

# THRIVE AND RISE ABOVE MS

## Two Draft Health Education Lesson Plans and Supplementary Materials



|                   |                                                                   |
|-------------------|-------------------------------------------------------------------|
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| Program           | Thrive and Rise Above MS: A Health and Wellness Education Program |
| Course            | Health Education Program Implementation (IHED 641)                |
| Institution       | School of Integrative Health, Notre Dame of Maryland University   |
| Target population | African American adults ages 22–50 living with multiple sclerosis |
| Format            | 90-minute weekly sessions; in-person, virtual, or hybrid          |

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## Document Guide

### Purpose

These two lesson plans were derived from the eight-week Thrive and Rise Above MS curriculum developed for the Week 7 course assignment. Each lesson plan provides a comprehensive teaching guide for one session of the larger eight-week program and includes measurable objectives, step-by-step activities, an assessment, a 10-point scoring rubric and participant materials.

| Section           | Lesson focus                                                        | Attached supplementary materials                                                     |
|-------------------|---------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Lesson Plan 1     | Culturally relevant nutrition and practical food swaps              | Evidence brief; supportive plate guide; food-swap worksheet; assessment/answer guide |
| Lesson Plan 2     | Adaptive movement and a 15-minute routine                           | Safety/readiness card; routine card; weekly action plan; skill checklist             |
| Facilitator notes | Health literacy, fatigue management, hybrid delivery, and inclusion | Teach-back prompts; adaptation guidance                                              |
| References        | APA-formatted sources used across both lessons                      | Program framework sources plus current MS and public-health guidance                 |

### Program alignment

The program framework identifies nutrition, movement, and mental health as its three pillars. The two selected lessons directly support the pilot-test objectives that participants will learn three practical food swaps and perform a 15-minute adaptive exercise routine independently.

## Lesson Plan 1

# Build a Plate That Supports Wellness: Culturally Relevant Food Swaps for Living With MS

|                                      |                                                                                                                                                                                                                                                     |
|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Descriptive Information              | Week 2–3 nutrition pillar; 90-minute session; in-person, virtual, or hybrid.                                                                                                                                                                        |
| Skill Emphasis                       | Health literacy, decision-making, meal planning, goal setting, and self-management.                                                                                                                                                                 |
| Knowledge Level                      | Adults ages 22–50 with varied health literacy and varied experience managing MS. Materials are written in plain language and designed for approximately a 6th–8th grade reading level.                                                              |
| Content Area                         | Nutrition, chronic disease self-management, health equity, and culturally responsive wellness education.                                                                                                                                            |
| Content Descriptor & Sub-Descriptors | What is known and not yet known about diet and MS; supportive dietary patterns; balanced plate planning; culturally familiar food substitutions; budget- and fatigue-friendly food preparation; communication with the healthcare team.             |
| Title of Lesson                      | Build a Plate That Supports Wellness: Culturally Relevant Food Swaps for Living with MS.                                                                                                                                                            |
| Curricular Connections               | MS symptom awareness, fatigue management, medication adherence, stress management, family support, food access, and health advocacy.                                                                                                                |
| Health Behavior Targeting            | Increase selection of minimally processed foods, vegetables/fruits, fiber-rich carbohydrates, healthy fats, and varied protein sources while reducing reliance on sugary drinks, heavily fried foods, processed meats, and highly processed snacks. |

### Teaching With the End in Mind:

At the end of this lesson, participants will be able to build one culturally familiar meal that follows a supportive plate pattern and identify three realistic food or beverage substitutions they are willing to try during the next week.

### Key Concept(s) to Be Covered in Today's Lesson

- There is no single diet proven to cure MS or replace disease-modifying therapy. A balanced diet can support overall health and may help some people manage fatigue, weight, bowel health, and cardiovascular risk.
- A practical plate can include approximately one-half vegetables and fruit, one-quarter protein, and one-quarter whole grains or other fiber-rich starches, with water or an unsweetened beverage.
- “Evolution, not exclusion”: culturally meaningful foods can remain part of the diet while preparation method, portion, frequency, or accompanying foods are adjusted.
- It's more sustainable to make small, repeatable changes rather than try and stick to rigid food rules. Food choices should also reflect allergies, medication considerations, finances, access, culture, and symptoms.
- Participants should discuss major dietary changes and supplements with their neurologist, primary-care clinician, or registered dietitian.

## Objective(s)

1. At the end of the lesson, participants will be able to describe in their own words one evidence-based benefit and one limitation of nutrition guidance for M.S.
2. Participants will correctly sort 6 or more of 8 sample foods into the appropriate supportive-plate category.
3. Participants will develop 3 or more culturally relevant food/beverage substitutions that maintain flavor, price and personal preference.
4. Participants will prepare one balanced means with three or more food groups using the plate guide as a guide.
5. Participants will write one specific, realistic nutrition action step to complete during the next seven days.

## Introduction to the Lesson

The facilitator welcomes participants, acknowledges that food is connected to family, culture, comfort, faith, finances, and identity, and states that the lesson is not about judging traditional foods. The facilitator introduces the program message: **“evolution, not exclusion.”** The facilitator then explains that nutrition is one supportive part of comprehensive MS care and does not replace prescribed treatment.

## Introductory Activity

### “Keep It, Change It, Pair It” (10 minutes)

Participants name one favorite family or cultural meal. In pairs or in the chat, they identify: (1) what they want to keep because it matters to them, (2) one preparation or portion change they could consider, and (3) one vegetable, fruit, whole grain, or other supportive food they could pair with it. The facilitator invites two or three volunteers to share and reinforces that more than one answer can be correct.

## Content Outline

| Time      | Content/message                                                                       | Facilitator method                                                     | Participant response                                           |
|-----------|---------------------------------------------------------------------------------------|------------------------------------------------------------------------|----------------------------------------------------------------|
| 0–10 min  | Welcome, purpose, “evolution not exclusion,” and medical disclaimer.                  | Brief introduction; normalize different experiences and dietary needs. | Share one expectation or question.                             |
| 10–20 min | Keep It, Change It, Pair Its activity.                                                | Pair-share or breakout room; record examples on board.                 | Adapt one familiar meal without removing its cultural meaning. |
| 20–35 min | What we know—and do not yet know—about diet and MS.                                   | Use Supplement 1; teach-back after each key point.                     | State one benefit and one limitation.                          |
| 35–50 min | Supportive plate pattern and food-group functions.                                    | Model one plate using food cards or the virtual slide.                 | Sort sample foods into plate categories.                       |
| 50–55 min | Fatigue break and hydration.                                                          | Offer seated stretch, quiet break, or camera-off option.               | Rest, hydrate, and self-monitor.                               |
| 55–72 min | Culturally relevant swaps, flavor-building, budget, and fatigue-friendly preparation. | Demonstrate two examples; invite participant ideas.                    | Complete three swap ideas on Supplement 3.                     |
| 72–90 min | Meal planning, teach-back, assessment, and weekly action step.                        | Coach participants; administer 10-point assessment.                    | Build one meal, complete action step, and submit exit ticket.  |

## Lesson Plan 1 — Learning Activities and Assessment

### Learning Activity(ies)

#### Food-card sort (10 minutes)

Small groups sort eight food cards into vegetables/fruit, protein, fiber-rich starch, healthy fat, beverage, or “sometimes/less often.” Discussion prompts: “Where could this food fit on a plate?” “How might preparation change its role?” “What makes this affordable or difficult to access?”

#### Swap lab (12 minutes)

Participants select three familiar foods or beverages and use the Keep It–Change It–Pair Its method. Discussion prompts: “What flavor must remain?” “Could you change the cooking method, portion, frequency, or pairing?” “What would make this realistic on a fatigue day?”

#### Build-one-meal challenge (10 minutes)

Using the plate worksheet, participants create one breakfast, lunch, or dinner. They may draw, write, or select food cards. A partner uses teach-back: “Show me how your meal includes balance and explain why your changes work for you.”

#### Seven-day action step (6 minutes)

Participants write one specific action. Examples: add frozen vegetables to two dinners; replace one sugary drink on three days; prepare a half-white/half-brown rice blend; or use baked/air-fried preparation once.

#### Facilitator discussion questions

1. What food traditions do you share with family or community? 2. Which changes feel supportive rather than restrictive? 3. How does fatigue, cost, transportation, or kitchen access affect your choices? 4. Who could support your action step? 5. What question should you ask your healthcare team before making a major dietary change?

### Final Thoughts/Conclusion to the Lesson

The facilitator reviews three take-home messages: (1) nutrition supports overall wellness but is not a cure or replacement for MS treatment; (2) balance can be created by what is added, paired, or prepared differently—not only by removing foods; and (3) one small action practiced consistently is a meaningful success. Each participant reads or shares the action step they selected, and the facilitator previews the next program session.

### Assessment

Participants complete a performance-based exit assessment using Supplement 3. The assessment includes four products: an evidence teach-back statement, three appropriate food or beverage swaps, one balanced meal, and one seven-day action step. The facilitator may assess orally, in writing, or through a picture-based response to accommodate fatigue, cognitive symptoms, vision, or literacy needs.

### Scoring Rubric for Assessment (10 points)

| Criterion           | 2 points                                                                                                    | 1 point                                                                       | 0 points                                                                 |
|---------------------|-------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| Evidence teach-back | States one accurate benefit and one limitation; clearly notes that nutrition does not replace MS treatment. | States a partially accurate benefit or limitation but needs prompting.        | Provides inaccurate information or cannot explain the role of nutrition. |
| Three substitutions | Provides three realistic substitutions or pairing changes aligned with lesson concepts.                     | Provides one or two appropriate changes, or three changes needing refinement. | Provides no appropriate changes.                                         |

| Criterion             | 2 points                                                                                      | 1 point                                                 | 0 points                                                |
|-----------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------|---------------------------------------------------------|
| Balanced meal         | Meal includes at least three supportive plate categories and is feasible for the participant. | Meal includes two categories or needs minor adjustment. | Meal is incomplete or not aligned with the plate guide. |
| Reasoning/teach-back  | Explains why the meals or swaps fit personal culture, preferences, symptoms, or resources.    | Short Explanation and prompts                           | Cannot explain the choices.                             |
| Seven-day action step | Action is specific, doable and when and how often it will happen.                             | Action is relevant but vague or too ambitious.          | No action step or action is not do-able.                |

Interpretation: 8–10 = meets lesson competency; 6–7 = developing and benefits from brief coaching; 0–5 = provide reteaching, an alternate-format assessment, and individualized follow-up.

## Classroom Materials & Management

- **Materials:** Supplement 1 evidence brief; supportive plate guide; sample food cards or food images; markers; pens; paper plates or plate worksheet; culturally varied grocery flyers or menus; water; projector or virtual slides.
- **Room setup:** small tables or semicircle seating with clear mobility paths. Provide a quiet seat, rest break, and option to participate from a seated position or with camera off.
- **Group management:** establish a no-judgment agreement; avoid labeling foods as “good” or “bad”; invite but do not require disclosure of diagnoses, weight, or eating habits; use teach-back rather than “Do you understand?”
- **Hybrid delivery:** send materials in advance; use a digital whiteboard or chat for food sorting; allow verbal answers; keep slides high contrast with large text; record only with participant consent.

## Resources

- Empowering people affected by MS to live their best lives. (n.d.). In *National Multiple Sclerosis Society*. Retrieved July 22, 2026, from <https://www.nationalmssociety.org/managing-ms/living-with-ms/diet-exercise-and-healthy-behaviors/diet-nutrition>.
- USDA MyPlate resources for balanced meals and food-group examples.
- Thrive and Rise Above MS Program Planning Framework, Appendix B: Personal Meal Reflection Worksheet and sample recipes.

# Supplement 1 — Participant Evidence Brief

## Food and MS: What We Know, What We Do Not Know, and What You Can Do

### The main message

There is no single eating plan that has been proven to cure MS. Healthy eating can still support your energy levels, heart health, regularity of your bowel movements, bone health, weight management and overall well-being. Some studies suggest that Mediterranean-style and other nutrient-dense eating patterns may improve fatigue or quality of life for some people, but larger and stronger studies are still needed.

### What we know

- People with MS should follow the same basic nutrition guidelines as other adults: eat a variety of vegetables and fruits; eat fiber-rich grains and starches; eat protein foods; eat healthy fats; and drink enough fluids.
- Diets rich in minimally processed plant foods and fish, and low in heavily processed foods, sugary drinks and excess saturated fat support cardiometabolic health.
- Food choices can be adapted for fatigue, swallowing problems, bowel or bladder symptoms, medications, allergies, finances, culture, and food access.
- Diet and supplements are not a substitute for disease-modifying therapy and other care advised by the health care team.

### What is still uncertain

- Researchers have not identified one “best MS diet” for everyone.
- Food that can help one person’s symptoms may not work for another person’s body in the same way.
- Don't exaggerate findings: Many studies of diet are small, short or use different definitions and outcomes.
- Herbs and supplements can interact with medications or cause adverse effects; “natural” does not always mean safe.

### Four actions you can take

| Action  | Example                                                                                                                 |
|---------|-------------------------------------------------------------------------------------------------------------------------|
| Add     | Add frozen greens, berries, beans, or another produce item to a meal you already enjoy.                                 |
| Pair    | Pair macaroni and cheese with greens and baked fish or beans rather than treating it as the entire meal.                |
| Prepare | Try baked, grilled, stewed, roasted, or air-fried preparation more often than deep frying.                              |
| Ask     | Ask your neurologist, pharmacist, or dietitian before using high-dose supplements or making a major restrictive change. |

### Remember

Your goal is not perfection. Choose one change that fits your life, symptoms, budget, and culture. A small change you can repeat is more useful than a strict plan you cannot sustain.

## Supplement 2 — Supportive Plate and Food-Swap Guide

### Build a Supportive Plate

|                                                                                                                                                                                    |                                                                                                                                 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| <p><b>½ PLATE</b><br/>Vegetables and fruit</p> <p>Examples: collards, cabbage, greens, broccoli, okra, peppers, tomatoes, berries, peaches</p>                                     | <p><b>¼ PLATE</b><br/>Protein foods</p> <p>Examples: fish, chicken, turkey, eggs, beans, lentils, tofu</p>                      |
| <p><b>¼ PLATE</b><br/>Fiber-rich grains or starches</p> <p>Examples: oats, brown rice, quinoa, corn, beans, sweet potato; a half-white/half-brown rice blend is also an option</p> | <p><b>ADD AS NEEDED</b><br/>Healthy fats + fluids</p> <p>Examples: olive oil, avocado, nuts/seeds; water or unsweetened tea</p> |

This plate is a flexible planning tool—not a prescription. Mixed dishes can be “deconstructed” by asking which ingredients provide produce, protein, and fiber-rich carbohydrate.

### Keep It — Change It — Pair It

| Familiar choice                     | KEEP what matters                       | CHANGE one feature                                                       | PAIR with support                                       |
|-------------------------------------|-----------------------------------------|--------------------------------------------------------------------------|---------------------------------------------------------|
| Fried chicken                       | Seasoning, family recipe, crisp texture | Bake or air-fry; remove some skin; reduce frequency                      | Collards/cabbage + sweet potato or brown-rice blend     |
| Collard greens                      | Greens, pot liquor, traditional spices  | Use smoked turkey, mushrooms, or less processed meat; watch sodium       | Beans, fish, or chicken + whole-grain cornbread portion |
| Macaroni and cheese                 | Comfort, flavor, family recipe          | Use a smaller side portion; add vegetables to the meal                   | Greens + baked fish/chicken or beans                    |
| White rice                          | Familiar taste and texture              | Try half white/half brown rice, or a smaller portion                     | Beans + vegetables + protein                            |
| Sweet tea or soda                   | Cold, refreshing beverage               | Half-sweet tea, fruit-infused water, or unsweetened herbal tea           | Drink with a balanced meal; keep water available        |
| Sausage or processed breakfast meat | Savory breakfast flavor                 | Use less often or in a smaller amount; try eggs, beans, fish, or poultry | Oatmeal/whole-grain toast + fruit                       |

#### Fatigue-day shortcuts

Use frozen or no-salt-added canned vegetables; microwaveable brown-rice or quinoa cups; pre-cut produce; low-sodium beans; rotisserie chicken with skin removed; canned salmon or tuna; sheet-pan meals; slow-cooker meals; and double-batch cooking when energy is higher.

## Supplement 3 — Nutrition Practice Worksheet and Assessment

### A. My Three Food or Beverage Changes

| What I usually choose | What I want to keep | One change I could make | What I could pair with it |
|-----------------------|---------------------|-------------------------|---------------------------|
|                       |                     |                         |                           |
|                       |                     |                         |                           |
|                       |                     |                         |                           |

### B. Build One Meal

|                                     |  |
|-------------------------------------|--|
| Vegetables and/or fruit             |  |
| Protein food                        |  |
| Whole grain or fiber-rich starch    |  |
| Healthy fat and beverage (optional) |  |
| Why this meal works for me          |  |

### C. Evidence Teach-Back

Complete the statement: “Nutrition can support people living with MS by \_\_\_\_\_, but it cannot \_\_\_\_\_.”

### D. My Seven-Day Action Step

|                                  |  |
|----------------------------------|--|
| I will...                        |  |
| How often/when...                |  |
| What could get in the way...     |  |
| My solution or support person... |  |

## Lesson Plan 2

# Move Your Way: A Safe 15-Minute Adaptive Movement Routine for MS

|                                      |                                                                                                                                                                                                                                                                                   |
|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Descriptive Information              | Week 4–5 movement pillar; 90-minute session; in-person, virtual, or hybrid.                                                                                                                                                                                                       |
| Skill Emphasis                       | Self-monitoring, movement adaptation, physical-activity decision-making, goal setting, and self-efficacy.                                                                                                                                                                         |
| Knowledge Level                      | Adults ages 22–50 living with MS, with varied mobility, fatigue, balance, heat sensitivity, and exercise experience.                                                                                                                                                              |
| Content Area                         | Adaptive physical activity, symptom-aware self-management, fall-risk reduction, and wellness.                                                                                                                                                                                     |
| Content Descriptor & Sub-Descriptors | Benefits of movement; difference between physical activity and exercise; readiness and safety checks; seated and supported-standing options; rating of perceived exertion (RPE) and talk test; pacing, rest, cooling, and hydration; 15-minute routine; personal action planning. |
| Title of Lesson                      | Move Your Way: A Safe 15-Minute Adaptive Movement Routine for MS.                                                                                                                                                                                                                 |
| Curricular Connections               | MS fatigue, mobility, confidence, mental wellness, social support, nutrition/hydration, and personal care roadmaps.                                                                                                                                                               |
| Health Behavior Targeting            | Increase safe, enjoyable, symptom-responsive movement in short bouts and build confidence to repeat an adaptive 15-minute routine independently.                                                                                                                                  |

### Teaching With the End in Mind:

At the end of this lesson, participants will be able to: create a safe movement area, use a basic effort scale, choose seated or supported-standing alternatives, and finish or lead a 15-minute adaptive routine at an appropriate personal intensity.

### Key Concept(s) to Be Covered in Today's Lesson

- Physical activity may support function, mood, sleep, and overall wellness in people living with MS. Activities should be individualized to symptoms, mobility, and clinical guidance.
- “Move your way” means the same movement goal may be completed seated, supported-standing, standing, or in shorter intervals.
- Participants can self-monitor with the 0–10 Rating of Perceived Exertion (RPE) scale and talk test. The CDC generally describes moderate intensity as about 5–6/10; a new or symptom-limited participant may need a lower effort and gradual progression.
- Pacing, cooling, hydration, rest, and planning for fatigue are valid adaptations—not signs of failure.
- New or rapidly worsening neurologic symptoms, chest pain, faintness, or severe shortness of breath require stopping activity and seeking appropriate medical guidance.

### Objective(s)

- By the end of the lesson, participants will name at least three potential benefits of regular physical activity and three safety or adaptation strategies for MS.

7. Participants will show how to set up the chair/space safely and select a suitable seated or supported standing option for current symptoms.
8. During the routine, participants will be asked to determine an appropriate level of personal intensity using the 0-10 RPE scale or talk test.
9. Participants will perform, adapt or verbally instruct all stages of the 15-minute routine (warm-up, strength/aerobic circuit, cool-down).
10. Participants will write one specific movement plan for the next seven days, including frequency, adaptation, and a barrier solution.

## Introduction to the Lesson

The facilitator opens by stating that movement is not “one size fits all.” Participants are reminded that fluctuating symptoms are expected and that the goal is to work with the body rather than push through it. The facilitator explains that observing, directing, or completing a smaller range of motion can still demonstrate learning when symptoms limit participation.

## Introductory Activity

### Movement Confidence Line (10 minutes)

Participants rate their current confidence in being active from 0 (“not confident yet”) to 10 (“very confident”). They identify one factor that raises confidence and one barrier that lowers it. In a virtual session, participants respond by poll or chat. The facilitator records common barriers—fatigue, balance, pain, heat, fear of falling, transportation, or lack of equipment—and previews how the lesson will address them.

## Content Outline

| Time      | Content/message                                                          | Facilitator method                                     | Participant response                          |
|-----------|--------------------------------------------------------------------------|--------------------------------------------------------|-----------------------------------------------|
| 0–10 min  | Welcome, medical/safety disclaimer, confidence line.                     | Normalize adaptations and variable symptoms.           | Rate confidence and name one barrier.         |
| 10–22 min | Benefits of movement and “some is better than none.”                     | Plain-language mini-lesson; connect to personal goals. | Name three benefits.                          |
| 22–35 min | Safety setup: chair, floor, footwear, cooling, hydration, symptom check. | Demonstrate safe/unsafe examples.                      | Complete readiness checklist.                 |
| 35–45 min | RPE scale, talk test, pacing, and stop signals.                          | Model intensity levels and teach-back.                 | Choose a personal target effort.              |
| 45–50 min | Fatigue and hydration break.                                             | Offer quiet/cooling break.                             | Rest and reassess symptoms.                   |
| 50–68 min | Guided 15-minute adaptive movement routine.                              | Demonstrate seated and supported-standing options.     | Complete, modify, observe, or direct routine. |
| 68–80 min | Partner coaching and barrier-solving.                                    | Use “What option works today?” prompts.                | Practice one adaptation and coach a peer.     |
| 80–90 min | Skill assessment, action plan, conclusion.                               | Use 10-point checklist; provide feedback.              | Demonstrate competency and commit to a plan.  |

## Lesson Plan 2 — Learning Activities and Assessment

### Learning Activity(ies)

#### Safety detective (8 minutes)

The facilitator displays or describes two movement setups. Participants identify risks such as a rolling chair, clutter, unstable footwear, poor lighting, lack of support, or overheated room. Discussion question: “What would make this setup safer for your symptoms today?”

#### Effort-scale practice (5 minutes)

Participants perform 20–30 seconds of gentle seated marching or arm movement, then report RPE and whether they can speak comfortably. They learn that intensity is personal and may differ across days.

#### Guided routine (15 minutes)

Participants follow Supplement 5. Every movement includes seated and supported-standing options. Participants may reduce range, slow the pace, rest, observe, or verbally direct a movement.

#### Adaptation coaching (12 minutes)

In pairs, one participant selects a barrier card—fatigue, balance, heat, weakness, pain, or cognitive overload. The partner recommends one safe modification. Discussion prompts: “What is the goal of this movement?” “How can we preserve the goal while changing the position, pace, range, or duration?”

#### Weekly movement plan (7 minutes)

Participants use Supplement 6 to select days, duration, effort, and a backup plan for a symptom-heavy day.

#### Facilitator discussion questions

1. What food traditions do you share with family or community? 2. What helps, not hinders? 3. How do fatigue, cost, transportation, or kitchen access impact your choices? 4. Who could support your action step? 5. What question should you ask your healthcare team before making a major dietary change?

### Final Thoughts/Conclusion to the Lesson

The facilitator reinforces that safe adaptation is a skill. Participants are not expected to match anyone else’s range, speed, or duration. The group repeats the phrase, “I can change the position, pace, range, or time and still meet the movement goal.” Each participant identifies one movement they feel confident repeating and one support they will use during the week.

### Assessment

The facilitator uses the skill checklist and action plan in Supplement 6. Participants may demonstrate physically, demonstrate from a seated position, verbally direct the sequence, or explain modifications when symptoms prevent full participation. Competency is based on safety, self-monitoring, adaptation, sequence knowledge, and planning—not athletic performance.

#### Scoring Rubric for Assessment (10 points)

| Criterion       | 2 points                                                                         | 1 point                                                      | 0 points                                                       |
|-----------------|----------------------------------------------------------------------------------|--------------------------------------------------------------|----------------------------------------------------------------|
| Safe setup      | Uses stable chair/support, clears space, and identifies cooling/hydration needs. | Identifies most setup steps with one prompt.                 | Setup remains unsafe or participant cannot identify key risks. |
| Self-monitoring | Correctly uses RPE/talk test and responds appropriately to symptoms.             | Uses tool with prompting or gives an incomplete explanation. | Does not monitor effort or ignores stop signals.               |

| Criterion         | 2 points                                                                                 | 1 point                                                      | 0 points                                |
|-------------------|------------------------------------------------------------------------------------------|--------------------------------------------------------------|-----------------------------------------|
| Adaptation choice | Selects and explains a seated/supported option that preserves the movement goal.         | Selects an option but needs help explaining or adjusting it. | Chooses an unsafe or unsuitable option. |
| Routine sequence  | Completes, modifies, observes, or verbally directs all four phases in order.             | Completes/directs most phases with prompting.                | Cannot identify the routine phases.     |
| Seven-day plan    | Plan specifies days/frequency, duration, effort or symptom check, and backup adaptation. | Plan is relevant but missing one or two elements.            | No feasible plan is documented.         |

Interpretation: 8–10 = meets lesson competency; 6–7 = developing and benefits from guided practice; 0–5 = stop and reteach safety, involve the appropriate clinician/physical therapist when needed, and reassess using an alternate format.

## Classroom Materials & Management

- Materials: sturdy non-rolling chairs; optional resistance bands; water; fan or cooling option; timer; high-contrast routine cards; RPE scale; barrier/adaptation cards; sanitizer for shared equipment.
- Room setup: wide clear pathways, stable flooring, chairs spaced to allow arm and leg movement, one chair near a wall or rail, and no requirement to stand.
- Staffing: ideally a fitness professional, physical therapist, occupational therapist, or instructor trained in adaptive exercise and emergency procedures. Obtain emergency contacts and follow site policy.
- Group management: ask participants to complete a current symptom check; discourage comparison; schedule a break; allow camera-off or observation-only participation; never require disclosure of medical details to the group.
- Hybrid delivery: ask remote participants to position the camera only if comfortable; verify stable seating and clear space verbally; provide the routine card in advance; avoid exercises requiring hands-on correction.

## Resources

- National Multiple Sclerosis Society: Exercise and Physical Activity and Pathways to Wellness in MS: Exercise.
- CDC: How to Measure Physical Activity Intensity (RPE and talk test).
- U.S. Department of Health and Human Services: Physical Activity Guidelines for Americans, 2nd edition.

## Supplement 4 — Movement Safety and Readiness Card

### Before You Move

| Check                                                               | My plan today                                                                           |
|---------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| <input type="checkbox"/> Stable chair or support                    | Seated / supported-standing / standing                                                  |
| <input type="checkbox"/> Clear floor and enough space               | I removed: _____                                                                        |
| <input type="checkbox"/> Comfortable clothing and secure footwear   | My footwear/support: _____                                                              |
| <input type="checkbox"/> Water available                            | <input type="checkbox"/> Yes <input type="checkbox"/> Not needed for this short session |
| <input type="checkbox"/> Cooling option available if heat-sensitive | Fan / cool room / cool cloth / shorter intervals                                        |
| <input type="checkbox"/> Symptoms checked before starting           | Energy: ____/10 Pain: ____/10 Balance today: _____                                      |
| <input type="checkbox"/> Personal effort target selected            | RPE target: ____/10                                                                     |
| <input type="checkbox"/> Backup option selected                     | Smaller range / slower pace / seated / rest / observe                                   |

### Use Your Effort Scale

| RPE  | How it may feel                                | What to do                                                              |
|------|------------------------------------------------|-------------------------------------------------------------------------|
| 0–2  | Very easy; breathing normal                    | Warm-up, recovery, or symptom-heavy day                                 |
| 3–4  | Light to somewhat challenging; can talk easily | Appropriate starting range for many participants                        |
| 5–6  | Moderate; can talk but not sing                | CDC's general moderate-intensity range; use only if appropriate for you |
| 7–10 | Hard to maximum; talking is difficult          | Not the target for this introductory session                            |

### Stop and get help

Stop activity for chest pain, fainting, severe shortness of breath, or a sudden serious change. Contact your healthcare team for new or rapidly worsening neurologic symptoms, repeated falls, or symptoms that do not settle with rest. This card does not replace individualized medical advice.

### Ways to Adapt Without Giving Up the Goal

| Change   | Example                                   | Goal preserved                          |
|----------|-------------------------------------------|-----------------------------------------|
| Position | Stand → supported stand → sit             | Strength, balance, or mobility practice |
| Range    | Use a smaller arm or leg movement         | Joint motion and muscle activation      |
| Pace     | Move more slowly                          | Control and endurance                   |
| Time     | 30 seconds → 15 seconds + rest            | Accumulated movement                    |
| Load     | Band/weight → body weight → no resistance | Safe strength practice                  |

## Supplement 5 — 15-Minute Adaptive Movement Routine

### How to use this routine

Choose the seated or supported-standing option that fits your symptoms today. Use a stable chair. Move in a comfortable range. Breathe continuously. Rest whenever needed. The facilitator should demonstrate each option before beginning.

| Time        | Movement                      | Seated option                                            | Supported-standing option                                | Self-check                         |
|-------------|-------------------------------|----------------------------------------------------------|----------------------------------------------------------|------------------------------------|
| 0:00–1:00   | Posture + breathing           | Sit tall; inhale gently, exhale slowly; relax shoulders. | Stand with hands on chair; soften knees; slow breathing. | Any dizziness? Adjust position.    |
| 1:00–2:00   | Ankle pumps + heel/toe raises | Alternate toes up/heels up.                              | Hold chair; raise heels, then toes if safe.              | Warm, not strained.                |
| 2:00–3:00   | Shoulder rolls + arm reach    | Roll shoulders; reach forward/up within comfort.         | Same with wide stable stance.                            | No breath holding.                 |
| 3:00–5:00   | March or toe taps             | Alternate knee lifts or toe taps.                        | March holding chair or tap feet side to side.            | RPE ____/10; can you talk?         |
| 5:00–7:00   | Leg strength                  | Alternate knee extensions; pause briefly.                | Mini-squat to chair or sit-to-stand as appropriate.      | Knees and balance feel controlled. |
| 7:00–9:00   | Upper-body strength           | Wall/chair push-away or press palms together.            | Wall push-up or counter push-up.                         | Shoulders relaxed.                 |
| 9:00–11:00  | Side movement                 | Seated side taps or step one foot out and in.            | Supported side steps.                                    | Use smaller range if needed.       |
| 11:00–13:00 | Repeat favorite 2 movements   | Choose two movements for 45 sec each with 15 sec rest.   | Choose two movements for 45 sec each with 15 sec rest.   | Stay at personal target effort.    |
| 13:00–15:00 | Cool-down                     | Slow ankle pumps, shoulder relaxation, and breathing.    | Slow march, then supported breathing.                    | RPE should begin to fall.          |

### After the routine

|                                     |                              |
|-------------------------------------|------------------------------|
| My effort at the end                | ____/10                      |
| My symptoms compared with the start | Better / same / worse: _____ |
| One movement I would repeat         | _____                        |
| One adaptation I used               | _____                        |

# Supplement 6 — Movement Action Plan and Skill Assessment

## A. My Seven-Day Movement Plan

|                                  |                                                |
|----------------------------------|------------------------------------------------|
| Movement I will do               |                                                |
| Days or frequency                |                                                |
| Minutes or number of short bouts |                                                |
| My usual option                  | Seated / supported-standing / standing / mixed |
| My target effort                 | ____/10 or talk-test description: _____        |
| My symptom-heavy-day backup      |                                                |
| My support/reminder              |                                                |

## B. Facilitator Skill Checklist

| Criterion                     | 2                        | 1                        | 0                        | Notes |
|-------------------------------|--------------------------|--------------------------|--------------------------|-------|
| Safe setup                    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |       |
| RPE/talk-test self-monitoring | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |       |
| Appropriate adaptation        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |       |
| Routine sequence              | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |       |
| Feasible seven-day plan       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |       |

Total score: \_\_\_\_\_ / 10    Competency: ☐ Met (8–10) ☐ Developing (6–7) ☐ Reteach/follow-up (0–5)

## C. Teach-Back Prompts

- Show or tell me how you would make your movement space safe.
- How will you decide whether today is a seated, supported-standing, or standing day?
- What does your RPE number or talk test tell you?
- What will you change if fatigue, balance, heat, or pain increases?
- When and where will you repeat this routine during the next week?

### Facilitator note

Do not score participants on speed, range of motion, strength, or ability to stand. Score the safety and self-management decisions that allow the participant to move appropriately for their current condition.

## Facilitator Notes for Both Lessons

### Health Literacy and Cognitive Accessibility

- Present no more than three to five key messages at one time and repeat the take-home messages at the beginning, middle, and end.
- Use plain language, large high-contrast text, short sentences, pictures or food cards, and spoken instructions.
- Use teach-back: “I want to be sure I explained it clearly. Please show me how you would use this at home.”
- Offer written, oral, picture-based, and demonstration-based assessment formats. Allow extra processing time and reduce distractions.
- Provide materials before the session and again afterward by email or text link.

### Cultural Responsiveness

- Treat culture, spirituality, family, and food traditions as assets rather than barriers.
- Invite participants to generate examples; avoid assuming that all African American participants eat the same foods or share the same beliefs.
- Use “more often/less often,” “add/pair/prepare,” and “options” rather than moral labels such as “good/bad” or “clean/dirty.”
- Ask about affordability, access, transportation, equipment, neighborhood safety, and caregiving responsibilities before recommending a behavior.

### Fatigue, Mobility, and Symptom Variability

- Schedule a planned break and normalize unscheduled breaks.
- Provide seating near exits and restrooms, uncluttered paths, cooling options, water, and a camera-off option for virtual participants.
- Allow participants to observe, verbally direct, or complete a reduced version of an activity without penalty.
- Avoid promising that a food or exercise will prevent progression, reduce inflammation, or improve a symptom for every participant.

### Scope and Referral

- These lessons provide health education, not individualized medical nutrition therapy, physical therapy, or medical diagnosis.
- Refer participants with swallowing difficulty, unintended weight change, disordered eating concerns, complex medication/supplement questions, repeated falls, or major mobility changes to the appropriate clinician.
- Encourage participants to continue disease-modifying therapy and other treatment as prescribed unless their healthcare professional changes the plan.

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### Source note

The lesson structure follows the uploaded Health Education Lesson Plan Template. Program population, curriculum sequence, culturally responsive approach, and pilot-test goals are based on the uploaded Thrive and Rise Above MS Program Planning Framework.