

# USING THE EXERCISE AND NUTRITION HEALTH EDUCATION CURRICULUM

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## STAFF TRAINING: TRAIN-THE-TRAINER

We recommend staff training prior to starting your exercise and nutrition health education program. Our new book titled *Staff Guide to Establishing Exercise and Nutrition Health Education Programs for Adults with Developmental Disabilities (DD)* gives staff guidelines on how to organize and start a physical activity and health education program for adults with developmental disabilities (DD) in community-based residential and day/vocational agencies.

This *Staff Guide* was developed using the Transtheoretical Model of Behavior Change<sup>7,8</sup> and Bandura's Social Cognitive Theory.<sup>3,4</sup> By using the transtheoretical approach and social cognitive theory, staff will learn the processes of modifying or changing health behaviors. The transtheoretical approach to behavior change uses five stages in which one becomes increasingly more motivated and ready to modify or change a particular behavior. According to social cognitive theory, movement toward behavior change is affected by one's: 1) perception of the pros and cons of change, 2) confidence in the ability to change, and 3) perceived level of social support to adopt a new behavior.

The *Staff Guide* provides a comprehensive six to eight hour training program for carers on starting a tailored health promotion program specific to physical activity, exercise, and nutrition for adults with DD. Our *Staff Guide* is based on the UIC Train-the-Trainer Health Promotion Program, which is a 5-year, ongoing national study. Using the *Staff Guide*, staff in community-based organizations serving persons with DD can receive training to gain skills, knowledge, and abilities for: 1) implementing a physical activity and health education program for adults with DD, 2) teaching adults with DD ways to increase physical activity and healthy food choices, and 3) supporting adults with DD to make long-term lifestyle changes. Additionally, the *Staff Guide* assists agency staff in acquiring the necessary skills and confidence to implement a physical activity and health education program personalized to their clients' needs. The *Staff Guide* includes five interactive staff training modules that incorporates four core learning tasks developed by Jane Vella. These learning tasks were created to engage adult learners in the learning process while respecting their different experiences, knowledge and attitudes toward health, and learning styles. These learning tasks are based on four assumptions: 1) learners have the capacity to do the work involved in the learning; 2) learners learn when they are actively engaged in the content; 3) new content can be presented through a learning task; and 4) learning promotes accountability. Each section includes the four different types of tasks along with Trainee handouts and worksheets. Through the *Staff Guide*, staff gain resources on teaching and supporting people with DD to increase their health knowledge and self-confidence to manage their own health in partnership with their health care provider.

Specifically, the *Staff Guide* has the following objectives for staff:

- 1) discuss issues related to physical activity (including exercise) and healthy food choices,
- 2) identify and monitor the relationship of behavior change and agency culture (e.g., staff knowledge, attitudes, and beliefs) and individual health status and behaviors (e.g., heart rate, blood pressure, maintaining equipment, and safety, pain, sweating, drinking, breathing, nutrition, medications, illness, and sleep),
- 3) set realistic goals for organization and participants,
- 4) design and tailor an individualized health promotion program to encourage participants with DD to make lifestyle changes (e.g., increase physical activity and make healthy food choices), and
- 5) support participants with DD to maintain long-term healthy lifestyles.

Staff training using the *Staff Guide* takes approximately six to eight hours depending on the number of staff participants and their educational backgrounds. We strongly recommend that trainers have training and/or experience in the areas of exercise, physical activity, nutrition, health education or self-advocacy. Additional information about our **Train-the-Trainer Workshops** can be found on the next page.



# Staff Guide to Establishing Exercise and Nutrition Health Promotion Programs for Adults with Developmental Disabilities

NEW!

**Why:** The *Staff Guide* provides staff in community-based agencies structured information on how to organize and start a tailored physical activity and health education program for adults with developmental disabilities (DD) in community-based residential and day/vocational agencies.

**Who:** Staff working with adults with DD.

**What:** The *Staff Guide* includes six to eight hours of training, with information and tools to implement a physical activity and health education program for adults with DD. This *Staff Guide* can enhance staff's skills, knowledge, and abilities to work with persons who have disabilities to become more physically active and make healthy food choices. Strategies are offered in the Resource Guide to do the following:

- 1) motivate and engage adults with DD in a physical activity and health education program,
- 2) teach core concepts relating to physical activity and nutrition to adults with DD, and
- 3) support adults with DD to incorporate physical activity and healthy lifestyles into activities of daily living.

The *Staff Guide* also provides instructions on how to use a new *Physical Activity and Health Education Personal Notebook* with participants. This notebook was designed to give feedback on participant's progress over time and increase knowledge and self-confidence to manage their health in partnership with their health care provider. In tandem with the Notebook, *thirteen new modules* were added to the 3rd edition of the *Exercise and Nutrition Health Education Curriculum* to familiarize participants with a physical activity and/or exercise program and to teach them how physical activity, exercise, and nutrition will affect their body. These modules include the following topics: heart rate; blood pressure; sweating; maintaining equipment; safety issues; good pain and bad pain; drinking water; breathing techniques; and the interaction of sleep, medications, illness, and food with physical activity.

**When:** Prior to the 12-week physical activity and health education program.

**Contact:** For more information on future RRTCADD Train-the-Trainer Workshops and Certification from experienced trainers, please contact:

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## USING THE CURRICULUM, continued

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### STARTING YOUR EXERCISE AND NUTRITION HEALTH EDUCATION PROGRAM

**Who:** Adults with developmental disabilities.

**What:** Health promotion program including exercise and nutrition education classes.

**Where:** Home, work, or community activity center.

**When:** Morning, afternoon, or early evening.

**Size:** 6 to 10 participants.

**How:** We recommend having at least 2 facilitators for the classes.

The curriculum was developed as a 12-week program with three 1-hour modules per week. Its design encourages trainers to customize the program and workbooks for each trainee.

Health education module may be enhanced by adding exercise and/or cooking activities.

The curriculum includes various activities that can be modified to fit your teaching style and the needs of your participants. After the program is over, people can begin or continue doing activities that they tried during the course of the health education program. Lastly, we recommend using parts of the curriculum to provide health education for caregivers and other support persons.

### TIPS FOR STARTING AN EXERCISE ACTIVITY PROGRAM

A fitness program should include a variety of activities that people enjoy doing.<sup>9</sup> For example, on Monday, Wednesday, and Friday you may want to walk briskly for 30 minutes, lift weights for 20 minutes, and do flexibility exercises for 10 minutes. Riding a stationary bike, swimming, dancing or doing an aerobic video can be substituted for walking. Prior to starting an exercise program, you should consider the following steps:

- Step 1 Get an okay from a healthcare provider.<sup>9</sup>** Make sure that people can safely begin exercising and will not aggravate any existing health conditions by regular exercise activity. The healthcare provider may recommend specific tests depending on the person's age and physical condition to determine any limitations in doing physical activities.
- Step 2 Do physical activities throughout the day.** Incorporate physical activity into daily routines throughout the day. When added to a structured exercise program, this can increase a person's fitness level and consume more calories, if he/she is trying to lose weight (e.g., don't use a remote control device, use stairs instead of elevators, do stretching exercises while watching TV).
- Step 3 Choose the right program.** Find an activity that fits the needs and interests of the individual. Make sure that the activity is accessible for people with disabilities.
- Step 4 Exercise a minimum of 3 days a week for at least 30 minutes.**
- Step 5 Keep the program fun and rewarding.** People must have fun doing the exercise activity in order to continue with their exercise program. Expose people to a variety of activities that they can do with their friends and/or family members and/or by themselves.
- Step 6 Foster fitness among staff and caregivers.** People are more likely to engage in exercise activities if they see people participating in fitness programs.

### TEACHING STRATEGIES

Several strategies are used throughout the curriculum. The strategies are characterized by processes of **choice, self-determination, self-efficacy, self-advocacy, rights and responsibility**. Implementation emphasizes two primary concepts based on primary health care: 1) maximum individual involvement in the planning and implementation of exercise and nutrition goals and 2) health promotive rather than curative activities. Additionally, strategies from a *Primary Health Care Curriculum*<sup>24</sup> including problem-solving techniques, conflict resolution, and role playing are used to teach the curriculum. *These strategies may be used to facilitate the learning process in each of the classes depending on the group and the individual style of the instructor.* They include the following:

- 1) **Problem-solving** is a strategy that is not directly addressed in the curriculum but is recommended for the facilitator as an underlying approach in each of the modules.<sup>24</sup> The problem-solving or decision-making approach provides participants with the skills and attitudes necessary to become life-long learners. In order for problem-solving to work in the classroom, the facilitator needs to:
  - have objectives that can be accomplished through the use of the process,
  - set the tone for the progress of the class by ensuring that participants are relaxed, and the atmosphere is calm, non-threatening, and non-judgmental, and
  - practice the principles and reinforce them with the participants at every opportunity.
- 2) **Conflict-resolution** is another strategy used throughout the curriculum as an underlying approach to teaching the content of each module. Conflict is defined as a clash of opinions, needs, or wants between individuals or groups.<sup>24</sup> The result of a conflict may be positive or negative. When handled correctly, conflict can lead to growth within individuals or groups. It can help participants see that their needs and wants may be different from those of others and that this may result in disagreements. Conflict resolution can help people understand that the person with whom they disagree has the right to his/her own needs and wants. Moreover, each person has the right to be accepted regardless of his or her point of view. Lastly, conflict resolution can help participants identify positive ways of resolving conflict such as demonstrating a willingness to discuss the situation to clarify the problem and trying to search for a solution that is agreeable to each person.
- 3) **Role playing** may also be used by the facilitator to teach the curriculum content. The reason for using role playing is to introduce the content through the participants' actual health experiences.<sup>24</sup>

Initially, ask for volunteers or select participants who are likely to talk and role play, and who can follow general instructions related to the role or situation for the first few modules. In the role playing exercises, have participants look for specific points or identify with the feelings of the actor in the role play. Participants' interest, involvement, and learning is easier when they have a specific task. Encourage people to express themselves freely. Address all remarks to the "characters" by name.

Use open-ended questions to encourage group participation in the discussion. Focus the discussion on the feelings, thoughts and actions of the characters and on the purposes and consequences of their actions. Help participants relate their experiences to situations that they might have or will encounter. After the participants have completed the role play, commend everyone for their efforts. Discuss what you thought was good about the role play and then suggest areas for improvement. Make sure that each participant has an opportunity to participate in a role-play situation.

## USING THE CURRICULUM, continued

### EVALUATION OF PARTICIPANT PERFORMANCE

The exercise and nutrition curriculum was designed to foster responsible, positive attitudes toward healthy behaviors for people with developmental disabilities. While these are long term goals that may be difficult to assess, we can evaluate growth towards the goals. The purpose of the evaluation is to measure growth in participant knowledge, skills, and attitudes toward exercise and nutrition behaviors as well as improved social-emotional well-being. We recommend doing an evaluation at the beginning and at the end of the program.

The assessment tools that we use for the project were pilot tested and adapted for people with mild to moderate intellectual disabilities and were tested for their reliability and validity. These tools may not be appropriate for people with more severe intellectual disabilities.

Lastly, wherever possible, peer and self-evaluation should be encouraged. Help participants learn to evaluate themselves. Peer evaluation is an important part of the curriculum. If possible, solicit information from support persons to assist in the evaluation of participant progress with the objectives.

### INSTRUMENTS

The following tools are the instruments that we used to measure the objectives for the curriculum. They have been included in the curriculum for your use. See **Appendix C** for the Assessments.

Scale	Reliability	Test - retest Correlation
	n=29	n=29
1. Energy Fatigue Scale <sup>10</sup>	.63	.44*
2. Jette Pain Measures <sup>11</sup>	.86	.40*
3. Life Satisfaction Scale for Adults with Developmental Disabilities <sup>12,13</sup>	.81	.60**
4. Choice-Making Scale <sup>14</sup>	.77	.66**
5. Exercise Knowledge Scale <sup>14</sup>	.66	.56**
6. Exercise and Activity Inventory <sup>15</sup>	NA	NA
7. Exercise Perception Scale <sup>16</sup>	.79	.72**
8. Barriers Scale <sup>17</sup>	.73	.55**
9. Exercise: Social/Environmental Support Scale <sup>18</sup>	.76	.48**
10. Self-Efficacy Scale <sup>19</sup>	.91	.52**
11. Community Integration Scale <sup>20,21</sup>	NA	.63**

Overall interrater reliability = .95

\* (p < .05)  
\*\* (p < .01)