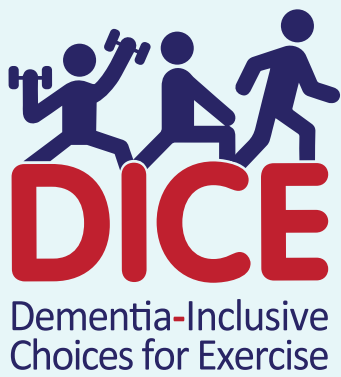




A Delivery Guide for Exercise Providers



*A Delivery Guide for
Exercise Providers*

ACKNOWLEDGEMENTS

The DICE project is supported by funding from the Jobson Family Foundation, the Schlegel-University of Waterloo Research Institute for Aging, the Canadian Institutes of Health Research [PEH-157075], and the Alzheimer Society of Canada Research Program and in-kind support provided by the Alzheimer Society of Ontario, the YMCAs of Three Rivers, the Schlegel-UW Research Institute for Aging, the City of Kitchener, and Community Support Connections – Meals on Wheels and More.





INTRODUCTION

Everyone has a responsibility to help make their exercise programs and facilities dementia-inclusive. People of all abilities have the right to participate in sport and recreational activities, including people living with dementia. Dementia-inclusive exercise programs and facilities can support people living with dementia to be engaged and live healthy, active lives. Programs that are dementia-inclusive may also help to improve accessibility to older adults (in general) as well as accessibility for people with other chronic health conditions or disabilities (for example, people with stroke, Parkinson's disease, or Multiple Sclerosis).

THIS RESOURCE WILL HELP YOU TO:

- Understand and recognize possible signs of dementia.
- Learn how to communicate in an effective, respectful way.
- Identify ways you can support a person living with dementia to participate in your exercise programs and be included in your facility.
- Connect with other resources and articles that will deepen your understanding of dementia and the role of exercise in living well with dementia.
- Understand the physical activity guidelines for people living with dementia.

TABLE OF CONTENTS

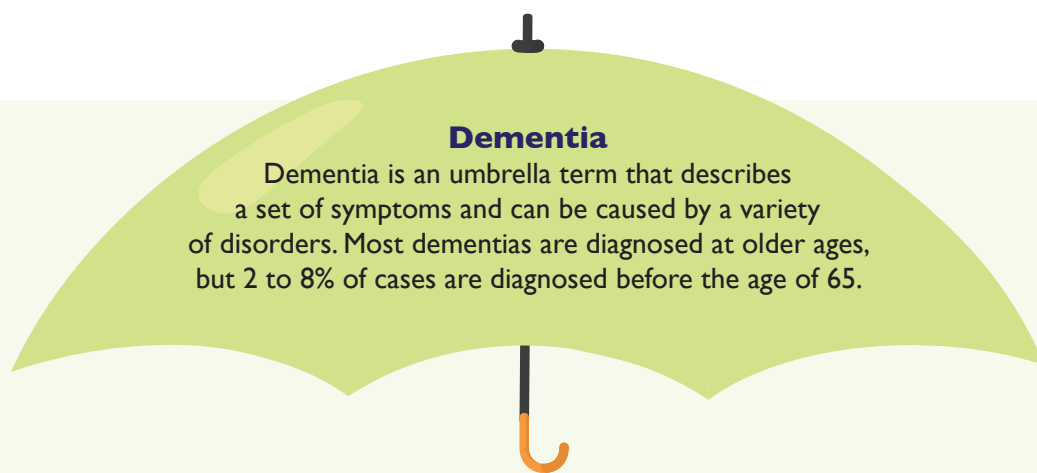
UNDERSTANDING DEMENTIA.....	6
What is Dementia?	6
Changes that May be Experienced with Dementia	7
Actions that Suggest Someone Has Cognitive Difficulties and May Have Dementia	7
Understanding Behaviour in Dementia	8
Rights of People Living with Dementia	8
Canadian Charter of Rights for People with Dementia.....	8
Appropriate Language and Terminology.....	8
 DEMENTIA-INCLUSIVE EXERCISE.....	 10
Dementia-Inclusive Exercise	11
Physical Activity Recommendations	11
Benefits of Physical Activity.....	12
Benefits of Dementia-Inclusive Physical Activity	13
Making Exercise Dementia-Inclusive.....	14
Ensuring Continuity of Support.....	19
 TAKING ACTION	 22
 REFERENCES.....	 23

UNDERSTANDING DEMENTIA

DEMENTIA IS “A SHIFT IN THE WAY A PERSON EXPERIENCES THE WORLD AROUND THEM.” -DR.ALLEN POWER

WHAT IS DEMENTIA?

Dementia is not a single disease but a set of symptoms. People diagnosed with dementia experience a decline in cognitive abilities that is sufficient to reduce their ability to perform everyday activities. Over time, changes in cognitive abilities may include difficulties with memory and judgement. Individuals with minor changes in cognitive abilities may be diagnosed with mild cognitive impairment (MCI).



Alzheimer's Disease is the most common dementia (one-half to two-thirds of dementias). Alzheimer's disease involves gradual degeneration of the brain. Most people (~95%) are diagnosed after the age of 65.

Frontotemporal Dementia usually begins at younger ages (45 to 65 years). It involves progressive degeneration of brain cells, especially in the front (frontal) and sides (temporal) of the brain.

Vascular Dementia occurs when the blood supply to the brain is disrupted. Nutrients and oxygen do not reach affected brain cells. Brain cells without blood supply may die.

Lewy Body Dementia occurs because of protein deposits in the brain. These protein deposits also occur in Parkinson's disease.

Mixed Dementia occurs when two or more disorders are present. Most frequently, mixed dementias include both Alzheimer's disease and vascular dementia.

Dementia can also occur for other reasons, such as head trauma, Huntington's disease, alcohol dependency, and HIV.

You can find out more about the types of dementia by going to the [Alzheimer Society of Canada](#) website. Risk factors for dementia include vascular risk factors, traumatic brain injury, sleep disturbances, hearing loss, and depression. Factors that are associated with reduced risk of dementia include education, physical activity, leisure activity, social support and engagement, and healthy diet.

CHANGES THAT MAY BE EXPERIENCED WITH DEMENTIA

People living with dementia will have many abilities that are not affected. At any stage of dementia, people living with dementia will demonstrate a wide range of retained abilities, as well as challenges. Abilities can also fluctuate over time; what someone with dementia can or cannot do may change from one day to the next or across different times of day. People with mild cognitive impairment can also experience these symptoms, though they would be milder. The symptoms would not be severe enough to affect their daily social or functional abilities.

- **Cognitive abilities:** All people living with dementia experience changes in cognitive abilities or behaviour. This may include memory loss, confusion, challenges with speech or expression, disorientation, and/or altered thinking or reasoning.
- **Physical abilities:** People living with dementia often have changes in mobility and balance, which can increase their risk of falling. However, people living with dementia can continue to be physically active throughout the course of the disease.
- **Sensory abilities:** The way people experience the environment can change with dementia. People living with dementia can be affected by noise and may feel overwhelmed in noisy environments (for example, crowded gyms with loud music). Ability to interpret vision and spatial awareness can also change with dementia. This may make it more difficult to judge distances. Sometimes parts of their environment may also be misinterpreted (for example, a black mat being perceived as a hole in the floor, or a reflection in mirror being perceived as a person). Other senses such as smell and taste can also be affected.
- **Emotion and behaviour:** People living with dementia may also experience emotional and behavioural changes such as depression, loss of motivation or initiative, or behaviour and actions that are considered out of character or out of context.

ACTIONS THAT SUGGEST SOMEONE HAS COGNITIVE DIFFICULTIES AND MAY HAVE DEMENTIA:

- Looking or saying that they are lost or confused
- Searching for something they can't find
- Looking like they don't know what to do next
- Struggling with handling money or other items
- Finding self-service facilities hard to understand
- Having trouble communicating, being understood, or understanding what you are saying
- Not able to recognize members, staff, volunteers they have known for years
- Confused or struggling with exercises that they have done in the past
- Difficulty copying exercises or actions
- Reports of effort or exertion during exercise do not match their physical appearance

UNDERSTANDING BEHAVIOUR IN DEMENTIA

Sometimes the behaviour of people living with dementia can be misinterpreted. Like everyone, people living with dementia experience frustration, distress, pain, and sadness. People living with dementia may also use nonverbal communication (behaviour) to express their feelings, especially if they have difficulty using language. It is easy to interpret these as behaviour ‘problems’, even though expressions of frustration or distress occur in response to a situation just like in people without cognitive impairment. One way you can help is to be aware and mindful, or to look for things that might have triggered a change in behaviour.

RIGHTS OF PEOPLE LIVING WITH DEMENTIA

The United Nations Convention for the Rights of People with Disability (UN CRPD) promotes, protects, and ensures the full human rights and freedoms of people living with disability, including people living with dementia. Among other rights, people living with dementia have the right to equal access to health services and rehabilitation, as well as recreation, leisure, and sporting activities.

CANADIAN CHARTER OF RIGHTS FOR PEOPLE WITH DEMENTIA

People living with dementia have the right:

1. To be free from discrimination of any kind.
2. To benefit from all of Canada’s civic and legal rights.
3. To participate in developing and implementing policies that affect their lives.
4. To access support so they can live as independently as possible and be as engaged as possible in their communities.
5. To get the information and support they need to participate as fully as possible in decisions that affect them, including care decisions.
6. To expect that professionals involved in their care are informed.
7. To access effective complaint and appeal procedures when their rights are not protected or respected.

APPROPRIATE LANGUAGE AND TERMINOLOGY

There is significant stigma surrounding dementia. The language we use influences how people living with dementia are viewed, treated, how they feel and express themselves.

- **Do Use:** Person living with dementia or person with dementia, expressions, explain what is happening instead of labelling behavior as ‘aggressive’
- **Do Not Use:** Demented, senile, burden, dementia sufferer, aggressive /problem/challenging behaviour or person

Reason: Putting the condition before the person reduces someone’s identity to their diagnosis, it is important to instead show respect for the person and that their condition does not define them. Some people prefer to avoid the term “dementia” altogether. This may be based on their individual preference or their culture. Some languages do not have a term for dementia, and so the term may be meaningless to them. Others may find the term “dementia” to be stigmatizing. In practice, you will likely refer to a person living with dementia by their name, as you would anyone else.

TIPS FOR PRACTICE

- ❑ Remember that dementia is an umbrella term that describes a set of symptoms and is not limited to just cognitive changes. Dementia also includes changes in physical abilities, sensory perception, emotion, and behaviour.
- ❑ Be observant of the signs and actions that may indicate a person has cognitive challenges.
- ❑ Every person living with dementia is unique. Talk to the person living with dementia to understand their unique abilities and challenges.
- ❑ If you have a standard assessment, check to ensure it gathers the information relevant to people living with dementia. Referring to “[Planning for I can](#)” (by Late Life Training) may be helpful.
- ❑ Changing how you think about behaviour and expressions of feelings in dementia can create more positive and constructive relationships with people living with dementia.
- ❑ Plan for equal accessibility for people living with dementia. Under this charter and the UN Convention for the Rights of Persons with Disability, people living with dementia have the right to equal access to sport, recreational, and leisure opportunities including exercise.
- ❑ Use appropriate terminology when referring to dementia and persons living with dementia. Reflect on how your language affects the experiences of people living with dementia and those around them.



DEMENTIA-INCLUSIVE EXERCISE

While some participants with dementia may have little or no trouble learning and adhering to a new exercise program, others may find it difficult to understand, learn, and remember how to do exercises or follow the program within and across sessions.

The supports people need and the strategies that you use will vary between each person throughout the time you work with them. People living with dementia have good days, where they need little support, and more difficult days when they may need more support.

This resource provides some strategies that may help a person living with dementia to participate in exercise or adhere to an exercise program over time. Note that you should choose strategies that are most appropriate for the person and your setting. Not all strategies will be relevant or possible for you.



DEMENTIA-INCLUSIVE EXERCISE

People living with dementia have a right to inclusion in their communities. A dementia-inclusive community is a place where people living with dementia are understood, respected and supported.

People living with dementia specifically have the right to have equal access to recreational, exercise, physical activity, and leisure opportunities. Dementia-inclusive exercise refers to exercise programs and facilities that are set up to accommodate, respect, and support the needs of people living with dementia. Staff, volunteers, and other participants are aware of and understand dementia. As a result, people living with dementia are included in exercise and physical activity programs and services, and have control over where, when, and how they are physically active.

Using dementia-inclusive strategies will help support people with any degree of cognitive impairment, including minor memory problems. These strategies will also help support people with movement disorders (such as Parkinson's disease and stroke) who may also have cognitive challenges. Our actions can support the inclusion of people living with dementia. Small changes can make a difference, whether it is in our communities or in our physical activity programs and facilities.

PHYSICAL ACTIVITY RECOMMENDATIONS

Current evidence from clinical trials of exercise among people living with dementia does not support a particular intensity, volume, or type of physical activity. Aerobic exercise, strength training, and 'mind-body exercise' (for example, tai chi) all have physical and cognitive benefits for people living with dementia or mild cognitive impairment. As a result, the [Ontario Brain Institute](#) recommends that people living with dementia follow the physical activity recommendations described in the 24 hour Movement Guidelines from the [Canadian Society of Exercise Physiology](#):



150 minutes per week
of moderate to vigorous
intensity physical activity



Do activities that
challenge balance daily



Twice a week
strength training



Regular movement
throughout the day

It is important to note that people living with dementia may also benefit at exercise levels lower than the recommendations (as little as 45 minutes per week), especially if they are inactive to start.

As with other clients, physical activity prescription and advice should consider the individual's fitness, physical activity history, and goals. On average, people living with dementia are less active than others – but some people living with dementia are life-long exercisers and athletes!

BENEFITS OF PHYSICAL ACTIVITY

Physical activity is a practical and accessible activity that offers broad benefits for people living with dementia. Most research suggests that people living with dementia or mild cognitive impairment experience improvements in cognitive abilities when they take up exercise, though not all studies agree. Experts believe that exercise may improve cognitive abilities by changing the chemicals in the brain so that new brain cells (neurons) and blood vessels can grow and existing ones work better.

People living with dementia also experience significant improvements in their functional abilities and rates of independence through exercise. This seems to be the result of a number of changes.

BENEFITS OF PHYSICAL ACTIVITY



People living with dementia or mild cognitive impairment also experience the broad benefits experienced by older adults:

- Improved cardiovascular health
- Reduced fall risk
- Better mood and decreased risk of depression
- Improved lung function
- Better bone health
- Improved ability to maintain healthy weight

BENEFITS OF DEMENTIA-INCLUSIVE PHYSICAL ACTIVITY

Though clinical trials typically focus on the cognitive, physical, or functional benefits of exercise, people living with dementia often highlight the social benefits of exercise first. Encouragement, inclusion, and social interaction may be the most important and valued benefits of physical activity, exercise, and sport to people living with dementia.

BENEFITS OF DEMENTIA-INCLUSIVE PHYSICAL ACTIVITY



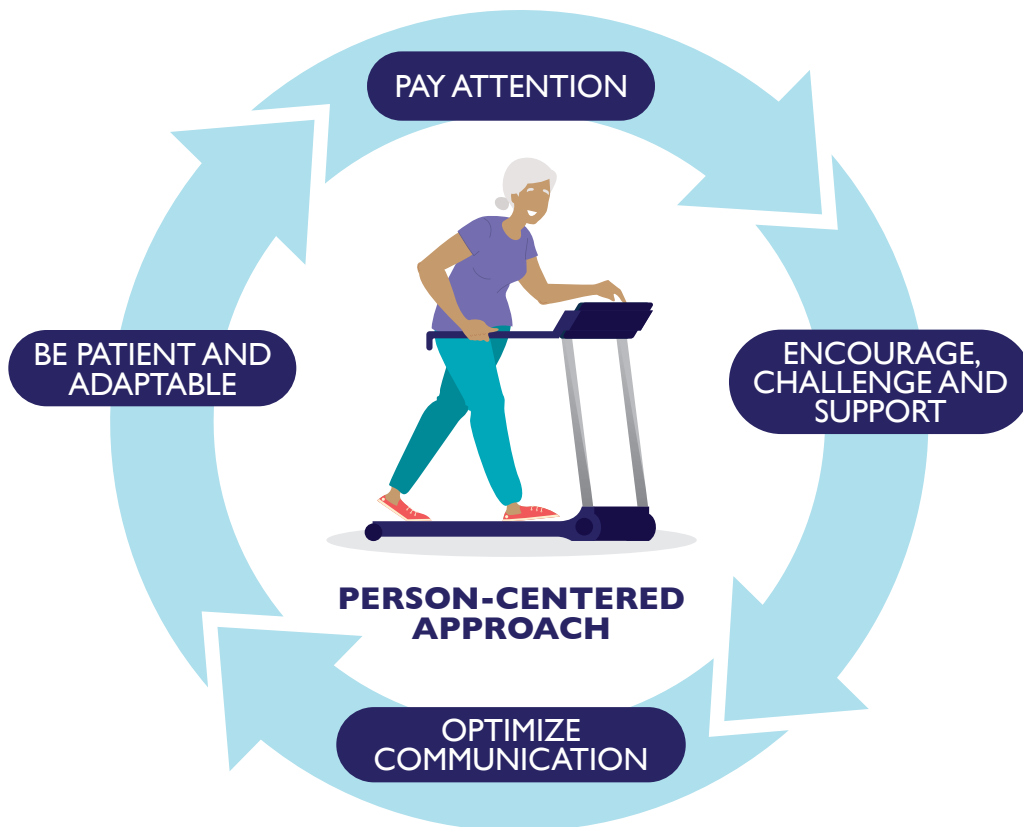
MAKING EXERCISE DEMENTIA-INCLUSIVE

Person-centered approach

A person-centered approach recognizes that each individual with (or without) dementia or mild cognitive impairment has unique preferences, experiences, and abilities that should be considered in programming. To take a person-centered approach, get a sense of your client's preferences, experiences, abilities and challenges. This may be more difficult in group exercise programs where you don't have a formal intake process. In these cases, informal conversations can be almost as beneficial!

The Late Life Training, Planning for I Can document may be useful for guiding the intake of a person living with dementia to an exercise program. The DICE wallet cards (for people living with dementia and people with memory challenges) also provide a short form to help you find out key details about the individual, who can then bring it to the programs they attend.

Accept the person living with dementia where they are. Be aware that their abilities and preferences might change over time. Pay attention and communicate clearly to understand how they are feeling. Be patient and adaptable.



Pay attention

Close supervision and monitoring is beneficial for most people, but especially for people living with dementia or mild cognitive impairment. Their cognitive, physical, and sensory abilities may vary day-to-day and moment-to-moment. Pay close attention to how they are feeling and meet them where they are on that day.

Enhanced observation will also help to overcome many cognitive challenges that people living with dementia or mild cognitive impairment experience, including memory challenges, difficulty focusing attention, and altered judgement. For example:

- People living with dementia are less likely to remember exercises and techniques within and between exercise sessions. By paying attention, you can provide reminders or cues when needed.
- People living with dementia may have altered judgement, so may be less able to self-monitor the safety or intensity of exercise. As a result, the exercise provider may have an increased role in monitoring.
- Watch for non-verbal signs of difficulty (for example, fatigue, overstimulation, pain, need to use the washroom) so you can support their needs.
- Increased staff or volunteer ratios are helpful, where possible.

Paying close attention, and communicating more if necessary, will help people living with dementia to follow your exercise program and stay safe.

Encourage, challenge & support them

People living with dementia often experience stigma and isolation. The encouragement and support of exercise providers and other program participants is highly valued. People living with dementia identify encouragement and support as one of the important reasons to exercise! Make sure you think of the individual's preferences when choosing how to encourage individuals. Some may prefer explicit demonstrations of encouragement, and others may like quiet recognition.

Understand the individual's strengths and make the most of them. Start simple but challenge them. Exercise is an opportunity for people living with dementia to show improvement, have success, and build confidence. If needed, adapt the exercise so that they can be successful – by simplifying movements or changing expectations. The confidence gained from successes can carry forward into their everyday life.

Optimize communication

People living with dementia may experience changes in language (speaking and understanding language) and ability to remember messages. These are some communication strategies that can be helpful for people living with dementia or mild cognitive impairment.

You may not need to use all of these techniques with every person or every day. Get a sense of the communication abilities of the individual living with dementia, how they are doing that day, and choose strategies as needed.

1. Get the person's attention and identify yourself.
[Standing in front of Joe] "Hi Joe. I'm Lucy. Nice to see you. Today we have [name of program]. Are you ready to join?!"
2. Make eye contact.
3. Bring the person to a quiet place if they are feeling overwhelmed or having a hard time hearing you. Let someone else know where you are going in case you need more support.
"Joe, would you like to come over here [to talk or take a break]?"
4. Speak slowly and clearly. It may take more time for most people living with dementia to process what you are saying.
5. Share one message at a time. If you are speaking over the phone, ask if they have a pen and paper to take notes.
"Let's start with raising one arm [demonstrate, allow for movement], now raise your other arm [demonstrate, allow for movement]."
6. Use close ended questions – yes or no answers.
"Joe, would you like to use this weight for your exercise today?"
7. Allow time for response. Silence can mean processing time. After a pause, try repeating, demonstrating or cueing a response (for example, by pointing).
8. Listen to what the person is telling you and showing you. Pay attention to feelings and actions as well as words. Ask how you can help.
9. Support the person in THEIR reality and offer appropriate support. If Joe believes it is Tuesday when in fact it is Wednesday, you do not need to correct him. Be present in the moment. Check in before helping. What does he really need?
10. Repeat questions or sentences as needed, or try again later.
11. Give them options. People living with Dementia often do not get to make choices for themselves. Making their own choices can give them a sense of empowerment, control, and belonging.
"Joe, would you like to exercise on the bike or treadmill today?"



Additional communication strategies

In addition to general dementia-friendly communication strategies reviewed above, additional types of communication may be helpful in exercise contexts:

Prompts:

- Avoid asking “do you remember ____ exercise”, which can invoke anxiety and frustration. Instead, name the exercise and let the person take the lead, cueing if needed.

Cueing Movements:

- People may have a difficult time remembering tips on form or technique in the short-term (within a set) and long-term (across sessions).
- Repeat the cue for the exercise more than twice and slowly. Cues may take time to process.
- Do not change the exercises quickly. Allow time for participants to be able to try and do the exercise before moving on to the next one. Repeat for the next lesson and slowly build up these exercises.
- Use verbal and non-verbal cues to help maintain safe and appropriate technique. If you use touch, make sure to ask permission every time. They may not remember giving you permission for an earlier exercise.

Written plans:

- Having a written plan (with short descriptions and photos) can help your clients remember what exercises they should do, and how to do those exercises. This can help people with memory challenges, but also people who have difficulties with attention or planning.

Be patient and adaptable

People living with dementia may need more time to learn and communicate. They may have difficulty with noise or processing a busy gym environment. They may simply feel overwhelmed. Be patient and give yourself, and them, time to understand and communicate with each other. Acknowledge their feelings and experience and meet them where they are. Be adaptable and make decisions together.

The table below includes specific strategies that may be useful when working with a person living with dementia or mild cognitive impairment. Adapt your exercise delivery so that it works for the individual. Consider this a menu of strategies to use as needed to make your exercise delivery, programs, and facility dementia-inclusive.

ACTIVITY	TIPS
Introducing a new exercise	<ul style="list-style-type: none">• Start with simple, large muscle group exercises.• Breakdown exercises into parts. Instruct one part at a time.• Use concrete, literal language. Avoid metaphors, except in the case of very familiar movements (e.g. sitting on a chair to describe a squat).• Instruct one component at a time.• When appropriate, provide examples in picture or video format.
Demonstrating an exercise	<ul style="list-style-type: none">• Face the same direction as the participant.• Stand beside and slightly in front of the participant so they can copy your movements. This may be easier than mirroring movements.
How to correct form or adapt	<ul style="list-style-type: none">• Non-verbal cues can be helpful, though ask permission to touch every time. The non-verbal cues can be small (e.g., a tap to the knee) or significant (e.g. moving them into the correct position).• Ability to correct will depend on the person's ability as well as the setting (how many people, noise, etc.). Correcting form in group exercise programs will be more difficult than when working 1-on-1.• If the person is unable to make the correction, allow them to proceed as long as it is safe.• Consider having some extra 1-on-1 time if possible.
Where to exercise	<ul style="list-style-type: none">• Noise and excess visual stimulation can be distracting.• Mirrors can be confusing for some.• Be aware of obstacles.
Use music in positive ways	<ul style="list-style-type: none">• Music brings joy but can also be overwhelming.• Using music without lyrics and a low to moderate volume is more easily tolerated. If possible, check with the person or group to see if the music and volume level are comfortable.• Where possible, choose music that is familiar and appropriate across age groups.

ACTIVITY	TIPS
Positioning in class	<ul style="list-style-type: none"> Consider positioning the person in a location where they can easily see the instructor with minimal distraction from other participants (for example, front row and to the side). If the instructor will be moving a lot throughout the class, consider a position where they can easily see a volunteer (if available) or other participant who knows the movements well. The movements of the instructor or participant can help prompt the person living with dementia if they forget.
Planning for breaks – or take them as needed	<ul style="list-style-type: none"> Pay attention to how the person is feeling. Check in regularly to see how the person is doing. If feeling overwhelmed, take a break in a quiet area.
Demonstrate options	<ul style="list-style-type: none"> People living with dementia have various levels of abilities and good and bad days. Demonstrating exercise options of varying levels of difficulty can help them (as well as others) feel included and capable.
Consider inclusion of care partners	<ul style="list-style-type: none"> Including the care partner has strengths and weaknesses. The care partner can be a resource to understand the person better.

ENSURING CONTINUITY OF SUPPORT

To fully include people living with dementia, you also need to ensure a continuity of supports to get people to the program and ensure they are included. These include diverse supports ranging from transportation to the facility, orientation within the facility, and encouragement within the program as well as dementia-inclusive facility design and set-up.

Facility Operations

When planning your staffing and operations, consider having staff or volunteers who can:

- ☐ Ask questions to understand their experiences, preferences, abilities, and needs of the individuals living with dementia. This may be the exercise provider, or other staff.
- ☐ Help to identify programs or trainers that may be suitable for their specific preferences, experience, abilities, and needs.
- ☐ Help people living with dementia to navigate throughout the facility.
- ☐ Help people living with dementia feel welcome and supported. They may have experienced stigma elsewhere.
- ☐ Consider whether the person living with dementia will need support, and what supports they have (spouse, children, friends, etc.). This will help you identify things that you can do to help them. For example, the person living with dementia may need help with finding the program or remembering the timing.
- ☐ If possible, help the person create a transportation plan for how they can get to and from the facility. This may include a drive from their partner, public transportation, or taxis.

Facility Environment

Signs:

- ☐ Clear, simple language, and easily recognizable images
- ☐ Simple, large print
- ☐ High contrast between font and background colours
- ☐ Placed at eye level (approximately 4 feet high)
- ☐ Located at key decision points (for example, at the start of a hallway)
- ☐ Signage to washrooms need to be clear and prominent throughout the facility

Entrances to building:

- ☐ Clearly visible and obvious
- ☐ Well-lit

Carefully consider music options:

- ☐ Consider the volume and type of music
- ☐ Choose a type of music that is familiar and appropriate across age groups
- ☐ Although music can be helpful to prompt exercise, it can be a distraction for some especially if it is loud
- ☐ Ensure quiet space is available

Other:

- ☐ Low sheen or matte floor cleaners will help prevent reflection, glare, and other visual issues
- ☐ Ensure there is adequate lighting throughout the building
- ☐ Hallways should be flat, wide, and unobstructed
- ☐ Avoid busy floor patterns and remove unnecessary carpets and mats, especially black ones, as they may be interpreted as a hole in the floor
- ☐ Consider mirror location so that they do not add to distraction but are located only where they are used with purpose

Recommendations for Printed Materials

Style:

- Present information one idea at a time
- Keep language simple, but not patronising
- Stick to the main message
- Avoid jargon or slang that may not be understood
- Explain all concepts and consider a glossary
- Each section should make sense on their own and readers should not have to remember what was in other sections to understand

Pictures:

- Pictures alongside text can be helpful but too many can be confusing
- Ensure the pictures have a purpose and match the content

Format and making sense of content

- 14pt font is best
- Use a simple font (for example, arial)
- Use white space
- Use bullet points, bold text and headings to separate information and highlight important pieces
- Avoid italics

Supports for broader inclusion initiatives will also help people living with dementia, for example:

- Have printed materials available in many languages
- Use inclusive language
- Have audio versions available

TIPS FOR PRACTICE

- ☐ Assess and engage with the person living with dementia to understand their preferences, goals, experiences, abilities, and challenges – as you would with people without dementia. Think about how your programs and facility can be challenging to them, and how they might be adapted to meet their needs.
- ☐ Pay attention, be patient, and communicate clearly. Encourage all staff to do the same.
- ☐ Your physical activity delivery should be based on the individual and will not vary just based on the presence of dementia alone.
- ☐ Reflect on the variety of changes that a person living with dementia can experience and how you might accommodate different cognitive, sensory, and physical challenges in your programming and facility. For instance, think about the ways you would design your programming to accommodate the variety of changes in persons living with dementia.

NOTES: _____

TAKING ACTION

LEARN MORE AND CONNECT:

- ☐ Find the Dementia-Inclusive Choices for Exercise training and resources at www.dementiaexercise.com
- ☐ Connect with your local Alzheimer Society
- ☐ Download the full Canadian Charter of Rights for People living with dementia
- ☐ Support people living with dementia to live safely
- ☐ Design and Dementia Community of Practice
- ☐ brainXchange
- ☐ Elder Abuse Ontario
- ☐ Rainbow Health Ontario (LGBTQ)
- ☐ I-CAARE (Indigenous perspectives)

GOALS: _____

REFERENCES

Overview of dementia:

alzheimer.ca/en/Home/About-dementia

Sensory changes with dementia:

www.lifechangestrust.org.uk/sites/default/files/Leaflet.pdf

Language use with dementia:

dementiavoices.org.uk/wp-content/uploads/2015/03/DEEP-Guide-Language.pdf

alzheimer.ca/sites/default/files/2017-11/Person_Centred_Language_Guidelines-e.pdf

Key reviews and articles supporting exercise for therapy of dementia:

Groot C, Hooghiemstra AM, Raijmakers PG, van Berckel BN, Scheltens P, Scherder EJ, van der Flier WM, Ossenkoppele R. The effect of physical activity on cognitive function in patients with dementia: A meta-analysis of randomized control trials. *Ageing Res Rev* 2016; 25:13-23.

Forbes D, Forbes SC, Blake CM, Thiessen EJ, Forbes S. Exercise programs for people with dementia. *Cochrane Database Syst Rev* 2015; (4):CD006489.

McDuff J, Phinney A. Walking With Meaning: Subjective Experiences of Physical Activity in Dementia. *Glob Qual Nurs Res* 2015; 2:2333393615605116.

Review of barriers, motivators, and facilitators to exercise among people with dementia:

van Alphen HJ, Hortobágyi T, van Heuvelen MJ. Barriers, motivators, and facilitators of physical activity in dementia patients: A systematic review. *Arch Gerontol Geriatr* 2016; 66:109-18.

Exercise Recommendations and Tools developed by the Ontario Brain Institute:

braininstitute.ca/resources/guidelines-and-toolkits/physical-activity-and-alzheimers-disease-toolkit

Dementia-Friendly Communities Resources:

Alzheimer Society of Ontario: alzheimer.ca/en/on/We-can-help/Dementia-Friendly-Communities-Ontario

Alzheimer Society of BC: alzheimer.ca/en/bc/Get-involved/dementia-friendly-communities

Alzheimer's Society UK: www.alzheimers.org.uk/get-involved/dementia-friendly-communities



QUESTIONS OR FEEDBACK?

Contact Laura Middleton
Director of the Brain and Body Lab
University of Waterloo
brainbodylab@uwaterloo.ca

