

*International Curriculum
Guidelines for Preparing
Physical Activity Instructors of
Older Adults in Collaboration
With the Aging and Life Course,
World Health Organization*



World Health Organization
Aging and Life Course



ISAPA
International Society for Aging
and Physical Activity

EXECUTIVE SUMMARY

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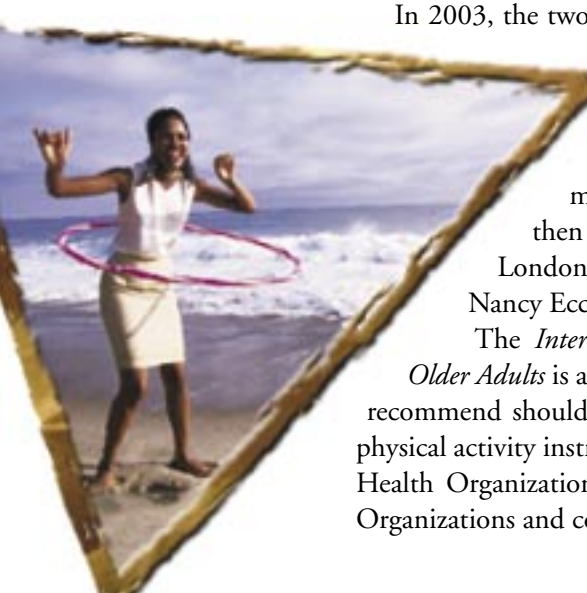
The recognized value of physical activity in preserving functional capacity and reducing physical frailty in later years, combined with the support of the medical community, has resulted in numerous senior fitness and physical activity classes springing up in various facilities (e.g., senior centers, hospitals, recreation departments, health and fitness clubs, churches, YMCAs, community centers, retirement communities, long-term care facilities) throughout the world. Because of the lack of licensure or endorsement of training guidelines for preparing physical activity instructors of older adults, facility directors can hire whom they want, regardless of the instructors' educational backgrounds. People receiving little or no specialized training can advertise themselves as senior fitness instructors. Most older adults lack the knowledge and experience to determine whether the physical activity program in which they are participating is safe and effective. Experts in the field have argued that because of the range of medical conditions and functional abilities of the 65-and-older population, physical activity instructors of older adults require more knowledge, skills, and experience than instructors of younger adults. Unfortunately, because of the lack of endorsed curriculum training guidelines to prepare physical activity instructors of older adults, some training programs have not required instructors to attain essential knowledge and skills for instructing older adults in a safe and effective way.

HISTORICAL BACKGROUND

Historically, the development of the *International Curriculum Guidelines for Preparing Physical Activity Instructors of Older Adults* began at the 1996 World International Congress on Physical Activity, Aging and Sport held in Heidelberg, Germany. Delegates from several countries met and developed a draft document; however, the guidelines were never published. Subsequently, Canada developed national guidelines in 2003 (appendix A) under the leadership of the Canadian Centre for Activity and Aging and with the support of Health Canada. In the United States, representatives from six national organizations developed and published national standards in 1998 (appendix B).

In 2003, the two separate documents from the United States (national standards) and Canada (national guidelines) were condensed into one document and titled the *International Curriculum Guidelines for Preparing Physical Activity Instructors of Older Adults*. Then, a coalition of members from 13 countries and a committee from the United States (appendix C) agreed to review and make recommendations for this document. These international guidelines were then presented at the 6th World Congress on Aging and Physical Activity held in London, Ontario, Canada (August 3 to 7, 2004) by the cochairs of this initiative, Nancy Ecclestone (Canada) and C. Jessie Jones (United States).

The *International Curriculum Guidelines for Preparing Physical Activity Instructors of Older Adults* is a consensus document that outlines each of the major content areas that experts recommend should be included in any entry-level training program with the goal of preparing physical activity instructors to work with older adults. The principles and perspectives of the World Health Organization (WHO) Active Ageing Policy Framework are reflected in this document. Organizations and coalitions currently endorsing the guidelines are listed in appendix D.



These guidelines can be applied to older adults across the continuum from healthy, independent older adults in community settings to functionally dependent older adults in long-term care. Advanced training would be necessary for instructors interested in working with older adults with severe disabilities or cognitive impairment in rehabilitation settings or managing and directing facilities, especially ones providing insurance reimbursement and those that serve a more frail older adult population.

Because of the complexity of the fitness industry and the differences in state and national requirements throughout the world, we believe that it is the responsibility of individual associations and organizations to develop the details of each major content area within each curriculum module, to develop appropriate areas of emphasis, and to develop performance standards that indicate the level of achievement expected of their students. Because of the varied functional ability levels of older adults, it is important to be aware of the target population (community-dwelling, able older adults versus homebound or institutionalized frail older adults) and to develop the content to meet the specific needs of that population.

PURPOSE AND DEFINITIONS

The purpose of the *International Curriculum Guidelines for Preparing Physical Activity Instructors of Older Adults* is to (1) ensure safe, effective, and accessible physical activity and fitness programs for older adults; (2) develop competent physical activity instructors of older adults; (3) provide more consistency among instructor training programs preparing physical activity instructors of older adults; (4) inform administrators, physical activity instructors, and others about the minimum training guidelines recommended by the profession when recruiting physical activity instructors of older adults; (5) clarify the definition and role of a physical activity instructor for older adults; and (6) establish the level of expertise required to help protect instructors and other facility staff from litigation (lawsuits). *These curriculum guidelines are not being developed to promote one certification or licensing body of physical activity instructors of older adults, but rather to provide curriculum guidelines to encourage more consistency among instructor training programs throughout the world.*

These guidelines do not include recommendations for (1) qualifications and experience of trainers and course tutors, (2) methods of curriculum delivery, (3) assessment requirements for students, or (4) requirements of the training providers.

Definitions of terms

The following terms are commonly used when discussing training modules.

instructor—A physical activity instructor is broadly defined as a professional who teaches, educates, and trains people to do physical activities.

physical activity—An encompassing term to mean any body movement produced by a skeletal muscle that results in energy expenditure.

exercise—A subset of physical activity. It is planned and repetitive body movement, which improves or maintains one or more components of physical fitness (e.g., cardiovascular endurance, muscular strength, balance, flexibility).



TRAINING MODULE 1: OVERVIEW OF AGING AND PHYSICAL ACTIVITY



Recommended areas of study include general background information about the aging process and the benefits of an active lifestyle.

Suggested Topics

1. Demographic considerations (e.g., ethnicity, culture, gender) as they relate to individual participation in physical activity programs
2. Various definitions of aging (including pathological, usual, and successful aging)
3. The difference between the terms chronological, biological, and functional aging
4. The benefits of physical activity as it relates to the multiple dimensions of wellness (e.g., intellectual, emotional, physical, vocational, social, spiritual) and the prevention of chronic medical conditions, health promotion, and quality of life throughout the lifespan
5. Current research and epidemiology related to health and physical activity



TRAINING MODULE 2: PSYCHOLOGICAL, SOCIOCULTURAL, AND PHYSIOLOGICAL ASPECTS OF PHYSICAL ACTIVITY AND OLDER ADULTS

Recommended areas of study include psychological, sociocultural, and physiological aspects of physical activity in order to develop safe and effective physical activity and exercise programs for older adults.



Suggested Topics

1. Exercise science: Basic anatomy, physiology, neurology, motor learning and control, and exercise psychology
2. Myths, stereotypes, and barriers associated with aging and physical activity participation in later life
3. Predictors of successful aging (e.g., biological, psychological, and sociological theories of aging, environmental factors, and lifestyle choices)
4. The relationship between physical activity and psychosocial well-being
5. Age-associated physiological and biomechanical changes in multiple body systems (e.g., cardiovascular and respiratory systems, musculoskeletal system, and central nervous system) and how these changes affect functional mobility and independence



TRAINING MODULE 3: SCREENING, ASSESSMENT, AND GOAL SETTING

3 Recommended areas of study include information on selection, administration, and interpretation of preexercise health and activity screening and fitness and mobility assessments appropriate for older adults. This information will provide the basis for exercise program design and appropriate referrals to other health professionals.

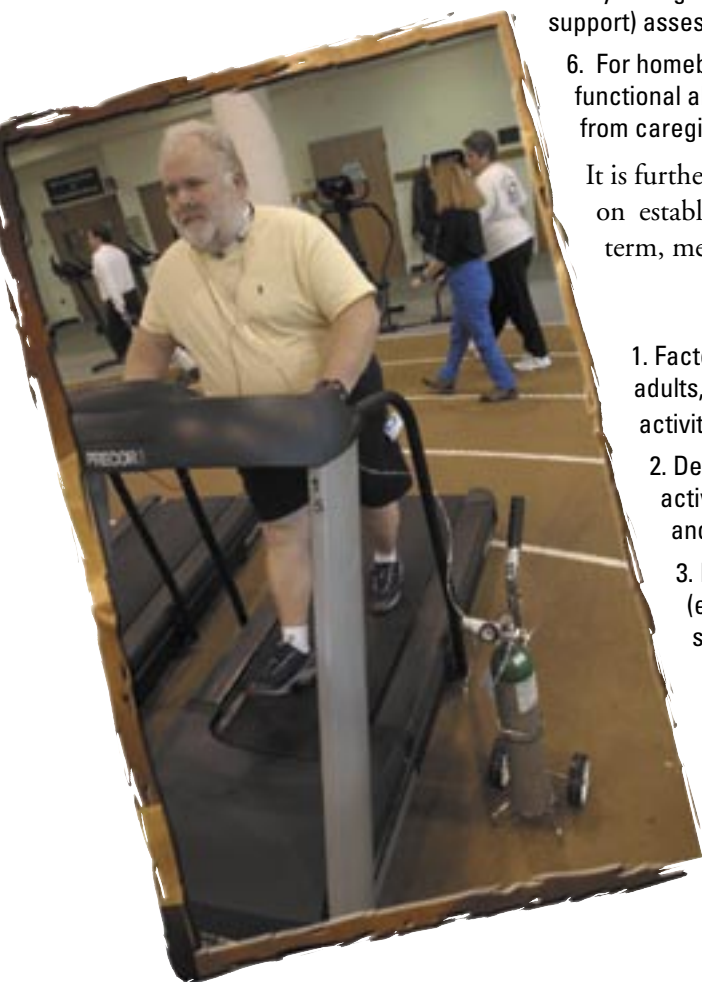
Suggested Topics

1. Guidelines and procedures for the selection, administration, and interpretation of screening tools to determine the health, physical activity, and disability status of older adult participants
2. Health, activity, and other lifestyle appraisals, including identification risk factors for falls and cardiovascular complications
3. How and when to make appropriate referrals to, or seek advice from, physicians and other qualified allied health and fitness professionals
4. Physiological and functional fitness assessments (e.g., heart rate, blood pressure, body mass index, and field tests for strength, flexibility, submaximal endurance, and functional mobility such as balance, agility, gait, coordination, and power)
5. Psychological (e.g., self-efficacy, depression) and sociological (e.g., social support) assessments
6. For homebound or institutionalized older adults, assessments of functional abilities (e.g., mobility, grooming, dressing, toileting) with input from caregivers

It is further recommended that training programs include information on establishing, with client input, realistic and measurable short-term, medium-term, and long-term goals.

Suggested Topics

1. Factors influencing physical activity participation among older adults, including barriers, motivators, regular involvement in physical activity, and behavior modification
2. Developing, monitoring, and modifying short-term and long-term activity goals based on results from screening and assessments and input from the participants and caregivers if appropriate
3. Importance of encouraging lifetime leisure physical activities (e.g., dancing, gardening, hiking, tennis, swimming) in addition to structured exercise programs



TRAINING MODULE 4: PROGRAM DESIGN AND MANAGEMENT

Recommended areas of study include information about using results from screening, assessment, and client goals to make appropriate decisions regarding individual and group physical activity and exercise program design and management.

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Suggested Topics

1. Interpretation of prescreening and assessment data, and consideration of client goals, for effective program development
2. Exercise variables (e.g., mode, frequency, duration, intensity) and principles (i.e., overload, functional relevance, challenge, accommodation) for program design in both individual and group settings
3. Exercise training components and methods, including warm-up and cool-down, flexibility, resistance, aerobic endurance, balance and mobility, mind–body exercise, and aquatics for program design in both individual and group settings
4. Applied movement analysis for proper selection and implementation of specific exercises
5. Training formats and session designs for various functional abilities and individual and group exercise sequencing for exercise programming
6. Economic considerations and consequent options for equipment (e.g., quality for cost, safety, and age-friendliness)
7. Importance of making healthy lifestyle choices (e.g., proper nutrition, stress management, and smoking cessation)
8. An organizational system for participant recruitment, tracking exercise compliance, and maintaining other client information
9. Methods for client reassessment and program evaluation



TRAINING MODULE 5: PROGRAM DESIGN FOR OLDER ADULTS WITH STABLE MEDICAL CONDITIONS

Recommended areas of study include information on common medical conditions of older adults, signs and symptoms associated with medication-related negative interactions during activity and how to adapt exercise for clients with varying fitness levels, and stable medical conditions to help prevent injury and other emergency situations.

Suggested Topics

1. Age-related medical conditions (e.g., cardiovascular disease, stroke, hypertension, respiratory disorders, obesity, arthritis, osteoporosis, back pain, diabetes, balance and motor control deficits, visual and hearing disorders, dementia, and urinary incontinence)
2. How to adapt group and individual exercise programs to accommodate for age-related medical conditions and for people who have experienced falls, operations, and illness
3. How to adapt group and individual exercise programs to accommodate for prosthetics (e.g., artificial hips, knees, legs)
4. How to design programs for preventive health (e.g., exercises to reduce risk of falling, control diabetes, heart disease)
5. Recognizing signs and symptoms associated with medication-related negative interactions during physical activity (e.g. postural hypotension, arrhythmias, fatigue, weakness, dizziness, balance and coordination problems, altered depth perception, depression, confusion, dehydration, and urinary incontinence) and refer back to health professional



TRAINING MODULE 6: TEACHING SKILLS

Recommended areas of study include information about motor learning principles that guide the selection and delivery of effective individualized and group exercises and physical activities, and the construction of safe and effective practice environments.

Suggested Topics

1. Application of motor learning principles for proper client instruction, verbal cues, feedback, and reinforcement
2. Structure of the learning environment to facilitate optimal learning of motor skills
3. Development of safe, friendly, and fun exercise and physical activity environments (e.g., appropriate use of humor, special equipment, creative movements, music, novelty, and props)
4. Issues facing older adults that may affect motivation (e.g., depression, social isolation, learned helplessness, low self-efficacy)
5. Development of lesson plans and elements of instruction
6. Methods for self-evaluation of teaching effectiveness
7. Monitoring and adjustment of exercise variables (e.g., frequency, intensity, duration, mode)



TRAINING MODULE 7: LEADERSHIP, COMMUNICATION, AND MARKETING SKILLS

7 Recommended areas of study include information on incorporating effective motivational, communication, and leadership skills related to teaching individual and group exercise classes as well as professional leadership skills, and how to create effective marketing tools for program and self.

Suggested Topics

1. Principles of individual and group dynamics in structured exercise settings
2. Translation of technical terminology into client-friendly language
3. Incorporating leadership skills into personal training and group physical activity classes to enhance teaching effectiveness and client satisfaction
4. Application of positive interpersonal interaction behaviors to work with a heterogeneous older adult population (e.g., gender, ethnicity, education level) in both group and individual exercise settings
5. Listening skills and reception to participants' feedback
6. Development of social support strategies (e.g., buddy system, telephone support)
7. Development of effective, age-friendly marketing strategies and tools of program and self, and methods of delivering the "right" message



TRAINING MODULE 8: CLIENT SAFETY AND FIRST AID

Recommended areas of study include information on developing a risk-management plan to promote a safe exercise environment and respond to emergency situations.

Suggested Topics

1. Signs that indicate need for immediate exercise cessation or immediate medical consultation
2. Appropriate response to emergency situations such as would be covered in standard first-aid and CPR classes (e.g., cardiac arrest; airway obstruction; emergencies requiring rescue breathing; heat- and cold-related injuries; musculoskeletal injuries including strains, sprains, and fractures; diabetic emergencies; bleeding; falls; seizures; and shock)
3. Establishment of an emergency action plan
4. Identification of a safe and age-friendly exercise environment (e.g., working conditions of equipment, accessibility, ventilation, lighting, floor surfaces, proper footwear, access to water and washroom facilities) and precautions for environmental extremes (e.g., high or low temperatures and excessive humidity)



TRAINING MODULE 9: ETHICS AND PROFESSIONAL CONDUCT

9 Recommended areas of study include information on legal, ethical, and professional conduct.

Suggested Topics

1. Legal issues related to delivering physical activity programs to older adults, including legal concepts and terminology
2. Issues related to lawsuits, including scope of practice, industry standards, and negligence and types of applicable insurance coverage
3. Ethical standards and personal conduct and scope of practice for physical activity instructors of older adults
4. Accessing resources for the enhancement of professional skills (e.g., position stands, ethical practices, professional practice guidelines consistent with the standards of care)
5. Methods of continuing education to enhance one's professional skills



APPENDIX A CANADIAN GUIDELINES

Canadian Guidelines for Leaders of Physical Activity Programs for Older Adults in Long-Term Care, Home Care and the Community (2003) can be found on the Web site of the Canadian Centre for Activity and Aging at www.uwo.ca/actage.

These guidelines were produced as a result of the release, in the International Year of Older Persons (1999), of the following:

- *Canada's Physical Activity Guide to Healthy Active Living* (endorsed by more than 56 organizations)
- *Blueprint for Action for Active Living and Older Adults: Moving Through the Years* (contributors: La Fondation en adaptation motrice [FAM], Active Living Coalition for Older Adults [ALCOA], Canadian Centre for Activity and Aging [CCAA], and Health Canada)
- Recommendations from the *Roundtable of Leaders in Physical Activity and Aging* (1998)[†] and the *ALCOA National Forum—Older Adults and Active Living* (1999).^{*} Both events were hosted by the Canadian Centre for Activity and Aging.

[†] Financially supported by Health Canada

Several delegates representing a cross-section of health-related perspectives were instrumental in contributing to the development of the Canadian Guidelines. These contributions were solicited on the basis of their expertise and not necessarily their affiliations. Delegates (66) to the forums (¹Long-Term Care Forum, ²Home Care and Community Forum) that contributed to the Canadian guidelines include the following:

Newfoundland

- Elsie McMillan, St. John's Nursing Home Board, St. John's¹
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Fran Cook, Memorial University Recreation Complex, St. John's²
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Patricia Nugent, Health and Community Services, St. John's Region, St. John's²

Prince Edward Island

- Marilyn Kennedy, Acute and Continuing Care, Department of Health and Social Services, Charlottetown¹
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Sharon Claybourne, Island Fitness Council, Charlottetown²

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- Denise Dreimanis, Nova Scotia Fitness & Lifestyle Leaders Association, ALCOA Speakers Bureau Dartmouth¹
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Gabriel Blouin, Institute for Positive Health for Seniors, ALCOA, Ottawa²
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Trish Fitzpatrick, Client Services and Program Development, CCAC Oxford County, Woodstock²
Hania Goforth, Recreation Services, Lifestyle Retirement Communities, Mississauga²
John Griffin, George Brown College, Toronto²
Joan Hunter, Link to Health, Canadian Red Cross, Toronto²
Janice Hutton, Canadian Association of Fitness Professionals, Markham²
Jane Miller, Ontario Fitness Council, Toronto²
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Nancy Stelpstra, Ontario Fitness Council, Guelph²
Bert Taylor, University of Western Ontario, London¹
Bruce Taylor, Health Canada, Ottawa²
Sue Thorning, Ontario Community Support Association, Toronto²



A

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Russell Thorne, Manitoba Fitness Council, University of
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Health, Regina¹
Bob Lidington, Saskatoon Home Support Services, Ltd,
Saskatoon²

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Debbie Ponich, Alberta Fitness Leadership Certification
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Marjorie Sandercock, Yellowknife¹

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Health Canada



B

APPENDIX B U.S. STANDARDS

The *National Standards for Preparing Senior Fitness Instructors* were published by Jones, C.J. & Clark, J. (1998). National standards for preparing senior fitness instructors. *Journal of Aging and Physical Activity*, 6, 207-221.

Coalition Members

Chair: C. Jessie Jones, Council on Aging and Adult Development,
American Association for Active Lifestyles and Fitness

Members

Janie Clark, American Senior Fitness Association
Richard Cotton, American Council on Exercise
Laura Gladwin, Aerobics and Fitness Association of America
Gwen Hyatt, Desert Southwest Fitness, Inc.
Lee Morgan, Cooper Institute of Aerobic Research
Kay Van Norman, Council on Aging and Adult Development,
American Association for Active Lifestyles and Fitness



APPENDIX C INTERNATIONAL RECOMMENDATIONS

A coalition of members from 13 countries and a committee from the United States made recommendations for the *International Curriculum Guidelines for Preparing Physical Activity Instructors of Older Adults*.

INTERNATIONAL COALITION

Cochairs

Nancy Ecclestone, Canada
and
C. Jessie Jones, United States

Members

Susie Dinan	England
Dorothy Dobson	Scotland
Ellen Freiburger	Germany
Linda Halliday	South Africa
Carol Hansen	Canada
Eino Heikkinen	Finland
Keith Hill	Australia
Marijke Hopman-Rock	The Netherlands
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Federico Schena	Italy
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Kiyoji Tanaka	Japan
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UNITED STATES COALITION

Chair: C. Jessie Jones
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(ACSM)

Members

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Grant Clark	American Senior Fitness Association
Janie Clark	American Senior Fitness Association
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Laura Gladwin	American Fitness and Aerobic Association
Carol Kennedy	Indiana University
Steve Keteyian	ACSM
Rainer Martens	Human Kinetics
Julie McNeney	International Council on Active Aging
Colin Milner	International Council on Active Aging
Tammy Peterson	American Academy of Health and Fitness
Jerry Purvis	American Kinesiotherapy Association
Roberta Rikli	Center for Successful Aging, Cal State University, Fullerton
Debra Rose	Center for Successful Aging, Cal State University, Fullerton
Christine Schnitzer	Healthy Strides, Kisco Senior Living Facilities
Cody Sipe	A.H. Ismail Center for Health, Exercise & Nutrition, Purdue University
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Mary Visser	CAAD, AAALF
Judy Wright	Human Kinetics



D

APPENDIX D SUPPORTING ORGANIZATIONS AND COALITIONS

Organizations and Coalitions supporting the *International Guidelines for Preparing Physical Activity Instructors of Older Adults* as of this printing include the following:

American Association for Active Lifestyles and Fitness, Council on Adult Development and Aging

American Kinesiotherapy Association

American Fitness and Aerobic Association

American Senior Fitness Association

Desert Southwest Fitness, Inc.

International Council on Active Aging

National Blueprint: Increasing Physical Activity
Among Adults Age 50 and Older

World Instructor Training Schools

Organizations and Coalitions endorsing the
*International Guidelines for Preparing Physical Activity
Instructors of Older Adults* as of this printing include the
following:

Active Living Coalition for Older Adults

Canadian Centre for Activity and Aging

Canadian Society for Exercise Physiology



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ISAPA Web site at www.isapa.org.*

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