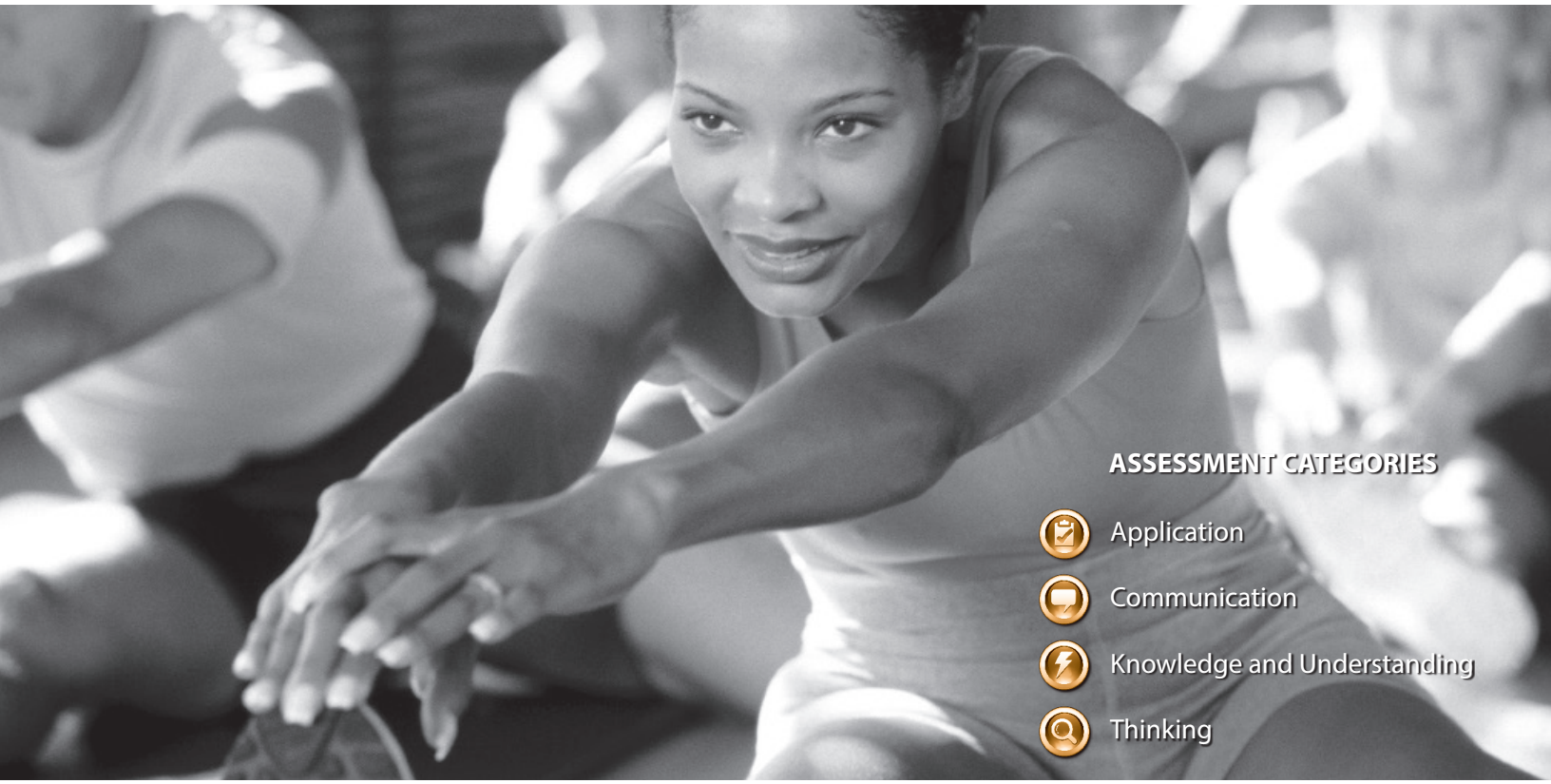
CHAPTER 15

DEVELOPING PHYSICAL FITNESS



Activities in this chapter:

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15.1 FITNESS TRAINING PRINCIPLES (Textbook pages 314-317)

15.1.1 Review Your Key Terms

FITT principle
formal fitness activities
informal fitness activities
overload principle
physical fitness
progression principle
reversibility principle
specificity principle
training frequency
training intensity
training time
training volume
work-to-rest ratio

15.1.2 FITT to Be Square

The mnemonic FITT can be used to remember the four major training components that should be considered when designing a comprehensive fitness program. Match each word on the left with its meaning on the right by writing the corresponding letter in the space provided.

Frequency	_____	A) What activity should I do?
Intensity	_____	B) How often should I exercise?
Time	_____	C) How hard do I need to exercise?
Type	_____	D) How long should I exercise for?

In the following table, check off whether each activity relates to *frequency*, *intensity*, or the amount of *time* the activity is performed.

Activity	Frequency	Intensity	Time
Exercising more often			
Cross-country skiing faster			
Rowing a longer distance			
Swimming six days per week instead of three			
Increasing number of sets			
Increasing number of repetitions per set			
Increasing the pace of cycling			
Stretching farther			
Playing soccer five days per week instead of three			
Holding a stretch longer			
Going all out on a 400-yard run			
Increasing the amount of weight lifted			
Making the heart beat faster			
Running uphill instead of running in the stadium			
Lifting weights four times per week instead of one			

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15.2 COMPONENTS OF PHYSICAL FITNESS (Textbook pages 318-328)

15.2.1 Review Your Key Terms

absolute strength
active flexibility
agonist–antagonist training
body composition
cardiorespiratory fitness
dynamic stretching
flexibility
muscular endurance
muscular strength
one repetition maximum (1RM)
passive flexibility
proprioceptive neuromuscular facilitation (PNF)
relative strength
static stretching
target heart-rate zone

15.2.2 The Major Components

Physical fitness is achieved when all the physiological systems of the body are functioning efficiently to meet the physical demands of everyday activities. List the six major components of physical fitness by filling in the blanks in the figure below.

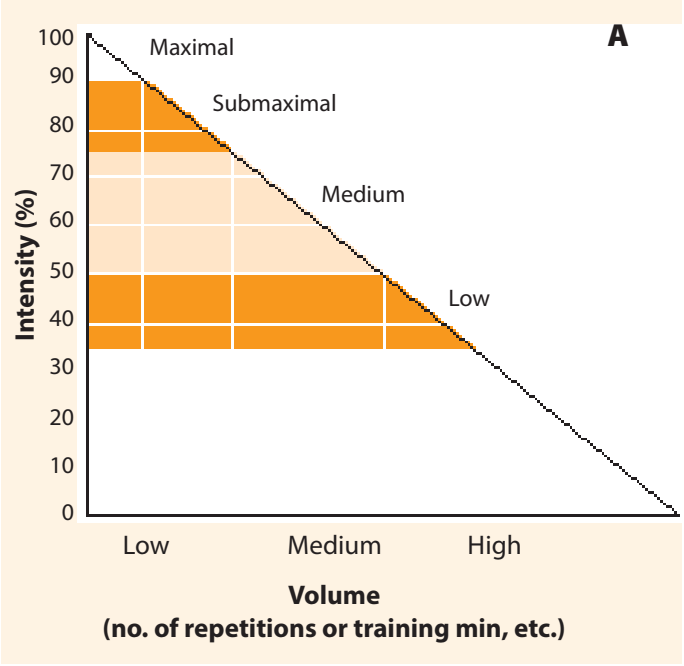
15.2.3 Agonist–Antagonist Training

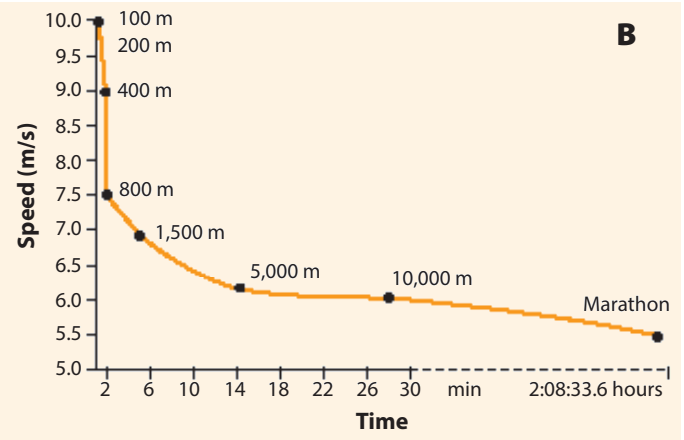
When planning and designing training routines, it is important to include exercises that stimulate both the working muscles (agonists) and the counteracting muscles (antagonists). Complete the table below, making suggestions for exercises that could be used when taking an agonist–antagonist training approach.

Muscle Agonist	Muscle Antagonist	Exercise Suggestions
Biceps		
	Hamstrings	
	Tibialis anterior	
Trunk flexors (abdominals)		

15.2.4 Training with Intensity

Issues of training intensity must always be considered in connection with other components of training when implementing effective training programs. Study the graphs below, and briefly explain the relationships depicted between **(A)** intensity and volume of exercise and **(B)** distance/time and speed of running.





Explain the relationship between the two graphs.

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15.3 COMPONENTS OF MOTOR ABILITY (Textbook pages 328-331)

15.3.1 Review Your Key Terms

agility
balance
coordination
dynamic balance
motor ability
plyometric training
power
reaction time
speed
static balance

15.3.2 Building an Efficient Motor Ability

A subset of physical fitness, motor ability is also known as _____ fitness. Motor abilities are of varying importance for the general population, but they are especially important for athletes. List the six most important components of motor ability and briefly describe each one with an example of a test used to measure them.

1 _____

_____

_____

2 _____

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3 _____

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4 _____

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5 _____

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6 _____

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