Module 10: Exercise Progression in the Treatment of Arthritis

"I need not to be incapacitated the next few days after I exercise." Julie Comer, RA Patient

Assessing the Client (*Sample Client Intake Form in Appendix*)

When doctors examine, assess and diagnose patients who they think may have arthritis, they follow an evaluation process that includes various steps. For example, symptoms may be apparent through a physical examination, but X-rays are often used to show the extent of any damage to the joint. Blood tests and other laboratory tests are also extremely useful tools when determining the type of arthritis that is present.

As an arthritis fitness professional, it is important to not only be educated about the various types and symptoms of arthritis, but also how to properly assess clients by taking into account their physical or emotional limitations. Following a specific protocol to onboard new arthritic clients and understand their abilities and needs is crucial. This is the first step to developing trust and creating a culture of open communication where the arthritic client feels they are supported and their voice is heard.

In addition to making sure arthritic clients are cleared by their doctor to exercise, a thorough client intake form should be filled out and discussed before beginning a baseline training. At this time, current or past injuries, medications, and concerns must be fully addressed. This is the time to lay the groundwork for a successful client-trainer relationship that breeds positivity, encouragement and dedication. This important dialogue is often referred to as, "peeling back the onion," and is when you will ask your client to identify their, "WHY." Here's an example:

Trainer: "What is one goal you wish to achieve by working with a trainer?"

Client: "I want to be less stiff."

Trainer: "Why do you want to be less stiff? How does this affect your life?"

Client: "When I am stiff, I can't move that well and it is sometimes painful."

Trainer: "What specific things can't you do when you are stiff, and what is painful?"

Client: "I have trouble getting in and out of my car, and I have a really hard time trying to play with my grandkids."

Trainer: "Is this painful for you?"

Client: "My joints are painful when they are so stiff, but I feel sad and depressed when my arthritis affects my daily activities."

Through an open and honest conversation, the arthritis fitness specialist can begin to educate their client on how they will help improve the quality of their life through safe and effective

exercises and emotional support. At this point, the conversation will move to the creation of a baseline workout to fully assess the physical ability of the client. Similar to the physical testing performed by a medical professional to diagnose arthritis, the arthritis fitness specialist will ask clients to perform various multiplanar exercises to look for:

- Weakness (atrophy) in the muscles
- Tenderness to touch
- Limited ability to move the joint passively (with assistance) and actively (without assistance).
- Signs that multiple joints are painful or swollen (an indication of rheumatoid arthritis)
- Grating feeling or sound (crepitus) with movement
- Pain when pressure is placed on the joint or the joint is moved

As the arthritic client carefully completes a baseline assessment, the fitness professional will take careful notes and ask for constant feedback throughout this process. Noting the range of motion or various joints, swelling, stiffness, atrophy and pain levels are key in designing exercise programs that will keep flare ups at bay. Plan a daily review with your client about the effectiveness of the program, and more importantly, create a channel of feedback regarding the intensity and tolerance of each exercise. Soliciting your client's opinion on their response to training, such as screening for exacerbation of arthritis pain, is a powerful tool to gather valuable feedback to better help your client. Because arthritis is unpredictable and can be a moving target day-to-day, an exercise or programming that works one day or week, may flare up pain the next day or week. Consistent reassessment with your client on how they are tolerating the program is essential for success when working with an arthritic client.

For example, the most important goal of treating rheumatoid arthritis is to reduce joint pain and swelling and to maintain and/or improve joint function. However, the long-term goal of treatment is to slow or stop the disease process, particularly joint damage, which can be seen on X-rays. If a long-term goal is to be able to pour coffee from a coffee pot, then the short-term goal may be to lift a coffee mug without pain for 5 straight days. Eventually, lifting a full pot of coffee coinciding with no additional joint damage on an X-ray would be the long-term goal.

Goal Setting

Before beginning any exercise program, sitting down with your client as they answer detailed questions on a "Client Intake Form" is the first step to the goal setting process. For the arthritic client, establishing realistic goals are extremely important to ensure the success and longevity of any program. This is the time to discuss the "why" behind beginning an exercise program or trusting you to help them regain strength, balance, flexibility, and more. To set realistic goals first involves a process that I like to refer to as "peeling the onion."

First, ask your clients what they wish to achieve and even offer them the "SMART" acronym to begin developing their goals. This stands for: Specific, Measurable, Attainable, Relevant and Time-Bound. Then, discuss with your client why they are motivated to achieve this goal and have them write it down to make it tangible. Then, discuss the plan of small steps that must occur

to reach this goal. As each smaller step, or goal, is reached, your client will enjoy feeling a sense of accomplishment with each milestone.

Creating Trust

This may sound obvious, but in order to create trust, you must be trustworthy. In other words, you must be worthy of gaining the trust of others. This means that you must openly communicate with your clients: be honest about your usefulness and your limitations. You may not always have the perfect solution or be able to answer every question, but be open to finding out everything you can in order to best help them achieve their goals. Find out more about their injuries, conditions, etc.Taking this arthritis fitness specialist course is a great way to qualify yourself when explaining the “WHY” and the exercise science that is involved behind each exercise. In other words, be prepared to do whatever it takes to create and maintain your relationship with your client and building a strong relationship means that there is constant and open communication.

Communication

By definition, communication skills allow you to understand and be understood by others. This includes being able to effectively communicate ideas to others, actively listen in conversations, appropriately providing and receiving critical feedback and public speaking.

Plainly stated, communication skills are the abilities you use when giving and receiving different kinds of information. Some examples include: communicating ideas, feelings or what’s happening around you. Communication skills involve listening, speaking, observing and empathizing. It is also helpful to understand the differences in how to communicate through face-to-face interactions, phone conversations and digital communications, like email and social media.

For example, there are different types of communication skills you can learn and practice to help you become an effective communicator. Many of these skills work together, making it important to practice communication skills in different contexts whenever possible. Below are some effective ways to improve communication between yourself and your arthritic client.

Active Listening

Active listening means paying close attention to the person who is speaking to you. Trainers who are active listeners are well-regarded by their clients and experience greater client retention because of the attention and respect they offer. While this may seem simple, this is a skill that can be hard to develop and improve. As a trainer, you can be an active listener by focusing only on them, avoiding distractions like cell phones, and by preparing questions, feedback and knowledge about their disease and training by thoughtfully responding.

Friendliness

In friendships, characteristics such as honesty and kindness often foster trust and understanding. The same characteristics are important between arthritis fitness specialist and client relationships. When you're working with arthritic clients, approach your interactions with a positive attitude, keep an open mind and ask questions to help you understand where they're coming from. Small gestures such as asking someone how they're doing, smiling and listening as they speak, or offering praise for work well done can help you foster productive relationships with both clients, and their support systems.

Confidence

As a arthritis fitness specialist, you have the knowledge to safely and effectively create and implement programs that will help your clients gain the strength, endurance, flexibility, balance, and confidence they need to live a more active and comfortable life. Therefore, it is important to be confident in the exercises and programs that you are implementing. For example, make eye contact when you're addressing them, sit up straight with your shoulders open, prepare all exercise sessions ahead of time so you can anticipate questions or plan for modifications. Confidence breeds success!

Feedback

Trainers who are effective communicators are able to provide constructive feedback to their clients. Feedback should answer questions, provide solutions or modifications, but still empower the client. Feedback should be honest, yet encouraging. The trainer needs to celebrate what the client can do and focus on small victories as opposed to dwelling on what the client cannot do.

Volume and Clarity

As an arthritis fitness specialist, it is extremely important to be clear and audible, especially for clients who experience symptoms of hearing loss. Adjusting your speaking voice so you can be heard in a variety of settings is a critical skill when it comes to communicating effectively. Speaking too loudly may be viewed as disrespectful or awkward in certain settings, but speaking too low may become frustrating to those who struggle with hearing deficits, especially in a large room with background noise or music. Be sure to ask your client for feedback regarding the volume of your voice as well as additional noise volumes.

Empathy

By definition, empathy not only means that you understand the emotions of others, but also that you share those emotions. This skill is important in both group and one-on-one settings because, in both cases, you will need to understand other people's emotions to select an appropriate response. For example, if your client is expressing anger or frustration while attempting to perform a certain exercise, having empathy will help you acknowledge and diffuse their emotion. The trainer who is an effective communicator may share a story with their client when they, too, experienced these emotions and how they were able to overcome it and move forward. At the

same time, a trainer who is able to understand when their client is feeling positive and enthusiastic will help to empower them and build the confidence needed to continue utilizing exercise to reduce their symptoms.

Respect

One of the most important aspects of being an effective communicator is knowing when to initiate communication, and when to respond. In a personal or group setting, allowing your client to speak without interruption is a vital communication skill tied to respectfulness. In addition, respectfully communicating means you are listening, and using your time with your clients wisely. For example, as a trainer, remain focused on the task or exercise at hand, ask clear questions, provide clear and effective feedback, give modifications when needed, and respond fully to any questions asked.

Body Language (i.e., non-verbal cues)

Paying attention to your use of non-verbal cues is paramount when working with clients. Since a great deal of communication happens through nonverbal cues such as body language, facial expressions, and eye contact, you should be paying attention to what your client is saying as well as their nonverbal language. In addition, be aware of your own body language when working with clients to ensure that you are communicating effectively. For example, be aware of what these non-verbal cues are actually relaying.

- Hands on hips - I do not agree or I will not budge.
- Arms crossed over chest - I do not agree or I am unwilling.
- Shoulders rounded - I am feeling depressed, sad or defeated.
- Smiling - I am happy to see you, open to communicating and listening.

Responsiveness

As an arthritis fitness specialist, you are a professional. Therefore, whether you are communicating either in-person, virtually, via phone or sending an email, be sure to always have an objective for each interaction. What is the purpose of the session? In addition, trainers who are fast communicators, meaning they are quick to respond to emails, phone calls, texts, or other forms of inquiries are viewed as more effective than those who are slow to respond. This is important when considering client retention. A great trick to this when considering you may have time constraints is to always reply with a brief response even if you need to go back later to add more details or follow up. To be an effective arthritis fitness specialist:

- Be clear and concise
- Practice and demonstrate empathy
- Be confident/assertive
- Remain calm and consistent
- Display appropriate body language

- Educate yourself about your client (arthritis type/symptoms/limitations)

Client Education and Transparency

As an arthritis fitness specialist, the first step to creating trust is to educate our client about the benefits of exercise. The trainer must be very clear when articulating that the workout we are providing to our clients is not *our* workout, but something that is tailored specifically to their needs and goals. If they understand how this program is custom-made for them, they will be more motivated and, therefore, more likely to succeed and continue with their training. Here's a best practice you might try: Write training sessions for each client ahead of time and make it available to view ahead of time via a document sharing platform. Viewing the workout ahead of time allows clients to ask questions or voice concerns before the session. In addition, the shared workout should contain, the date, the goal of the day, the purpose, and even an inspirational quote to spur conversation.

Finding Their WHY

Before we can program for our clients and explain to them why they are doing each exercise, we must understand why they are coming to us in the first place. The process of dissecting a client's goals can range from simple to challenging. If their goal is to lose weight, for example, we must help them break it down using the "SMART" principle (Verstegan, 2015). Note how each word serves as a building block to support the clients "WHY," and eventually serves as a foundation for creating each exercise session.

- **Specific -** How much weight do they want to lose? What action do they wish to perform? Do they wish to be less stiff in the morning? Do they wish to sit and stand unassisted?
- **Measurable -** Will we measure progress with a scale, calipers, circumference measurements, underwater weighing or clothing size? Will we measure your flexibility by how far you can reach? Will we measure progress getting up and down off a chair weekly? Will we record the amount of time it takes each morning to become less stiff?
- **Achievable -** Is this a goal this individual can actually achieve? How much work will it take to get to that goal? What is the plan when a flare-up occurs?
- **Realistic -** Are they exceeding the ideal weight loss threshold of 1 to 2 pounds per week? Are they able to get up and down from a chair with their current physical limitations? Are there any additional factors affecting stiffness in the morning?
- **Time Bound -** In what time frame will this goal be achieved? Is that too much time? Is that enough time? What happens when the goal is achieved?

Ms. Verstegan states, "Once we have "SMARTED" our client's goals, we now have an objective template to work with in our programming." It is crucial, however, to consider the deeper layers of the goal. This is often referred to as, "peeling back the onion." For example, why does this

client really want to lose weight? So that she can fit into those size 8 jeans again? So that she can get off of those extra meds? So that she can pick up her grandkids? So that she can feel beautiful again? So that she can experience less chronic pain and depression? Once these deeper layers are revealed, the true "WHY" can be identified, and the most effective training programs to reach these goals can be designed.

How do you know if your program is going to be effective? As an arthritis fitness specialist, this is one of the most important questions that should be at the forefront of your mind before, during and after each session. If you have taken the aforementioned steps outlined in this module, thoroughly assessed your client, established trust by developing open and honest communication, and set clear goals with their WHY as the foundation, then it is time to reassess the process.

Now is the time to revisit the "SMART" acronym that you used to develop their goals. What specific goals did you identify as specific, measurable, attainable, relevant and time-bound. After each session, there should be an open discussion between the client and trainer to revisit both the daily goals and focus of the session with an emphasis on how this is moving them towards their bigger goals.

As the arthritis fitness specialist, reviewing all data and notes you have recorded over a set period of time while working with your client will provide the evidence needed to assess progress. However, since each arthritic client has their own individual program in order to work towards their goals, it is important to pay close attention to their specific benchmarks. Tracking the outcome of each session by recording exercise repetitions and time, and the client's flexibility, range of motion, and lack of pain are important indicators of program effectiveness.

In addition to analyzing hard data about the client's physical fitness and pain levels, program effectiveness should also be measured by the mental state of the client. An effective program produces a positive mentality; the client should feel accomplished, empowered, and successful after each session. Just as you may set physical benchmarks, mental or emotional benchmarks also need to be addressed. Is the client more willing to step outside their comfort zone? Are they sharing more information with you? There must be a certain level of trust between both the client and trainer that allows for open communication and feedback to avoid injuries, flare-ups or other negative effects. As the arthritis fitness specialist, it is up to you to analyze both the physical and mental data to ensure you are providing your client with the most safe and effective program to best meet their needs.

Creating a trusting relationship that promotes a culture of open communication with arthritic clients will allow for the most authentic feedback. As an arthritis fitness specialist, you will have a heightened knowledge of how best design safe and effective exercise programs to meet the needs of each client. Just as every person has unique fingerprints, every arthritic client's body will respond differently to the stress placed upon it by exercise. While muscle gain is a product of overloading muscle fibers in order to tear them down so they can rebuild during recovery and rest periods, this principle must be carefully considered with the arthritic client.

Many symptoms of arthritis may appear during, immediately after, or up to 24 hours or more after the exercise session. These "flare ups" can be very painful and debilitating to the arthritic

client and can last days or weeks. While arthritis is an unpredictable disease where symptoms may come and go, it is important to consider what exercises and movements may be causing "flares." For this reason, both the fitness professional and client need constant communication before, during and after all sessions to closely monitor the physiological and emotional responses to each movement. In addition, feedback from the client should be carefully recorded throughout the duration of the training in order to keep track of client tolerance to various stimuli to use as a guide to post-exercise assessments.

In addition, consistent positive reinforcement is crucial to not only motivating the arthritic client throughout a session, but also empower, improve confidence and improve the overall mood of the client. Remember that an arthritis diagnosis may cause depression as symptoms increase which may include a grieving process when they are no longer being able to complete daily activities. This is where the power of the arthritis fitness professional comes into play.

Exercise Program Design - Part I

Guidelines

Careful consideration must be placed upon various exercises and modalities for the arthritic client. For example, cycling, low-impact or step aerobics should be completed no more than 3-5 days per week and the intensity should remain at about 60-80% of the max heart rate. You may reduce the intensity to 40-70% of the max heart rate and decrease the duration to 30 minutes to cater to individual fitness levels. In addition, when working with arthritic populations, there are special considerations, such as avoiding heavy lifting and high repetitions. Participants need to stay in pain-free ROM at all times, which may mean that they will need to start with only 5 minutes of activity. Only then, would they progress based on the severity of their condition.

General Population

Note that whether you're working with general fitness clients or the arthritic population, training in all planes of motion is essential. There are various human movements typically in a single plane of motion, however, most human movement requires us to move through all planes of motion throughout the day. Whether it's turning to walk up a staircase, playing catch with kids, or simply changing directions while walking, the joints of the human body are moving through the different planes to create proper movement. Doing this effectively, efficiently, and safely requires strength, stability, and flexibility in all three planes.

Arthritic Populations

Note that when working with arthritic populations, designing exercise programs that work all planes of the body is paramount; however, it is important to remember when integrating multiplanar exercises into your client's workout that you should:

- Focus on exercises involving the major joints of the body (e.g., hip, knee, shoulder, elbow, wrists, etc.).

- Emphasize movements that include multiple joints; check for kinetic chain alignment.
- Start slow, build strength/confidence; multi-joint movements tend to be more complex.
- Mix it up. Include new movements, and new equipment/modalities in each workout.

Multiplanar training is a balanced training program that focuses on moving the body through all three planes of motion. This is incredibly important because most human movements (daily activities and athletics) require us to move effectively through all three. In order to support proper functional movement, we need to ensure we are including multiplanar exercises in our clients' routines. Functional training and a varied workout series can help prepare the body to move in many directions. It's about more than just one muscle group or plane of motion, so be sure to start simple; focus on multi-joint, complex movements; and use a variety of different exercises and modalities.

Protecting Joints

It is paramount to slowly and ease the joints into exercise, especially if they have not been active for a while. If joints are pushed too hard, the muscles can be overworked and lead to an increase in joint pain and additional swelling. For example:

- **Keep the impact low -** Low impact exercises like stationary or recumbent bicycles, elliptical trainers, or exercise in the water help keep joint stress low while you move.
- **Apply heat -** Heat can relax your joints and muscles and relieve any pain you have before you begin. Heat treatments — warm towels, hot packs or a shower — should be warm, not painfully hot, and should be applied for about 20 minutes.
- **Move gently -** Move your joints gently at first to warm up. You might begin with range-of-motion exercises for five to 10 minutes before you move on to strengthening or aerobic exercises.
- **Go slowly -** Exercise with slow and easy movements. If you feel pain, take a break. Sharp pain and pain that is stronger than your usual joint pain might indicate something is wrong. Slow down if you notice swelling or redness in your joints.
- **Ice afterward -** Apply ice to your joints for up to 20 minutes as needed after activity, especially after activity that causes joint swelling.

As the arthritis fitness professional, it is important to have open communication both during the assessment and exercise phase of this process. Encourage clients to trust their instincts and avoid exerting more energy than they think their joints can handle. Slowly increasing pain-free exercise length and intensity is the key to safely and effectively implementing an exercise program to meet the needs of all types of arthritis.

Multi-Planar Movements

Many traditional weight lifting programs tend to spend a significant amount of time in the frontal and sagittal planes (i.e., squats, lunges, leg press, bicep curls, lateral raises, tricep extensions, etc.). We can't forget that there are many joints and muscle groups that move in more than one direction and most of our daily movements require us to move in all the planes of motion. This is why multiplanar training is essential. Let's take a look at what multiplanar training is why it is important, and some exercises and tips to begin designing safe and effective programs for arthritic clients.

Foundational Movements

There are 6 foundational movement patterns that characterize how the human body moves. As a fitness professional, if you want to be a strong, athletic, healthy human, you train all of these foundational patterns. These are: Squat, hinge, lunge, push, pull, and carry.

There is a problem, however, because not all the exercises that mimic these patterns are right for every *body*; at least, not right away. For example, if you start with the wrong squat variation for your body type, skill level, injury history or goal, you'll wind up with a banged-up body.

- Range of Motion
- Balance, Stability and Flexibility
- Endurance, Strength and Power
- Breath and Mindfulness

Exercise Program Design Breakdown Part II

Dynamic Warm-ups

By definition, a dynamic warm up is a series of movements performed dynamically with the purpose of restoring active flexibility and/or preparing the joints, connective tissues, and muscles for dynamic movement with the purpose to promote muscular force (via concentric, isometric, eccentric contractions). When designing a training program for the arthritic client it is crucial to first make sure the client has clearance from a medical doctor and a proper client intake meeting has taken place. After your initial greeting and verbal assessment of the client, each session should begin with a series of dynamic movements. This portion of the training will generally last anywhere from 10-15 minutes during a 60min session or 5-7 minutes during a 30min session.

This is the time to assess your client's range-of-motion, flexibility, level of pain (if any), and begin to bring blood flow to the muscles and increase circulation. It is important to include both concentric and eccentric movements that will lengthen and contract the muscles in preparation for exercise. In addition, be advised that isometric stretching during the warm-up phase of any exercise program could be contraindicated. If muscles are not "warm," attempting to hold a stretch can result in various injuries such as muscle pulls, strains, or sprains.

Examples of dynamic exercises suitable for the arthritic client may include:

- Head/Neck circles
- Shoulder rolls/shrugs
- Arm/Wrist circles
- Shallow squats/lunges
- Walking/Marching in place or jogging (depending on client's fitness level)
- Hip circles/ankle circles/ toe taps

Working in the Workout

The United States commonly refers to exercise as "working out," when in actuality, exercise should be something that we "work in" to our lives to live longer, healthier, and pain-free lives. As the trainer, be aware that many of your clients may be new to exercise and that it may be intimidating, scary, and uncomfortable. While you will be in constant communication with your client regarding the importance of each exercise in relation to how it will help to alleviate symptoms of arthritis through a combination of strength, flexibility, and balance, this is also the time to be empathetic and supportive.

After the dynamic warm-up is complete, it is time to introduce the "focus of the day." During this 20-40min portion of the training, this is where you will utilize a combination of multiplanar exercises to meet the needs of each individual client. Clearly communicating the "why" behind the exercises and how they will aid in reducing signs and symptoms of arthritis is key to building trust and respect from your client. As an arthritis fitness specialist, though, always remember that arthritis varies from person to person, and what your client may be able to do one day, he or she may not be able to do the next. Flare ups are very common among people who live with arthritis, and exercise may occasionally bring on an increase in pain. Examples of effective exercises for the arthritic client may include:

- Squats with or without aid/chairs/rails
- Walking up and down stairs
- Lateral steps with or without a band
- Bicep/Tricep curls with light weights
- Multi-directional lunges (Shallow)
- Knee lifts/toe taps/lateral step overs
- Bicycling, swimming, water walking/jogging, elliptical, stair climber

The Cool Down, Stretch and Breath

The cool down phase, which consists of isometric stretching, breath awareness, and mindfulness practices is just as important as the dynamic warm-up and the exercise portion of the workout. The cool down allows the breath to gradually return to the same rhythm it had before the workout and greatly helps to prevent muscle soreness. It's common for the general population to feel stiff or sore after an exercise session, so it is crucial for the arthritic client to spend even

more time than the average person to complete a proper full-body and mind cool down. As an arthritis fitness specialist, the cool down may be the difference between clients experiencing slight muscle soreness and discomfort to experiencing a severe flare-up that may leave them unable to exercise for an extended period of time.

It is also important to note that extended cool downs are usually implemented following aerobic exercise, however, the arthritic client should also be engaging in an extended cool down after each session due to the type and current progression of their disease. The cool down should include muscle movements at a lower intensity combined with stretching. It is important to gradually lower the heart rate back to under 120 beats per minute during a cool down, instead of drastically stopping after exercise. One of the most important functions of the post-exercise cool down is to prevent dizziness. Strenuous exercise causes the blood vessels in the legs to expand, bringing more blood into the legs and feet.

Allows Heart Rate to Normalize

Most forms of exercise cause the heart rate to increase. Cardiovascular exercise, also called aerobic exercise, can increase heart rate substantially, and at the end of workout, the goal of the exercise program is to return the heart rate back to normal, slowly. This helps to avoid lightheadedness or a feeling of faintness.

Slows Breathing

When heart rate increases with exercise, breathing can become deeper, and more rapid. This is a sign that one is working hard and burning more calories with exercise. A cool down allows the breath to gradually return to the same rhythm it had at the start of the workout.

Improves Relaxation

One of the most important benefits of exercise is improved confidence. A cool down is a great opportunity to reflect on accomplishments and give your client credit for the hard work done during the workout. This can promote a sense of relaxation and well-being, and boost confidence.

It is also helpful to include relaxation exercises in the cool down. This might include a few minutes of deep breathing, or a yoga pose called Savasana. According to the Yoga Journal, Savasana allows the body and mind time to process what has happened during a movement session. It provides a necessary counterpoint to the effort put forth during exercise. Savasana is also something that you may encourage your clients to practice before bed each night to quiet their minds and experience more restful sleep. Examples of effective cooldown practices (standing/seated/laying down) for the arthritic client may include:

- Savasana
- Guided imagery
- Corpse pose
- Cat/Cow pose (variation of spinal flexion and extension)

- Overhead reach
- Calf stretches on a step/against a wall or modified Downward Dog
- Myofascial Release Foam Rolling

A Sample Session Creation Document can be found in the course Appendix

Post-COVID Exercise Program Design

In 2020, the world became a very different place for the fitness and medical fitness professional due to the onset of the Covidi19 pandemic. In the past, fitness professionals mainly worked inside buildings that were devoted to promoting health and fitness. They had an array of exercise equipment, space, and other resources at their leisure. As a result of Covid-19, many local, state, and federal safety mandates were implemented, some actually prohibiting large gatherings of people in indoor spaces, increasing social distancing, wearing facemasks, and more. Thehe fitness professional needed to adapt and reimagine exercise.

The "new" normal for the arthritis fitness specialist may now most often involve outdoor exercise with little to no equipment. Variables such as the weather, uneven surfaces, and even access to bathrooms must now be considered when creating and scheduling exercise programs for the arthritic client. In addition, guaranteeing a safe space for an efficient and effective session during a time of heightened stress and uncertainty must also be considered when conducting your "mental check in."

Workout Recommendations for Inside and Outside Locations

Due to the global pandemic which began in early 2020, the emergence of outdoor workouts has become more normal. Big box gyms, fitness centers, boutique studios, and more have transitioned to outdoor spaces to reduce the spread of the Covid-19 virus. As a result, the use of parks, beaches, fields, parking lots, driveways, and decks have now replaced indoor fitness locations. Many of these locations are open for public use, but be sure to check with the local and state laws to see if you will need a permit to hold group exercises sessions.

Training Outdoors and Equipment

For the arthritic client, some of the most safe and effective exercises involve body weight-only exercises. Therefore, the use of outdoor space is a great option to not only practice social distancing, but also engage in many functional body-weight exercises that promote longevity. While the arthritic client should not be lifting heavy weights due to the unnecessary strain it causes on muscles and stress on already weakened bones, outdoor equipment can be very simple.

Here are some examples:

EQUIPMENT	EXERCISES
16oz. Water Bottles	Bicep Curls, Tricep Kickbacks
Small Sticks/Branches	Finger/Hand Grabs, Wrists-Light Drumming
Towel	Stretching/Yoga/Meditation
Reclining Chair or Beach Chair	Seated March, Supine Crunch
Bungee Cords	Lateral Band Steps, Wrists-Front Raises
Backpack/Pocketbook	High Rows, Deadlifts
Paper Plates/Frisbee	Lateral Single Leg Slides, Play Catch

Training Indoors and Equipment

EQUIPMENT	EXERCISE
1-5 LB Dumbbells	Bicep Curls, Tricep Kickbacks
Drumsticks/Pencils	Finger/Hand Grabs, Wrists-Light Drumming
Yoga Mat	Stretching/Yoga/Meditation
Exercise Ball	Seated Bounce or March, Supine Crunch
Round Bands	Lateral Band Steps, Wrists-Front Raises
Light KettleBell	High Rows, Deadlifts
Glider	Lateral Single Leg Slides, Play Catch

Social Distance Guidelines

- Personal Touches - Social distancing is recommended in reducing the spread of COVID-19 and has reduced the number of infections according to the CDC. Therefore, personal touches such as high-fives, hugs, pats on the back, and hands on form correction should be carefully considered. It is important to communicate with your client on their comfort level as well as whether or not they may want you to wear gloves.
- Masks - Depending on the latest guidelines, restrictions, and policies, masks may be required for all in-person sessions. However, be aware that many types of arthritis are considered autoimmune diseases that compromise the immune system. For this reason, masks should be worn around these clients to prevent the spread of airborne particles that are said to cause infection.
- Disinfecting - While working with clients who may have compromised immune systems, disinfecting before, during, and after all sessions can make a huge difference in fighting the spread of disease. Hand sanitizer and disinfecting wipes and spray should be readily

available throughout the session and each piece of equipment used should be immediately wiped clean once it is no longer in use.

Since COVID-19 is said to be an airborne disease, sneezing, coughing, eye-rubbing, or touching of the face is said to lead to the spread of infection. Remember that immunocompromised clients such as those with rheumatoid arthritis are at a much higher risk for getting sick than the general population. If training clients indoors, it is recommended that temperatures be taken upon entry and if there are any signs of sickness, training should not take place.

Virtual Training Guidelines (*e.g., ZOOM®*)

One of the most popular ways to work with the arthritic client who may be immunocompromised is to conduct sessions via a free online platform such as ZOOM, Google® Meets, private Facebook® groups or FaceTime®. These easy-to-access visual tools have revolutionized the reach of the fitness or medical fitness professional. In addition, the arthritic client is able to reap the benefits of knowing they are working with a certified professional in the comfort of their own home.

Although conducting virtual training sessions is a great alternative to in-person training, there are many important guidelines that must be followed. First, a medical release or waiver must be signed when working in person or virtually with clients. This should be sent ahead of time and kept on file at all times. Another option may be to have a verbal agreement with the client. They can simply state that they agree to work with you and will not hold you liable for any injuries attained during the virtual training. Recording the session would then be a way to document the spoken agreement. In addition, the arthritis fitness specialist also needs to carry their own fitness liability insurance if they are working privately with clients that don't fall within the auspices of another company or employer. This can be purchased for a yearly price of around $100 from various accredited companies.

As an arthritis fitness specialist, it is also crucial to follow the same guidelines with regards to assessments, reassessments, communication, and feedback when you are working on a virtual platform. Be sure to prompt clients to clear away any potential fall risks, drink water, and remain in view of the camera at all times. Clients have a greater chance of injury due to improper form if the trainer is unable to see them and effectively communicate proper form and alignment cues.