

GLOSSARY

Active living: A way of life in which physical activity is valued and integrated into daily living (Government of Canada, 1992).

Anaerobic threshold: The highest intensity that can be sustained for an extended period of time (15–60 minutes).

Endurance: The ability of the heart, blood, blood vessels and respiratory system to supply oxygen and necessary fuels to muscles during exercise. Exercises for endurance range from walking and household chores to organized exercise programs and recreational sports.

Exercise: A form of leisure-time physical activity that is planned, structured and repetitive. The main objective is to improve or maintain physical fitness.

Flexibility: The ability to move easily, keeping the muscles relaxed and joints mobile. Regular flexibility activities can help maintain and improve quality of life and ensure independence as aging occurs. Flexibility activities include gentle reaching, bending and stretching of all muscle groups.

Functional fitness: The possession of the necessary fundamental components of fitness—endurance, strength and flexibility—to allow for comfortable and confident participation in a selected physical activity.

Heart-rate numbers: The number of heartbeats per minute.

Maximal heart rate: The highest number of times the heart can contract in one minute. This can be measured by using a heart-rate monitor and it is sport specific.

Muscular endurance: The ability of a muscle to contract over time.

Outcomes: Describes the knowledge, skills and attitudes achieved through student learning.

- General Outcomes—broad statements that identify what students are expected to know and be able to do upon completion of a program.
- Specific Outcome—statements that identify the component knowledge, skills and attitudes of a general outcome.

Physical activity: All leisure and nonleisure body movement produced by the skeletal muscles resulting in an increase in energy expenditure.

Physical fitness: Attributes that are either health related or performance (skill) related. Health-related fitness comprises those components of fitness that exhibit a relationship with health status. Performance/skill-related fitness involves those components of fitness that enable optimal work or sport performance.

Rate of Perceived Exertion (RPE): A way of assigning a numerical value based on the perception of effort.

Recovery heart rate: The number of beats per minute the heart drops in the first minute after exercise has stopped.

Resting heart rate: The reduction in heart rate right after exercise has stopped. The higher the fitness level, the faster the drop in heart rate.

Strength: Activities that help muscles and bones stay strong, improve posture and prevent diseases like osteoporosis. Strength activities are those that work muscles against some kind of resistance, like pushing or pulling to open a heavy door.

FURTHER SUPPORT RESOURCES

Alberta Education Authorized Resources

Allen, Lynn (ed.). *Physical Activity Ideas for Action: Secondary Level*. Champaign, IL: Human Kinetics, 1997.

Kirkpatrick, Beth and Burton Birnbaum. *Lessons from the Heart: Individualizing Physical Education with Heart Rate Monitors*. Champaign, IL: Human Kinetics, 1997.

Swaim, Deve and Sally Edwards. *Middle School Healthy Hearts in the Zone: A Heart Rate Monitoring Program for Lifelong Fitness*. Champaign, IL: Human Kinetics, 2002.

Swaim, Deve and Sally Edwards. *High School Healthy Hearts in the Zone: A Heart Rate Monitoring Program for Lifelong Fitness*. Champaign, IL: Human Kinetics, 2003.

Other Materials

Heart Zone Training chart. Available for purchase from the Learning Resources Centre, at <http://www.lrc.education.gov.ab.ca>. LRC# 608896, \$23.60 at time of publication.

Heart Rate Monitors can be rented from local Be Fit for Life Network locations. See Web site at <http://www.befitforlife.ca> for locations.

Pedometers with Safety Straps and Storage Tray (sold in sets of 30). Available for purchase from the Learning Resources Centre, at <http://www.lrc.education.gov.ab.ca>. LRC #620634, \$358.90 at time of publication.

Note: The following titles and Web sites are listed as a service only to identify potentially useful ideas for teaching and learning. The responsibility to evaluate these resources and sites prior to selection rests with the user, in accordance with any existing local policy.

Nonauthorized Resources

Burke, Edmund (ed.). *Precision Heart Rate Training*. Champaign, IL: Human Kinetics, 1998.

Edwards, Sally. *The Heart Rate Monitor Guidebook to Heart Zone Training*. Sacramento, CA: Heart Zones Training, 2002.

Kerr, Rob and Sally Edwards. *Heart Zones Handbook: Test and Measurement*. Sacramento, CA: Heart Zones Training, 2002.

Ottawa-Carleton Heart Beat Youth Committee. *Feel the Beat: Leader's Manual: Promoting Heart Health for Youth Aged 13 to 18*. Ottawa, ON: Ottawa-Carleton Heart Beat Youth Committee, 2000.

Web sites

Alberta Education. <http://www.education.gov.ab.ca/physicaleducationonline/teacherresources>
This site provides information to support implementation and student learning of the K–12 physical education program of studies. The site is divided into three major sections: Program of Studies, Teacher Resources and Home Education.

American Heart Association. <http://www.americanheart.org>. This site provides information on fighting heart disease and stroke, and offers information on the structure and function of the heart, risk factors of heart disease and tips for maintaining a healthy heart.

Canadian Fitness and Lifestyle Research Institute. <http://cflri.ca/cflri/cflri.html>. This site includes research on physical activity of Canadians over the past 10 years, tips for being active, resources, research projects and news releases. Also included is a Heart Health Quiz to help students assess their cardiac risk.

Canada's Physical Activity Guide. <http://www.phac-aspc.gc.ca/pau-uap/paguide/>. (Call 1–888–334–9769 to order the guide.) This site contains a number of guides, based on various age groups, to help people make wise choices about physical activity.

Dietitians of Canada. <http://www.dietitians.ca>. Includes activities to support understanding of nutrition. Includes a nutrition challenge game, a personal Nutrition Profile, a make-a-meal feature and other interactive activities.

Edmonton 2001 8th IAAF World Championships in Athletics: *Our Schools in Action*. <http://www.education.gov.ab.ca/physicaleducationonline/edmonton2001/posters.asp>. This site has downloadable teacher resources, including Run, Jump, Throw posters for circuits.

Gatorade Sports Science Institute. <http://www.gssiweb.com/index.cfm>. This is a sport science site complete with the latest research on nutrition, sport performance, injuries and hydration.

Health Canada. <http://www.hc-sc.gc.ca>. Resources related to heart health include a Healthy Heart Kit and *Canada's Food Guide to Healthy Eating*.

Heart and Stroke Foundation of Canada. <http://ww2.heartandstroke.ca>. Includes the latest research, resources on heart health, a calculator for beats per minute (BMI) and waist-to-hip ratio measurement, and various other tools.

The Heart: An Online Exploration. <http://sln.fi.edu/biosci/heart.html>. This is an information site on the heart, complete with images. Includes information on the development, structure and function of the heart as well as tips for heart health.

Heart Zones. <http://www.heartzones.com>. Includes information on Heart Zones Training™—an approach that utilizes Max heart rate and a five-zones concept to facilitate individualized training. Also includes information about training seminars, training tips, an e-newsletter and list of resources; e.g., wall charts, DVDs, CD-ROMs, books, heart-rate monitors.

Human Kinetics. <http://www.humankinetics.com>. Human Kinetics is a leader in the distribution and publishing of books, journals, software, videos and distance learning in physical activity.

Kids Health. “All about the Heart.” http://kidshealth.org/kid/body/heart_SW.html. This information site, written for a youthful audience, includes information about how the heart works.

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Alberta Learning. *Social Studies 10–20–30 (Senior High) Program of Studies*. Edmonton, AB: Alberta Learning, 2000b.

Borg, Gunnar A. V. “Psychophysical Bases of Perceived Exertion.” *Medicine and Science in Sport and Exercise* 14, 5 (1982), pp. 377–381.

Canadian Institute for Health Information. *Improving the Health of Canadians*. Ottawa, ON: Canadian Institute for Health Information, 2004.

Craig, Cora Lynn and Christine Cameron. *Increasing Physical Activity: Assessing Trends from 1998–2003*. Ottawa, ON: Canadian Fitness and Lifestyle Research Institute, 2004.

Craig, Cora Lynn et al. *Increasing Physical Activity: Supporting Children’s Participation*. Ottawa, ON: Canadian Fitness and Lifestyle Research Institute, 2001.

Edwards, Sally. *Heart Rate Monitor Book*. Kempele, Finland: Polar Electro Oy, 1993.

Heart and Stroke Foundation of Canada. *The Growing Burden of Heart Disease and Stroke in Canada 2003*. Ottawa, ON: Heart and Stroke Foundation of Canada, 2003.

Robergs, Robert A. and Roberto Landwehr. “The Surprising History of the “HRmax=220” Equation.” *Journal of Exercise Physiology Online* 5, 2 (May 2002).
<http://faculty.css.edu/tboone2/asep/May2002JEPonline.html> (Accessed December 3, 2003).

