time for the medicinal effects of these holistic remedies to sooth the symptoms of joint pain and relive inflammation, holistic remedies are not an overnight pain and inflammation remedy for the treatment of the symptoms of joint pain, but they are more of a preventative measure and in my opinion that require you to include them in your nutrition plan so you can consume them daily not as needed. Now we are going to look at several of the most common holistic pain remedies that are used specifically to treat joint pain symptoms, like inflammation, wear and tear of the joint.

First, we are going to look at the top 5 nutrition based holistic remedies for the symptoms of joint pain, because in most cases these remedies are more affordable and can be readily available to you for your use.

- 1. <u>Ginger</u> Ginger has anti-inflammatory, antioxidant, and anti-cancer properties. Because of this, it's thought to boost your overall immunity.
- Turmeric Curcumin, the active ingredient in turmeric, has been used in folk medicine for years.
   Unlike other types of herbs, turmeric may work best in fighting joint pain when taken orally.
- 3. <u>Willow bark</u> Acts a lot like aspirin, so it is used for pain, including headache, muscle pain, menstrual cramps, rheumatoid arthritis (RA), osteoarthritis, gout.
- 4. **Green tea** is one of the most popular beverages in the world and has been used to reduce inflammation in the body. It's possible that green tea can be used to treat arthritis inflammation in the form of beverages, tablets, or tinctures.
- 5. <u>Boswellia</u> also called frankincense is praised by alternative medicine practitioners for its anti-inflammatory capabilities. This herb is thought to work by blocking substances (leukotrienes) that attack healthy joints in autoimmune diseases such as RA or Rheumatoid Arthritis.

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There is no magic bullet to managing or preventing joint pain, the key is not to ignore the pain and to become engaged with the process of prevention and to be consistent with being physically active. The timing of the treatment of your joint pain will more than dictate the type of pain management that will be the most effective for you. The first option should always be to seek out help and the professional opinion of a health care professional, preferably an orthopedic specialist that specializes in joints that require treatment. After you have the joint examined by a licensed medical professional, you should know how to proceed and, in most cases, you will receive a plan of action and have a better understanding of what you are dealing with which will help speed up your recovery.

Under the grand scheme, the plan should be to prevent or limit pain and inflammation within the joint.

Here is my system that I use to prevent or limit my joint pain after 8+ arthroscopic procedures and countless injures to every joint in my body.

1. I maintain a moderate active schedule even when my joints are barking. This helps keep the joint in motion and maintain some strength in the musculature that surrounds the joint.

Ex. Run jog intervals for under three miles – I have a system of movements that address strength imbalances and flexibility within the muscles that surround the joint. I will cover more on that later.

2. I try to limit consistent consumption of foods that may promote inflammation, like processed foods, some dairy, and foods high in sugar. This is hard for me due to my soft addiction to cookies. And I try to have colorful plate of various fruits and vegetables, lean healthy protein choices, and I try to drink close to a gallon of water a day – min of 120 fl. oz.

3. I Meditate daily, this in my opinion is essential to the healing and maintenance process that occurs in the body, which may not be considered by most as an effective way to help the healing process. But in my experience meditation helps me be breath clearer and more consistent. There are studies that show that clear, consistent breathing can help reduce inflammation and help manage pain.



## CONCLUSION

### FINAL THOUGHT

This book was an expansion of one of my blog posts that I published back in 2018 on the Atlas Pro Training Website. I wrote this blog post during a time during a time when I was working with a majority of general population clients and one of the main issues that that they dealt with was issues of joint pain and the limitations that it caused them in their everyday lives. I hope you have found this brief look at the different ways that joint pain can be managed beneficial to you, and I hope it helps you develop a plan of action to manage your joint pain, with the goal of possibly eliminating joint pain. I hope this guide will be a valuable resource to you in your pursuit to live a health and active life. I wrote this book to show you different options on how you can to you how you treat and manage your joint pain and discomfort joint pain.

My goal as I mature is to live a life without physical limitations due to "uncontrollable" joint pain, these limitation have lead to missed opportunities to, run a marathon, or an obstacle race, and in most cases just trying to keep up with our everyday lives. As we grow and change physically as we mature there is no one "cookie cutter" plan that comes in a magic pill, supplement, or herb that will eliminate pain, but in my opinion all tools should be on the table in regards to managing and relieving joint pain in the hope of eliminating it.

Over the last 20 years pain management has been viewed to only consist of the use of powerful medications, or a specific herb or spice that can be used to reduce pain and inflammation. In my opinion this is putting all of your eggs in one basket, and hoping for relief without any effort or engagement in the process of managing your joint pain and inflammation. Being physically active on consistent bases is medicine, and there are hundreds of studies that have been published over the past decade to prove this. But if you are at the point where your joint pain is unmanageable; this should be decided after you have been diagnosed and treated by a licensed medical professional so you can understand where the problem is coming from and in order to know what you are dealing with.

It is up to you to become engaged and develop a plan of action by doing you own research or contacting and meeting with a movement specialist such as a physical therapist or a certified Trainer/Coach (depending on the severity of you joint pain) with basic knowledge of kinesiology and movement. The process to start to move and exercise, with the help of medicine, mind set, and natural remedies mentioned earlier in the book will not be easy but if you stick to it your effort will be rewarded in the end with a health mobile body. Solutions to any problem require time, effort, and consistency on our part and it is no different with joint pain management. Your engagement with the process of healing yourself will give the tools to manage your joint pain more effectively and give you the blueprint to help you STAY AHEAD OF THE GAME AND AWAY from pain.