IN COMMON SPORTS + FIT, FOOD AND FUN FOR ELDERLY!

2021 - 2023

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Training plan suggestion

2021-2023

60 min session	
	10’ Warm up
	20’ Strength training
	20' Cardio Training
	10’ Cooldown

60 min session	
	10’ Warm up
	45’ Adapted Sports Games
	5’ Cooldown

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General Warm up: 6’

In this first phase, we include more general exercises of an aerobic nature, including tasks that promote the activation of the main physiological systems.

This phase aims to:

1. Increase body temperature;
2. Increase heart rate;
3. Increase ventilation,
4. Increase blood flow;
5. Decrease joint fluid viscosity through low intensity activities.

Bishop, 2003a; Bishop, 2003b

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General Warm up: 6’

Warm up should:

1. Include general full-body movements;
2. Have an intensity between 40 to 60% of VO_2max;
3. Calisthenic movements;
4. Promote a progressive increase in intensity;
5. Avoid causing fatigue or reduced energy reserves.

Law et al., 2007

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Specific Warm up: 4’

This warm up phase should comprises:

- Movements similar to those included in the modality;

- Repetitions of skills to be performed in competition;

In this phase, the main movement patterns for athletic performance are executed. And the main focus is on intensity and mobility of movement.

Bishop, 2003b

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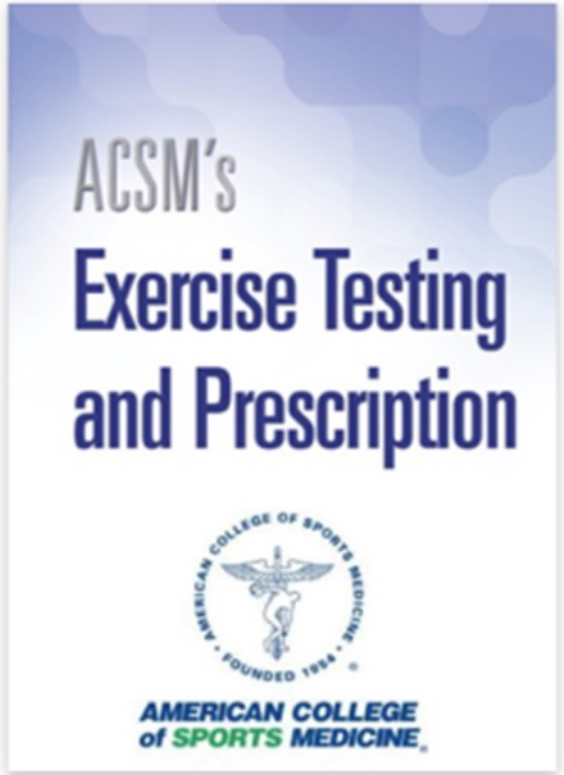
Strength and Balance Training

2021-2023

- ✓ 2 a 3 training per week with 2 days apart between training sessions;
- ✓ 8 to 10 exercises per training session according to the different body parts;
- ✓ 1 to 3 sets per exercise;
- ✓ 8 to 12 repetitions per set;
- ✓ Progression according to the number of training session per week, number of exercises per training sessions, number of sets per exercise, repetitions per set and intensity of each repetition.



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Strength and Balance Training

2021-2023

Training	Initial	Progression	Maintenance
Week (n)	4	4-8/12	>8/12
Training/week (n)	2	2-3	3
Exercises/training (n)	8-10	8-10	8-10
Sets/exercise (n)	1-2	2-3	2-3
Repetitions/sets (n)	12	8-12	8
Intensity (0-10)	4	5/6 - 7/8	7-8
Execution (s)	2/2	2/2	2/2
Rest between exercises (min)	2	2	2
Total strength training time (min)	20-25	30-40	30-40

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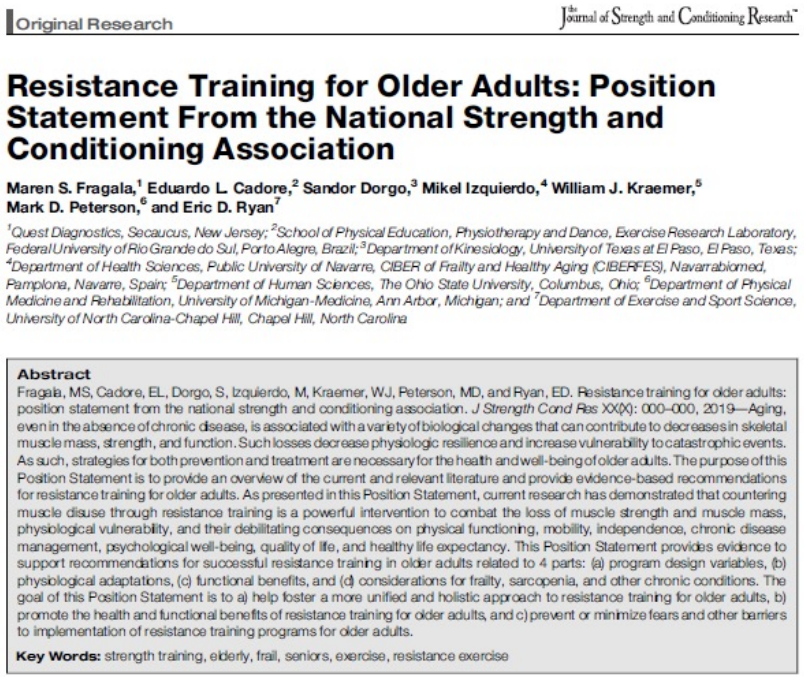
Strength and Balance Training

2021-2023

- ✓ Perform 6–12 reps with variation for muscular strength for healthy older adults;
- ✓ Perform 10–15 repetitions at a lower relative resistance for beginners;
- ✓ Exercises should be performed in a repetition-range intensity zone that avoids going to failure to reduce joint stress;
- ✓ Include major muscle groups targeted through multijoint movements

e.g., chest press, shoulder press, triceps extension, biceps curl, pulldown, row, lower-back extension, abdominal crunch/curl-up, quadriceps extension or leg press, leg curls, and calf raise



Original Research — The Journal of Strength and Conditioning Research™

Resistance Training for Older Adults: Position Statement From the National Strength and Conditioning Association

Maren S. Fragala,[1] Eduardo L. Cadore,[2] Sandor Dorgo,[3] Mikel Izquierdo,[4] William J. Kraemer,[5] Mark D. Peterson,[6] and Eric D. Ryan[7]

[1]Quest Diagnostics, Secaucus, New Jersey; [2]School of Physical Education, Physiotherapy and Dance, Exercise Research Laboratory, Federal University of Rio Grande do Sul, Porto Alegre, Brazil; [3]Department of Kinesiology, University of Texas at El Paso, El Paso, Texas; [4]Department of Health Sciences, Public University of Navarre, CIBER of Frailty and Healthy Aging (CIBERFES), Navarrabiomed, Pamplona, Navarre, Spain; [5]Department of Human Sciences, The Ohio State University, Columbus, Ohio; [6]Department of Physical Medicine and Rehabilitation, University of Michigan-Medicine, Ann Arbor, Michigan; and [7]Department of Exercise and Sport Science, University of North Carolina-Chapel Hill, Chapel Hill, North Carolina

Abstract

Fragala, MS, Cadore, EL, Dorgo, S, Izquierdo, M, Kraemer, WJ, Peterson, MD, and Ryan, ED. Resistance training for older adults: position statement from the national strength and conditioning association. *J Strength Cond Res* XX(X): 000–000, 2019—Aging, even in the absence of chronic disease, is associated with a variety of biological changes that can contribute to decreases in skeletal muscle mass, strength, and function. Such losses decrease physiologic resilience and increase vulnerability to catastrophic events. As such, strategies for both prevention and treatment are necessary for the health and well-being of older adults. The purpose of this Position Statement is to provide an overview of the current and relevant literature and provide evidence-based recommendations for resistance training for older adults. As presented in this Position Statement, current research has demonstrated that countering muscle disuse through resistance training is a powerful intervention to combat the loss of muscle strength and muscle mass, physiological vulnerability, and their debilitating consequences on physical functioning, mobility, independence, chronic disease management, psychological well-being, quality of life, and healthy life expectancy. This Position Statement provides evidence to support recommendations for successful resistance training in older adults related to 4 parts: (a) program design variables, (b) physiological adaptations, (c) functional benefits, and (d) considerations for frailty, sarcopenia, and other chronic conditions. The goal of this Position Statement is to a) help foster a more unified and holistic approach to resistance training for older adults, b) promote the health and functional benefits of resistance training for older adults, and c) prevent or minimize fears and other barriers to implementation of resistance training programs for older adults.

Key Words: strength training, elderly, frail, seniors, exercise, resistance exercise

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Strength and Balance Training

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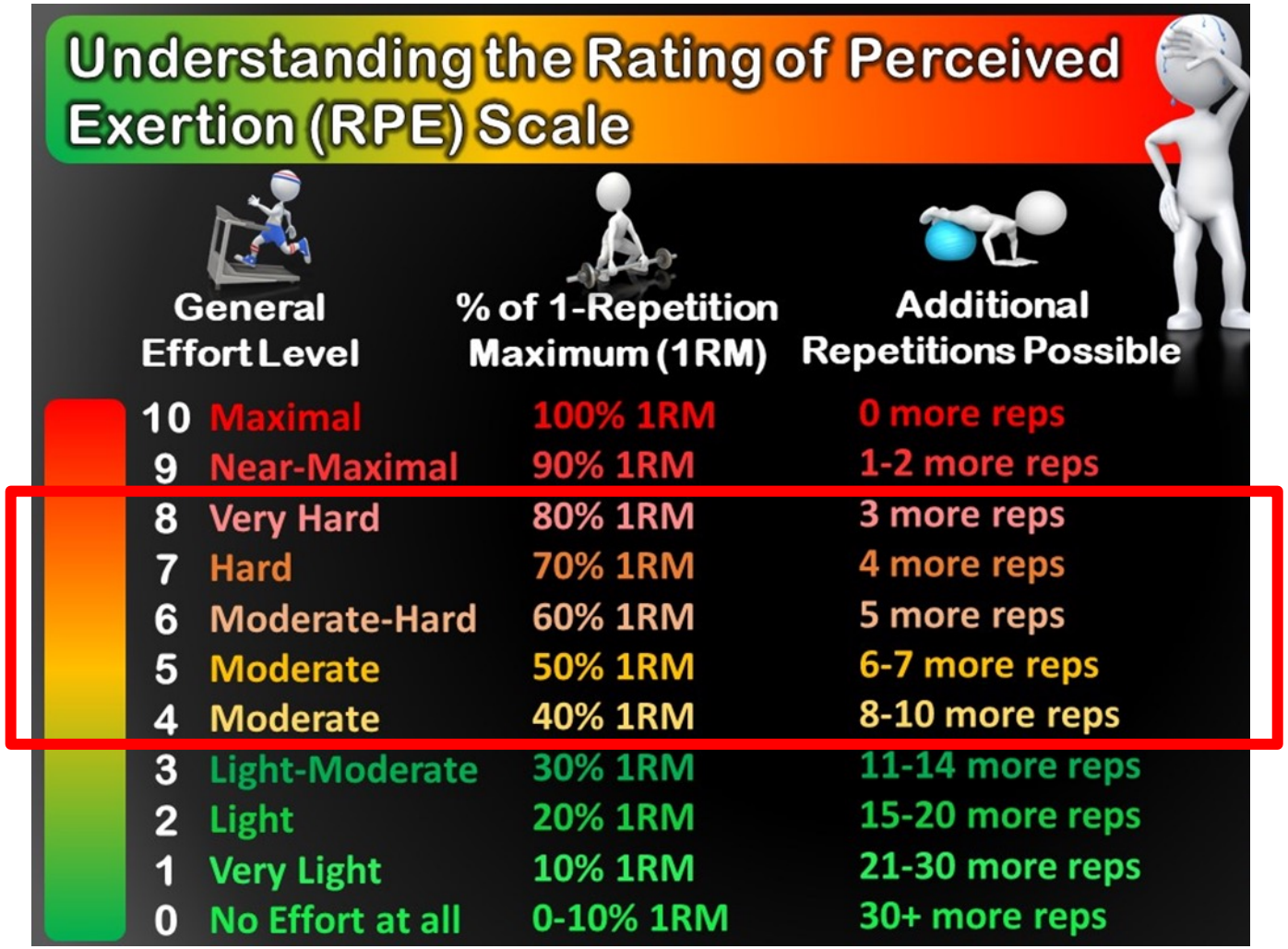
Beginner level
moderate – 4 on the efort level

Intermediate level
moderate to hard – 5-6 on the efort scale

Advanced level
hard to very hard – 7 – 8 on the efort scale



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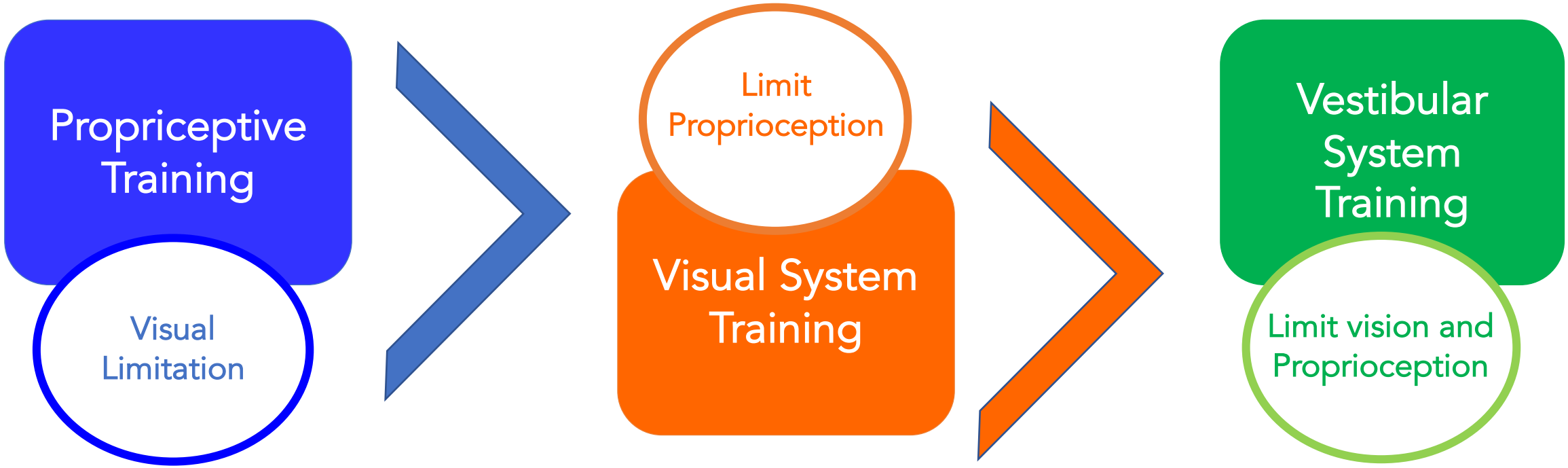
2021-2023

Multisensorial Intregration



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Multisensorial Intregration

Propriceptive Training

Visual Limitation

https://www.acefitness.org/certifiednewsarticle/687/designing-balance-exercise-programs-for-older/

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Multisensorial Intregration

Limit Proprioception

Visual System Training

https://www.acefitness.org/certifiednewsarticle/687/designing-balance-exercise-programs-for-older/

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2021-2023

Multisensorial Intregration

Vestibular System Training

Limit vision and Proprioception

https://www.acefitness.org/certifiednewsarticle/687/designing-balance-exercise-programs-for-older/

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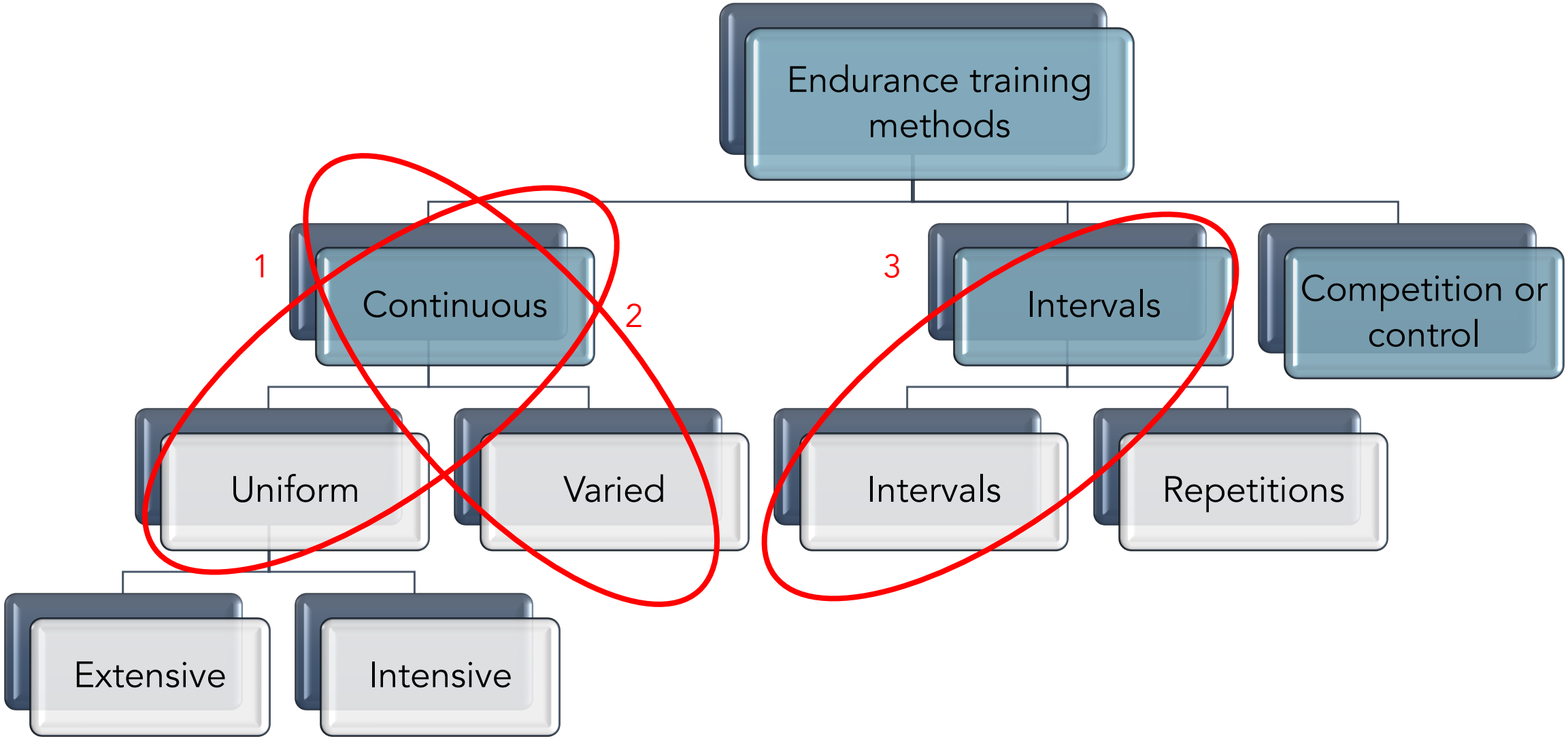
Cardio training



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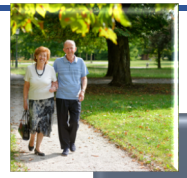
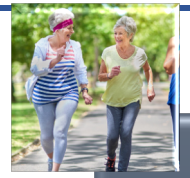
Cardio training



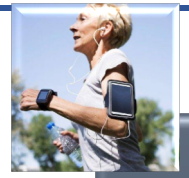
Extended Uniform Continuum

- RPE of 4-5
- Between the aerobic and anaerobic threshold
- 45 to 65% of VO_2max
- Ideal duration of 30’ up to 2h or more



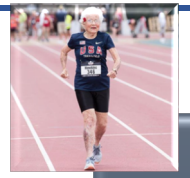
Continuous Intensive Uniform

- RPE of 6-7
- Between anaerobic threshold and aerobic power
- 80 to 90% of VO_2max
- Ideal duration of 20’ to 30’



Continuous variable

- RPE of 7-8
- It may include short sprints on flat terrain, climbing stairs or benches, performing short-duration muscular power exercises with longer periods of aerobic nature.



Interval training

- RPE of 9
- Short intervals of high intensity

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Cool down

2021-2023

An active cool-down should:

(1) involve dynamic activities performed at a low to moderate metabolic intensity to increase blood flow, but prevent development of substantial additional fatigue;

(2) involve low to moderate mechanical impact to prevent the development of (additional) muscular damage and delayed-onset muscle soreness;

(3) be shorter than approximately 30 min to prevent substantial interference with glycogen resynthesis;

(4) involve exercise that is preferred by the individual athlete, with some evidence also suggesting that an active cool-down should involve the same muscles as used during the preceding activity.

Van Hooren, B., & Peake, J. M. (2018).

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Thank you for your attention!