



Overcoming the Barriers:

A Fitness Professionals Guide to Removing Fitness Facility Barriers for Persons with Multiple Sclerosis



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Printing: Priority Printing

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Alberta & Northwest Territories Division



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MS ActiveNOW

MS ActiveNOW is a health promotion initiative for persons with multiple sclerosis (MS) designed to:

- Increase awareness of the benefits of daily physical activity and exercise for persons with MS, caregivers, and providers in the health, fitness and lifestyle industry;
- Help fitness providers design exercise programs for persons with MS, so that persons with MS may enjoy the benefits of exercise safely and with confidence;
- Increase access to active living and exercise opportunities in the community for persons with MS; and
- Increase intention for physical activity and exercise in persons with MS.

MS ActiveNOW uses a combination of information sessions and target audience specific materials in order to raise awareness and educate persons with MS, fitness and lifestyle professionals and health professionals with regard to the role of exercise in symptom management of MS and to provide a guide for suitable exercises for persons with MS.

Introduction

Over the past 10 years, there has been a noticeable shift in the understanding of disability and treatment of persons with disabilities. A medical-based model for service delivery has now given way to social models that place emphasis on health promotion and the prevention of secondary health conditions such as obesity, type II diabetes, and hypertension¹. The medical viewpoint conceptualized problems as residing within the individual; that disabilities were difficulties or limitations. Contrary to this, the social model of disability views disability as a function of impairment and environment and also the concept of disability as a part of. What this means is that by engaging in physical activity within a welcoming, comfortable and accessible facility it can help to unlock or maximize a persons individual potential. In fact contrary to historical views or dogma, exercise and physical activity for persons with MS carries the same health benefits as people without MS².

In the past, many people with disabilities, including persons living with MS, avoided using community fitness and recreation facilities due to a number of reasons or barriers. First, persons with MS were advised to avoid exercise due to the risks of elevated body temperature, physical exertion, fatigue, and unpredictability of the disease³. However, recent research has shown that exercise in moderation is beneficial and safe for individuals with MS and is now recognized as an important part of the care plan and symptom management for MS. Thus, the goal of exercise for persons with MS is to improve overall health and maintain function in order to maintain a self defined level of independence and quality of life⁴.

Second, barriers can exist that prevent a person with MS from fully participating in activities within fitness centres, whether they are physical, psychological or social in nature. For example, facilities and programs designed to include persons with disabilities (including MS) still have limitations, as a facility may lack adequate access, ramps and accessible washrooms or change rooms⁵. As a result of these limiting factors, many individuals with disabilities are looking to use a small number of specialized facilities and programs that are often operating at maximum capacity. The end result is an increased number of people waiting for access, but more importantly waiting to be physically active in general and not receiving the immediate and ongoing benefits of being physical active.

Third, many fitness facility staff lack knowledge regarding helping people with disabilities become active or knowledge on specific disabilities. This lack of knowledge or awareness can either be around understanding and knowing what MS is and the symptoms associated with it, or the impact that MS can have upon physical activity levels and intention

for physical activity. This in turn can create a barrier to participation as a person with MS may not feel comfortable in seeking the guidance or aid of the staff around program design and proper exercise principles.

Finally, a potential perceived lack of social support or a sense of belonging may contribute to a lack of access. This barrier alone can be difficult to overcome, especially when a person with MS may not feel confident in their abilities to participate in physical activities or exercise programs.

The intent of this brief guide is to provide fitness and lifestyle professionals along with fitness and recreation facilities with key information on overcoming or removing the barriers to participation that persons with MS or other with disabilities may experience.

General Barriers to Participation

The community environment, specifically the community fitness and recreation centre can be a complex environment filled with many challenges for a person with MS. These challenges or barriers can be physical, social, psychological, or economic in nature. These barriers can either be present singularly or in combination. Presented here are some of the most common barriers experienced or discussed by persons with disabilities, including persons with MS.

The Physical Environment

- Lack of accessible design in the facility (i.e., accessible routes, ramps, washrooms, changing areas, etc.)
- Lack of accessible design in equipment
- Lack of transportation to and from facilities

The Social Environment

- Attitudes of other community members or users of the facility (i.e., discomfort, negative attitudes)
- Attitudes of staff towards persons with disabilities
- Facility staff lacking knowledge about MS and the special considerations around exercise

Psychological Barriers

- Lack of confidence in abilities
- Lack of knowledge about community resources (i.e., what is out there and what is available)
- Lack of skill with mobility aids (e.g., wheelchair, walker, cane, etc.)
- Actual or perceived lack of social support or sense of belonging
- Lack of knowledge about exercise techniques
- Lack of knowledge about what special exercise considerations should be taken into account because of a persons' MS

Economic Barriers

- Membership or facility access fees can prevent persons with MS from becoming active

The aforementioned list is based upon a review of research literature into barriers to participation for persons with disabilities and direct conversations with persons with MS about their physical activity experiences using community fitness facilities^{6,7,8}. Please note other barriers may exist that are not listed, if you require additional information or support in regards to a barrier that has been brought to your attention, please contact your local chapter of the MS Society of Canada for assistance (1-800-268-7528).

Tips for Interacting with Persons with MS

As mentioned earlier in this guide attitudinal barriers can affect motivation and intention to start or continue to access a community fitness or recreation facilities. Provided here are some general tips for interacting with persons with MS or for that matter any type of disability. Doing some of these simple things can help to remove some of the real and perceived barriers people may face.

- Always treat a person with MS or for that matter anyone with a disability with the same respect that you would extend to everyone else.
- Use words that put the person first, referring to them as a “person with multiple sclerosis”. Avoid using words like ‘handicapped’, ‘crippled’, ‘wheelchair bound’, or ‘confined to a wheelchair’.
- Don’t be afraid to offer assistance to a person with a disability if you feel it might be helpful or necessary, but wait until your offer is accepted before you help. As well, listen to any instructions that the person gives about the best way to assist them.
- When talking to with a person with MS, speak directly to them rather than through a companion who may be with them.
- Let the person with MS make their own decisions regarding what they can or cannot do. Do not impose limitations on someone else’s capabilities or interests. Be careful not to be overprotective.
- Be considerate of the extra time it may take the person to get things done. Let the person set the pace.
- Do not move a person’s wheelchair or mobility aid out of reach without their permission if they have transferred onto a piece of equipment. A person’s wheelchair or mobility aid can be considered an extension of their body and should be treated as such.

Determining Accessibility of a Fitness Facility

Accessibility can be a large barrier to participation for a person with MS in deciding whether to start, continue with, or cease participating in physical activity and exercise. When thinking of accessibility people commonly think of issues related to building access and public spaces. Equipment can also play a very important role in determining accessibility. Presented here is a list of potential barriers to determine whether your fitness or recreation facility can meet the needs of persons with MS. In addition, this information can be used by a person with MS to decide whether your facility is the right place for them.

Adaptability of exercise equipment

Can the equipment be modified or adjusted to accommodate the needs of the person with MS? For example, cardiovascular equipment with removable middle consoles or adjustable seats are easier to get on and off.

Adaptability of exercise classes

Do the fitness classes (i.e., cardio, yoga) at the fitness centre offer choices in exercises, pace and intensity that include participants with a wide range of abilities? For example, could a person with MS participate in a Yoga or Tai Chi class while seated in a chair instead of standing or lying on the floor? A person with MS can and will still receive the same health and exercise benefits as if they were standing or lying⁹. In addition, the ability for the person with MS to select their own intensity and participation level will ensure that they work within their abilities and ensure ongoing continuation in exercise and physical activity.

Design of activity spaces and placement of equipment

Does the space between equipment at your fitness facility allow for ease of manoeuvring around, either with mobility aids (i.e., wheelchairs, canes, walkers, scooters) or without? Is there enough room for a person who uses a wheelchair (motorized and non-motorized) to move around with ease to allow them to transfer on and off equipment without assistance?

An important feature that makes it possible for a person using a wheelchair, scooter, or other mobility aid to manoeuvre around independently is an accessible route. Without it your facility will not be usable by many people with mobility impairments. An accessible route is a clear path at least 36 inches wide with no steps or stairs.

Most fitness facilities have rows of treadmills, exercise bikes, and other cardiovascular equipment grouped, usually very close together. Many people with disabilities, including persons with MS can use much of this equipment, but given the space restriction between pieces of equipment, access is often difficult. Although it is ideal to have 36 inches of clear floor space between each piece of equipment, this however may not be possible. Often the simplest strategy is to locate one of each type of equipment at the end of a row along the accessible route. A good rule of thumb is to plan a circle 60 inches in diameter beside the exercise equipment with the circle overlapping the accessible route¹⁰. Therefore, if a person's wheelchair or scooter can be parked perpendicularly to a piece of equipment, allowing other people to still pass by while the person is using the equipment and not feeling in the way.

In terms of the placement of strength training equipment, it is important that any stand-alone equipment has adequate space on all sides. A good minimum space is 36 inches, but this is often not sufficient for many people. If possible, try to provide somewhere between 36 and 48 inches of clear floor area perpendicular to the equipment on any side¹⁰, thus allowing for increased ease of transferring and providing easier access to pins or controls while still seated in their wheelchair. Note, some people who use wheelchairs prefer to transfer from their right, while others from the left, and they may take an angled approach to better position themselves for a safe transfer.

Knowledge base of staff

Of important consideration to persons with MS is the knowledge base of the staff. When persons with MS or other types of disabilities look to access community fitness or recreation facilities they are looking for staff that are aware and knowledgeable about their disability and the special considerations or contraindications related to exercise and the disability. For example, the effect that excess heat can have in causing a temporary worsening of MS symptoms or the impact fatigue can have on duration and intensity of exercise and activity levels.

Attitudes of staff and facility members

Attitudes can play a significant role in whether a person with MS decides to be active and participate within a community fitness or recreation facility. The decision to participate can be influenced by the attitudes of many different people, such as the fitness centre staff and management or people from the community who use the facility. Provided below is a list of questions to ask yourself about whether your fitness or recreation facility is the right place for a person with MS. Also these questions may provide insight into areas to which you can improve the overall experience your members have at your facility.

Will a person with MS feel welcome in your fitness facility? Does the atmosphere and climate of the facility welcome a person in and are they made to feel a part of the facility? People from the facility should freely talk and/or interact with the person on a personal level, treating them with respect and dignity.

Will a person with MS be able to establish social relationships in your fitness facility? The physical design of the facility as well as existing members should allow for a person with MS to meet new people, develop social relationships, and develop friendships.

Will a person with MS feel comfortable exercising in your fitness facility with other members who may not have a disability? Does a person with MS feel they can go about their business or routine within the centre without having to draw unneeded or unwanted attention to themselves? Are they able to access and use the equipment with ease, not feel pressured to conform to everyone else, and not feel as if they are a nuisance or burden on the facility or staff.

7 Principles of Universal Design

One way to create accessible and barrier-free opportunities is through the use of universal design, which represents a model of design process that fully supports the social model of disability. Universal design is based on the assumption that all people have a disability and seeks to design products, buildings and spaces to be used by all people to the greatest extent possible regardless of abilities¹. The result of universal design is flawless incorporation of accommodations that do not call attention to disability as being a unique experience. Within universal design there are seven principles to guide designers, fitness professionals and users of these community resources in creating barrier-free facilities. These principles can be used by you to assess and determine the accessibility of your fitness or recreation facility. The seven principles are as followsⁱ:

1. **Equitable Use.** The facility or centre is useful and marketable to all persons with diverse abilities.
 - Provides the same means of use for all users; identical whenever possible, equivalent when not.
 - Avoids segregating or stigmatizing any users.
 - Provisions for privacy, security, and safety should be equally available to all users.
 - Makes the design appealing to all users.
2. **Flexibility in Use.** The design accommodates a wide range of individual preferences and abilities.
 - Provides choice in methods of use. For example it accommodates right- or left-handed access and use.
 - Facilitates the user's accuracy and precision.
 - Provides adaptability to the user's pace.
3. **Simple and Intuitive.** Usage of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level.
 - Eliminates unnecessary complexity, while providing consistency with user expectations and intuition.
 - Accommodates a wide range of literacy and language skills.
 - Arranges information consistent with its importance.
 - Provides effective prompting and feedback during and after task
4. **Perceptible Information.** The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.
 - Uses different modes (pictorial, verbal, tactile) for redundant presentation of essential information.
 - Provides adequate contrast between essential information and its surroundings.
 - Maximizes "legibility" of essential information.
 - Differentiates elements in ways that can be described (i.e., make it easy to give instructions or directions).
 - Provides compatibility with a variety of techniques or devices used by people with sensory limitations.
5. **Tolerance for Error.** The design minimizes hazards and the adverse consequences of accidental or unintended actions.
 - Arranges elements to minimize hazards and errors: most used elements, most accessible; hazardous elements eliminated, isolated, or shielded.

ⁱ Adapted from The Center for Universal Design. (2007). *Principles of Universal Design*. NC State University.

- Provides warnings of hazards and errors.
 - Provides fail-safe features.
 - Discourages unconscious action in tasks that require vigilance.
6. Low Physical Effort. The design can be used efficiently and comfortably and with a minimum of fatigue.
- Allows a user to maintain a neutral body position.
 - Uses reasonable operating forces.
 - Minimizes repetitive actions.
7. Size and Space for Approach and Use. Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility.
- Provides a clear line of sight to important elements for any seated or standing user.
 - Makes reach to all components comfortable for any seated or standing user.
 - Accommodates variations in hand and grip size.
 - Provides adequate space for the use of assistive devices or personal assistance.

Guidelines for Selecting Equipment

The design of the equipment is critical to a successful exercise experience for people with disabilities, including persons with MS. The assumption cannot be made that all equipment is suitable for all users. Here are some recommendations around equipment that will benefit members of all ability levels.

Strength training equipment

- Look for equipment that offers a swing away seat allowing everyone to use the same piece of equipment. A person in a wheelchair, then, has the option of transferring onto the seat provided or remaining in their wheelchair.
- Look for equipment with small weight increments. Resistance should start near zero and should have 1- to 2-pound increments.
- Equipment should be easy to enter and exit, especially if seats and benches are not removable. Make sure padding or stability bars do not get in the way of or prevent a transfer from a wheelchair onto the equipment seat or bench.
- Wider seats and benches are important for people who need a little extra surface to maintain balance.
- Consider using multi-station equipment that is accessible to someone who uses a wheelchair. This offers a wide range of resistance activities in a small space. Anyone can use the equipment by simply placing a chair or bench in the space designed for a wheelchair.

Free weights/stretching Area

- Offer different types of free weights, including a variety of weights less than 2.5 kg, and cuff weights for those with limited grips.
- Consider providing an elevated mat for above-the-floor stretching. This will allow persons who use a wheelchair to transfer easier.

Cardiovascular equipment

- Offer different types of exercise bikes that can augment traditional exercise bikes (i.e., recumbent bikes).
- Look at equipment that provides both arms and legs, either separately or at the same time.
- Treadmills that have minimal start speed settings are good for persons with different types of mobility abilities. This allows a person to set their own pace and benefit from weight-bearing exercise. Treadmills with stable arm and handrails and have wider side steps are also important to ensure the safety of the individual while allowing them to set their own pace.

- Offer an upper arm ergometer (arm bike). This type of equipment is important for people with MS as it provides a good cardiovascular exercise.

Tips for Adapting Exercise

The following list is not exhaustive, but it does highlight important areas within exercise and physical activity that may be helpful in removing some barriers. In addition you will find some of the general recommendations of where to start in terms of making individual modifications around specifics related to exercise and physical activity for persons with MS.

Flexibility

Persons with MS may experience some form of contracture, which is the permanent shortening of muscles due to a chronic spasm or muscle imbalance due to paralysis¹². If this is the case the most recommended activity is to work on muscle flexibility before starting any other type of strengthening or conditioning program, since there may be a reduced range of motion. This may prevent a person with MS from being or becoming active, but did you know that certain body positions can affect individuals differently? For some people, lying on their back will relax certain muscles, while for others, lying on the stomach will relax them. Find out which is the most effective method for the person with MS to perform flexibility and stretching exercises.

In addition, stretching does not have to be done on a mat on the floor or by standing. A person with MS can easily do stretching from a seated position whether they use a wheelchair or just have some balance or stability issues. Almost any type of stretch can be adapted to suit an individual's needs and abilities. There are a number of different types of recommended stretching techniques for persons with MS, such as static, dynamic, and active stretching.

Static Stretching – Static stretches are usually used at the end of an exercise bout. This type of stretching helps to increase flexibility and provide a nice cool down. Studies show that significant gains in range of motion can be achieved with a static-stretching program after activity.

Dynamic Stretching – Dynamic stretches are usually used at the beginning of a training session after a proper warm up has been done. Dynamic stretches are an active way to get the blood in the muscles and core temperature of the body elevated and in condition to perform certain exercises and movements. Typically they are used more in athletic settings because they are very applicable to athletic performance since they closely replicate the movement requirements seen in training and competition. This does not mean that non athletic clients can not perform dynamic stretches, because they most definitely should, they just need to be varied more to fit the type of exercises they soon will perform.

Active Stretching – Active stretches is where a person assumes a position and then holds it there with no assistance other than using the strength of their agonist muscles. For example, a person with MS could bring their leg up high and then holding it there without anything (other than their leg muscles themselves) to keep the leg in that extended position. The tension of the agonists in an active stretch helps to relax the muscles being stretched (the antagonists) by reciprocal inhibition. Active stretching increases active flexibility and strengthens the agonistic muscles. Active stretches are usually quite difficult to hold and maintain for more than 10 seconds and rarely need to be held any longer than 15 seconds. Many of the movements (or stretches) found in various forms of yoga are active stretches.

All three types of stretches have their certain place in a persons training program and should be used appropriately. For ideas or assistance you can read *Everybody Stretch*, a booklet designed with guidelines and adaptations for stretching applicable to persons with MS. Another option is to contact the local chapter of the MS Society of Canada for resources pertaining to stretching. Please see the list of available resources at the back of this guide.

Strengthening

Limited strength can be a barrier for many people and specifically for persons with MS. Did you know that instead of having a person with MS use equipment—a family member, friend, caregiver or fitness professional can act as a partner and provide resistance? The significance of this is that it will then provide support, stability and a comfortable resistance level for the person with MS while working on strengthening. However, it is very important for the person with MS to communicate levels of comfort to the person with whom they are working to avoid injury.

Lack of knowledge around strengthening techniques and rules can be a barrier to participation. Here are some helpful tips to consider for persons with MS:

- Always have the person warm-up before lifting for approximately 5-10 minutes. A warm-up can be completed on a bike, treadmill, arm ergometer, or any other cardio equipment. By utilizing a warm-up it will help to prepare the persons muscles, nervous system, tendons, ligaments and heart for exercise by increasing blood, oxygen supply and prevent injuries.
- Ensure individuals breathe normally when lifting and use smooth fluid movements. This may mean getting them to use a lighter weight and/or lifting slowly (i.e., 2 to 4 seconds per lift).

Remember we want them to stay in the pain-free range and avoid soreness; for persons with MS, 'pain is not a gain'. Even if they need to reduce weight, number of sets and reps, they still gain benefits of being physical active.

Endurance

Depending on the persons type of MS (i.e., relapsing-remitting, primary progressive, secondary-progressive) and their voluntary control of extremities; endurance activities can be a barrier to participation. The key thing here is to provide alternative types of cardio equipment beyond the standard treadmill which everyone thinks about when it comes to endurance activities? Instead of using a treadmill, have the person use an arm ergometer (arm bikes), rowing machine, or recumbent bike; all of which work on cardiovascular fitness as well. Furthermore this then takes into consideration symptoms associated with MS, such as balance and coordination issues, vision issues, and fatigue.

Swimming can also be used as an alternative in endurance training. Chest-high water enables persons with MS to stand and maintain balance for exercises with less effort than on land and allows the person to achieve a greater range of motion within joints. The resistance that water provides can also be utilized for strengthening muscles. Water also helps reduce body heat that is generated by exercise which helps lessen exacerbation of symptoms. It is typically recommended persons with MS exercise in swimming pools with a temperature range of 26.7 to 29.4 degrees Celsius¹³.

Some people with MS talk about having difficulty gripping handles. Grip gloves or cuffs are a great tool to increase and help individuals grasp handles of exercise equipment. Also, trunk stabilizing belts can be used on endurance equipment, as well as strengthening training equipment for stability, support and increased feelings of safety.

As a person with MS looks to become more active or train for new challenges, you as the fitness professional will pick up on other ideas for accommodation and success. Remember to share your successes, failures, and ideas with other professionals and persons with MS as they try to navigate the fitness landscape. Some of the challenges you may have faced in your fitness or recreation centre along with the experiences of persons with MS may be relevant to others. Another option is to seeking out further professional qualification that could assist you in providing quality opportunities and programs (i.e., CSEP – Certified Exercise Physiologist).

MS Symptoms as a Barrier

There are several factors that may influence how a person's body responds to exercise and physical activity who has MS and at times may represent a barrier to participation. Some factors that you need to consider with exercise are discussed below. Note, that the symptoms presented here represent some of the symptoms a person with MS may experience but does not reflect an exhaustive list.

Balance and Coordination

When a person with MS is fatigued this can lead to a loss of balance and coordination, or the person may experience fatigue as a result of the demyelination process. Exercises such as stationary cycling, rowing or aquatics would be good exercises in the case of poor balance. You and your client should be aware of the exercise area (i.e., physical space), including the placement of exercise equipment, to help decrease their risk of falls.

Bladder Dysfunction

If a person with MS experiences bladder dysfunction, voiding before exercise and intermittently during the exercise session is important, particularly if drinking fluids to prevent dehydration and overheating. Recognizing that certain exercises can place pressure on the bladder causing it to empty is key to ensuring the dignity of the person with MS. This should not prevent a person with MS from exercising; however you and your client should be aware of where the closest bathrooms are located in the facility.

Fatigue

Fatigue will impact the best time of day to exercise for a person with MS. Generally, MS fatigue worsens later in the day, so it may be best for a person to exercise earlier in the day. The best way to determine this is to talk to the person with MS and get to know their daily fatigue profile (i.e., the factors that impact upon fatigue such as time of day, temperature, duration). Rest is also an important part of an exercise program and a balance between rest and exercise is needed to avoid becoming overly fatigued¹⁴. Resting for 10-15 minutes several times a day can be just as restorative as prolonged periods of rest which may include sleeping for a person with MS.

It is important to remember that fatigue that occurs in people with MS is different than the fatigue that other people may feel. In people with MS, fatigue involves the motor and sensory nerves. There are feelings of weakness, tiredness, shakiness, and incoordination with motor nerve fatigue. Fatigue of the sensory nerves can result in blurred vision, numbness, or other problems. It is important to recognize that fatigue and low levels of strength are a function of a combination of disused atrophy and detraining, as well as neurological impairment. Therefore overcoming detraining and disuse atrophy are important, but it is also important to recognize that this is not a curative strategy in relation to the neurological impairment.

Hydration

Limiting the intake of fluids throughout the day may lead to chronic dehydration and general fatigue because of a reduction in circulating blood volume. It is important for a person with MS to stay hydrated especially when exercising. This will also help to reduce the likelihood of excessive fatigue or heat exhaustion. In relation to hydration it is also important to remember that bladder dysfunction may be a symptom that some individuals with MS may experience. Thus it is essential that persons keep hydrated but remember to be accommodating to allow for frequent washroom breaks.

MS Relapses

It is absolutely essential that a person with MS have flexibility with their exercise program especially in the case of relapses. You as the fitness professional may need to modify their exercise program when ready to resume activity after an exacerbation because of lasting motor changes¹⁵. Depending on the severity of the exacerbation, light activity such as gentle stretching and range of motion (ROM) exercises are encouraged to avoid de-conditioning¹⁶. There is nothing wrong with this as it will help to regain some of what a person may have lost as a result of the attack.

Temperature

For a person with MS, an increase in body temperature with exercise can cause a worsening of MS symptoms such as blurred vision or numbness¹⁷. These symptoms are temporary and will improve upon completion of exercise. To prevent this from occurring, having the person with MS exercise in a cool environment such as an air-conditioned gym or in a swimming pool may help eliminate some of the symptoms that may occur. Cooling garments such as headbands or vests, wearing light weight clothing, drinking cold drinks, or pre-cooling the body before exercise may also help¹⁸. If blurred vision is a problem, you may find it helpful to have the person exercise in a seated position such as on a stationary bike. Body temperature is generally the highest in the late afternoon so exercising early in the day may decrease some of these symptoms as well¹⁹.

For more information on symptoms associated with MS in relation to exercise please see the list of resources within this document or you can contact your local chapter of the MS Society.

Five Suggestions for Making Your Facility a 'Welcoming Facility'

1. Remember that any effort to address the needs of people with disabilities, including those with MS is an opportunity to market and expand your membership to a growing population.
2. Assess how environmental barriers can be removed and accessible features incorporated into all areas of your facility.
3. Go beyond the minimum requirements of the law to incorporate principles of universal design to make your facility usable to many more people.
4. Purchase or replace exercise equipment with types of equipment that offer more features which make it usable for persons with varying degrees of ability (i.e., persons with and without disabilities).
5. Treat people with disabilities as you would any other member, taking into account individual needs and utilizing the many exercise options that may be available.

Closing

A fitness and recreation facility that is low in physical and social barriers can increase a person's level of independence and help them to become more active. This guide is one piece of the puzzle to helping get a person with MS started and to get past some of the barriers that they may face. As persons with MS, fitness practitioners, communities at large, and the MS Society work to create programs and opportunities, the barriers that exist are slowly being reduced and removed. Through eliminating and removing barriers, you as a fitness professional can help in striving to build capacity of and within communities to support persons with MS.

Need More Information

For more information on barriers to being active or exercise and MS, contact your local chapter of the Multiple Sclerosis Society of Canada. This can be done by calling 1-800-268-7528, by email (active@mssociety.ca) or by accessing the MS ActiveNOW website (www.mssociety.ca\alberta)

Resources

TITLE	AUTHOR(S)	YEAR	PUBLISHER
Checklist for Accessibility & Universal Design in Architecture	Advisory Board on Services for Persons with Disabilities	2008	The City of Edmonton
Everybody stretch: A physical activity workbook for people with various levels of multiple sclerosis.	J. Fowler	2003	MS Society of Canada
Understanding MS and exercise: A fitness and lifestyle providers guide	MS Society of Canada, Alberta Division	2008	Priority Printing
Activating your life: A guide to exercise for persons with multiple sclerosis	MS Society of Canada, Alberta Division	2007	Priority Printing
A health professionals guide to understanding exercise and Multiple Sclerosis	MS Society of Canada, Alberta Division	2009	Priority Printing

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OUR MISSION

To be a leader in finding a cure for multiple sclerosis
and enabling people affected by MS to enhance
their quality of life.