

Demonstrate knowledge of exercise prescription for older people

Level 5

Credits 8

Purpose This unit standard is designed for exercise professionals who wish to specialise in working with older people.

People credited with this unit standard are able to: explain exercise for older people in terms relevant to an exercise professional; explain changes in acute physiological responses to exercise in older people; relate chronic physiological adaptations to regular exercise of older people; describe the process followed when working with older people; and identify environmental and social factors and changes in behaviour that may enhance adherence to exercise.

Subfield Fitness

Domain Exercise Prescription

Status Registered

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Replacement information This unit standard replaced unit standard 7032.

Accreditation Evaluation of documentation and visit by NZQA and industry.

Standard setting body (SSB) Skills Active Aotearoa Limited

Accreditation and Moderation Action Plan (AMAP) reference 0099

This AMAP can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Special notes

1 Definitions

The term *older people* refers to people of at least 65 years of age.

Low intensity exercise is defined as a rate of perceived exertion (RPE) (from the 1-10 RPE scale) of <3.

Moderate intensity exercise is defined as an RPE of 3 – 5.

- 2 Risk stratification should identify those suitable for low to moderate intensity exercise and those for whom medical clearance is required.
- 3 Exercise prescription guidelines for older people include: Nelson M E; Rejeski W J; Clair S N; Duncan P W; Judge J O; King A C; Macera C A; Castaneda-Sceppa C. *Physical activity and public health in older adults: recommendation from the American College of Sports Medicine and the American Heart Association*. Source: *Medicine & Science in Sports and Exercise*, 2007 Aug; 39(8): pp 1435-1445.
- 4 Additional resources can be found at:
Canadian Society for Exercise Physiology (CSEP), <http://www.csep.ca>;
American College of Sports Medicine (ACSM) <http://www.acsm.org>;
American Heart Association (AHA) <http://www.americanheart.org>;
Sport and Recreation New Zealand (SPARC) <http://www.sparc.org.nz>.

Elements and performance criteria

Element 1

Explain exercise for older people in terms relevant to an exercise professional.

Performance criteria

- 1.1 The risk factors associated with older people are explained in terms of exercise.

Range family history, cholesterol levels, activity levels, hypertension, diabetes, arthritis, cardiovascular disease, osteoporosis, metabolic syndrome, falls, vision, hearing impairment.
- 1.2 The physiology of older people and its possible effects on exercise performance are explained.

Range strength, muscular endurance, flexibility, body composition, aerobic capacity, balance.
- 1.3 The role of key medical professionals monitoring disease processes in older people, and the diagnostic information they routinely collect, are explained.

Range medical professional – general practitioner, geriatrician or specialist physician, physiotherapist;
diagnostic information may include – range of movement tests, body mass index, bone mineral density, blood lipid profile, blood pressure, electrocardiogram, mammography, prostate health, age-related skin conditions.

Element 2

Explain changes in acute physiological responses to exercise types and variables in older people.

Range exercise variables – duration, intensity;
exercise types – resistance, aquatics, upper body exercise.

Performance criteria

2.1 Positive and negative impacts of exercise types and variables on older people are explained in terms of acute physiological responses.

Element 3

Relate chronic physiological adaptations of older people to regular exercise.

Performance criteria

3.1 Chronic physiological adaptations of older people to regular exercise are explained in relation to cardiovascular function and disease risk factors.

3.2 Exercise prescription for older people is described in terms of benefits of exercise.

Range benefits – psychological, social, physical factors.

Element 4

Describe the process followed when working with older people.

Performance criteria

4.1 The information required in order to make judgements and prescribe exercise for older people is described.

Range personal details, medical history, status of any disease (stability and latest monitoring results and prognosis), health status (including injuries and medications), lifestyle details, exercise history, exercise intentions, exercise preferences, medical clearance, contra-indications.

4.2 Exercise prescription for older people is explained in terms of the risks of exercise and the safety considerations.

Range safety considerations must include – absolute and relative contra-indications, modes of exercise that are unsuitable, intensities and durations that are unsuitable, frequencies that are unsuitable, signs that exercise should be ceased, conditions where medical supervision is required;
risks must include – immediate risks, risks of ongoing complications or damage.

4.3 Guidelines for exercise prescription are explained in terms of the recommended frequency, intensity, time, and type for older people.

Range guidelines – American College of Sports Medicine/American Heart Association, SPARC Push Play Campaign;
type – resistance, cardio.

Element 5

Identify environmental and social factors and changes in behaviour that enhance adherence to exercise.

Performance criteria

5.1 Environmental and social factors that may increase or decrease the ease with which older people can engage in and adhere to exercise are identified.

Range environmental and social factors – positive, negative.

5.2 Behaviour changes that may occur and ways of reinforcing or overcoming those changes in older people are identified.

Range behaviour changes – positive, negative.

Please note

Providers must be accredited by NZQA, or an inter-institutional body with delegated authority for quality assurance, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be accredited by NZQA before they can register credits from assessment against unit standards.

Accredited providers and Industry Training Organisations assessing against unit standards must engage with the moderation system that applies to those standards.

Accreditation requirements and an outline of the moderation system that applies to this standard are outlined in the Accreditation and Moderation Action Plan (AMAP). The AMAP also includes useful information about special requirements for organisations wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.

Comments on this unit standard

Please contact Skills Active Aotearoa Limited info@skillsactive.org.nz if you wish to suggest changes to the content of this unit standard.