



ACSM's Guidelines for Exercise Testing and Prescription – Summary of Significant Revisions/Additions from 10th to 11th edition

Box 1.3, *2018 Physical Activity Guidelines for Americans, Second Edition*

Pages 10-16, Risk of injury data updated.

Chapters 2 (Exercise Preparticipation Health Screening) and **3** (Preexercise Evaluation) from the previous edition were merged into one chapter titled Chapter 2, Preexercise Evaluation.

Pages 28-39, clarifies the recommended order in which to conduct the preexercise evaluation screenings. This chapter also includes specific guidance for informed consent, preparticipation health screening, the ACSM Preparticipation Screening Process and Algorithm and Medical History.

Figure 2.4, See <http://eparmedx.com> for the most current annual update of the PAR-Q+

Pages 45-52, Cardiovascular Disease Risk Factor Assessment. The CV risk factor analysis is separate from the algorithm screening as the former is for client education and the latter is for initiating an exercise program.

Table 2.3, Classifications and Management of Blood Pressure for Adults from the ACC/AHA and JNC7 blood pressure thresholds and classifications

Page 60, Information on the use of sex-based norms and criteria in fitness testing for the transgender individual.

Table 3.9, Cycle Ergometer-Based Cardiorespiratory Fitness Classifications by Age and Sex

Table 3.14, Fitness Categories for the Countermovement Vertical Jump by Age and Sex

Table 3.18, Range of Motion in Degrees at Select Joints by Age and Sex

Page 102, updated information on use of sit-and-reach test.

Pages 103-105, Balance assessment information included.

Table 4.2, Recommendations for Patients Requiring Personal Physician Supervision Based on Clinical Safety Criteria

Box 4.5, Examples of Regression Equations for Age-Predicted Normal Standards for Exercise Capacity

Page 142, Frequency, Intensity, Time, and Type (FITT) principles of exercise prescription and other components to consider clarified.

Box 5.1, Examples of Interval Training Protocols

Table 5.3, Commonly Used Equations for Estimating Maximal Heart Rate. Pg 149-150 discusses the move away from (220-age) for HR max, and instead suggested a few other methods as listed in Table 5.3. As noted, Appendix D (Metabolic Calculations) uses Gelish for estimating HR max (207-[0.7xage]).

Box 6.2, Low Back Pain: Clinical Practice Guidelines

Box 6.3, Contraindications for Exercising during Pregnancy

Table 6.6, Physical Activity Recommendations during Pregnancy from Three Guideline Documents

Table 7.1, Estimated Impact of Increasing Altitude on Time to Complete Physical Tasks at Various Altitudes

Table 7.2, Predisposing Factors for Cold Injury

Box 8.1, Manifestations of Cardiovascular Disease and Pulmonary Disease

Pages 241, updated guidance for on precautions or restrictions on arm movement post- cardiovascular surgeries

Pages 261-265, Expanded information on Exercise Training for Pulmonary Diseases Other than Chronic Obstructive Pulmonary Disease (Pulmonary Arterial Hypertension, Interstitial Lung Disease, Cystic Fibrosis, and Lung Transplantation, and Other Tests of Muscular Fitness)

Pages 288-292, updated hypertension guidelines from the ACC/AHA and JNC7 blood pressure thresholds and classifications.

Figure 10.2, Recommendations for assessments prior to exercise among participants with a history of cancer

Table 10.1, Preexercise Medical Assessments for Individuals with Cancer

Pages 358-361, Expanded Special Considerations for individuals with spinal cord injury

Chapter 11, updated information (of the conditions Cerebral Palsy, Parkinson’s Disease and Intellectual Disability and Down Syndrome) and new coverage on

the conditions Attention-Deficit/Hyperactivity Disorder, Alzheimer’s Disease, Anxiety and Depression and Autism Spectrum Disorder for a new chapter (Brain Health and Brain-Related Disorders)

Box 12.1, High Intensity Interval Training

Pages 450-451, New section on Dual Processing Theories.

Page 455, New section on Affect Regulation.

Appendix A, Common Medications integrated where appropriate in chapters with appendix focus on most common medications exercise professionals were likely to encounter in routine practice.

Appendix B, Electrocardiogram Interpretation emphasis the “normal” ECG.

Appendix C, updated to the most recent information on American College of Sports Medicine Certifications.

Appendix D, Metabolic Calculations and Methods for Prescribing Exercise Intensity uses Gellish for estimating HR max ($207 - [0.7 \times \text{age}]$). However, as noted previously, Table 5.3 suggests a few methods, while no longer supporting ($220 - \text{age}$).

For links to more related resources and to order your copy of *ACSM’s Guidelines for Exercise Testing Prescription, Eleventh Edition* at the ACSM [website](http://www.acsm.org). For more information about the American College of Sports Medicine, visit www.acsm.org, www.acsm.org/facebook, and www.twitter.com/acsmnews.