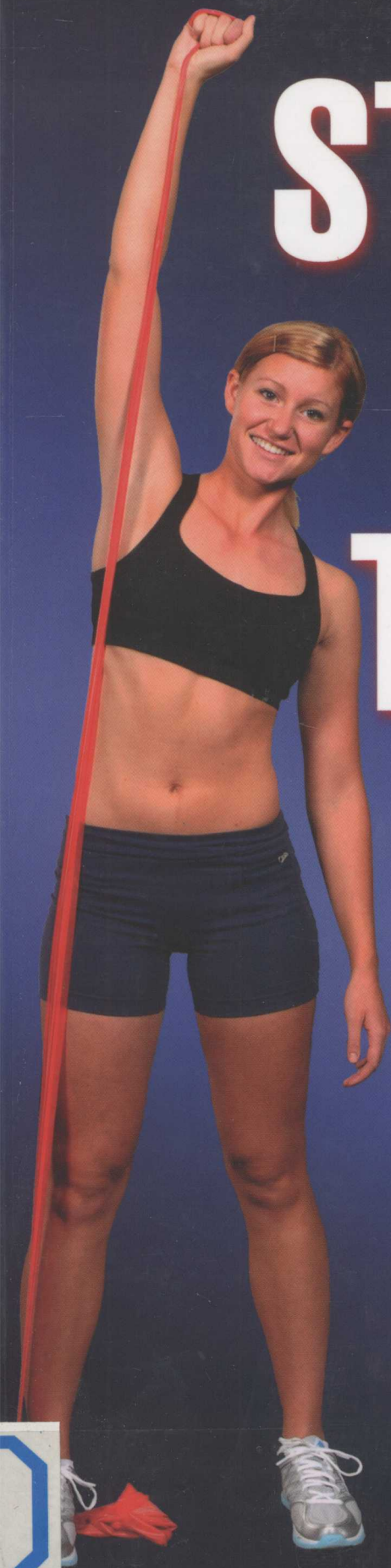


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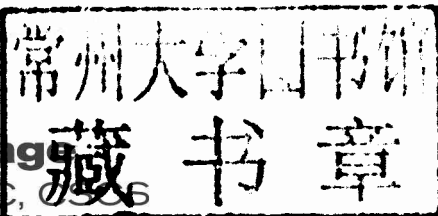
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Strength Band Training

SECOND EDITION

Phil Page

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Strength Band Training - 2nd Edition

弹力带的训练-第二版



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To my family—Angela, Madison, Caitlin, Hannah,
and Andrew—for their patience, understanding,
and encouragement.

—Phil Page

To Gail, for her love and support.

—Todd Ellenbecker

EXERCISE FINDER

Title	Primary muscles affected	Primary sport applications	Attachment required	Page number
CHAPTER 3				
Lateral raise	Deltoids	Basketball, football, hockey	No	32
Front raise	Deltoids	Basketball, football, hockey	No	33
Scaption	Rotator cuff, deltoids	All sports	No	34
Shoulder internal rotation at 0 degrees	Rotator cuff	Baseball, golf, softball, swimming, tennis, volleyball	Yes	35
Shoulder external rotation at 0 degrees	Rotator cuff	Baseball, golf, softball, swimming, tennis, volleyball	Yes	36
Serratus punch	Serratus anterior	Baseball, golf, softball, swimming, tennis, volleyball	Yes	37
Biceps curl	Biceps	All sports	No	38
Elbow extension	Triceps	All sports	Yes	39
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Wrist extension	Wrist extensors	Baseball, golf, softball, tennis, volleyball	No	41
Forearm supination	Supinator, biceps	Baseball, golf, softball, tennis, volleyball	No	42
Forearm pronation	Pronator teres	Baseball, golf, softball, tennis, volleyball	No	43
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Radial deviation	Forearm flexors and extensors	Baseball, golf, softball, tennis, volleyball	No	45
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Hip external rotation	Hip rotators	All sports	Yes	47
Hip flexion	Iliopsoas	All sports	Yes	48
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Hip abduction	Gluteus medius	All sports	Yes	50
Hip adduction	Hip adductors	All sports	Yes	51
Knee flexion	Hamstrings	All sports	Yes	52
Knee extension	Quadriceps	All sports	Yes	53
Terminal knee extension	Quadriceps, vastus medialis	All sports	Yes	54
Dorsiflexion	Tibialis anterior	All sports	No	55
Plantar flexion	Gastrocnemius and soleus	All sports	No	56
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Eversion	Peroneals	All sports	No	58

Title	Primary muscles affected	Primary sport applications	Attachment required	Page number
CHAPTER 4				
Chest press	Pectoralis major, anterior deltoid	Basketball, football, hockey	Yes	61
Chest fly	Pectoralis major, anterior deltoid	Basketball, football, hockey	Yes	62
Push-up	Pectoralis, triceps	Basketball, football, hockey	No	63
Supine pullover	Pectoralis, latissimus dorsi	Basketball, football, hockey	Yes	64
Dynamic hug	Serratus anterior	Baseball, softball, swimming, tennis, volleyball	No	65
Seated row	Rhomboids, middle trapezius	Baseball, softball, swimming, tennis, volleyball	Yes	66
Reverse fly	Rhomboids, middle trapezius	Baseball, softball, swimming, tennis, volleyball	Yes	67
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Shrug	Upper trapezius	All sports	No	69
Bent-over row	Rhomboids, middle trapezius	All sports	No	70
Linton external rotation	Rotator cuff, scapular stabilizers	Baseball, softball, swimming, tennis, volleyball	No	71
Bilateral extension with retraction	Rhomboids, posterior deltoid	Baseball, softball, swimming, tennis, volleyball	Yes	72
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Diagonal extension: PNF	Pectorals, rotator cuff	Baseball, softball, swimming, tennis, volleyball	Yes	77
Shoulder external rotation with retraction	Rotator cuff, rhomboids	Baseball, softball, swimming, tennis, volleyball	No	78
Shoulder internal rotation at 90 degrees	Pectoralis major, rotator cuff	Baseball, softball, swimming, tennis, volleyball	Yes	79
Shoulder external rotation at 90 degrees	Rotator cuff, deltoids	Baseball, softball, swimming, tennis, volleyball	Yes	80
Dip	Lower trapezius, triceps	Basketball, football, hockey	No	81

> continued

Title	Primary muscles affected	Primary sport applications	Attachment required	Page number
Shoulder wall walk	Rotator cuff, lower trapezius	Baseball, softball, swimming, tennis, volleyball	No	82
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Reverse clam	Hip rotators	All sports	No	105
Good morning	Gluteus maximus, hamstrings	Basketball, football, hockey, soccer	No	106
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Lunge	Gluteus maximus, quadriceps	All sports	No	108

Title	Primary muscles affected	Primary sport applications	Attachment required	Page number
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Barbell squat	Gluteus maximus, quadriceps	Basketball, football, hockey, soccer	No	111
Single-leg squat	Gluteus maximus, quadriceps, ankle stabilizers	All sports	No	112
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Squat walk	Gluteus maximus, gluteus medius, quadriceps	All sports	No	114
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> continued

Title	Primary muscles affected	Primary sport applications	Attachment required	Page number
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Shoulder external rotation step	Rotator cuff, rhomboids, trunk rotators	Baseball, golf, softball, swimming, tennis, volleyball	Yes	131
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Title	Primary muscles affected	Primary sport applications	Attachment required	Page number
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Tennis backhand	Posterior deltoid, rotator cuff, scapular stabilizers, core muscles	Tennis	Yes	150
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Title	Primary muscles affected	Primary sport applications	Attachment required	Page number
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Title	Primary muscles affected	Primary sport applications	Attachment required	Page number
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INTRODUCTION

Strength training is an important component of any well-rounded exercise program. In fact, the American College of Sports Medicine and the U.S. Department of Health and Human Services recommend that muscle strengthening exercises be performed at least two days a week, using all major muscle groups. Elastic resistance bands offer an inexpensive, convenient, and effective way of adding resistance exercises to any workout. Research has proven the effectiveness of elastic resistance training (ERT) across ages, from children to older adults, as well as from sedentary people to elite athletes.

Elastic resistance has been used for over 100 years in fitness programs, and more recently, in rehabilitation. It's one of the most-used modes of resistance training by physical therapists for both clinical and home programs. Because of its versatility, elastic resistance is ideal for a variety of patients and conditions. Recent research has shown that elastic resistance provides results similar to those of traditional isotonic resistance, making it ideal for anyone to use.

This second edition of *Strength Band Training* has been improved with new photos, more exercises, and sections on performance enhancement. Part I includes a chapter covering the basics of elastic resistance training, such as force production and general use of the bands. Stretching exercises using elastic resistance (chapter 2) are also introduced.

Part II introduces the use of elastic resistance bands for stability, strength, and power. It includes six chapters full of exercises, beginning with isolated joint exercises (chapter 3). These exercises can be used for single joint movements in fitness or rehabilitation. Regional, multijoint exercises are then provided for the upper body, core, and lower body (chapters 4-6). Part II concludes with total body exercises, including more functional movements (chapter 7), as well as exercises for power, speed, and agility (chapter 8).

A major advantage and application of elastic resistance training is the ability to perform virtually any training movement and to perform that movement in various places and situations. This makes ERT an ideal method of training for those with fitness, rehabilitation, and sport-specific exercise needs. Part III offers sample program options for fitness and sport applications.

The programs in chapter 9 can be used under normal circumstances as well as when time is limited or when access to standard workout equipment is difficult or impossible. Long (30-minute) and short (15-minute) versions of highly efficient ERT circuit programs for each of the three

major regions of the body—the upper body, core, and lower body—are presented. These can be performed alone or in whatever combination best suits individual goals and circumstances.

ERT programs tailored to the sport athletes take part in can be found in chapters 10 (rotational sports), 11 (strength and power sports), and 12 (endurance sports). The programs use base exercises and sport simulation exercises that will enhance performance while preventing or minimizing injuries.

Base exercises are recommended for athletes for two primary reasons: to activate or develop muscles that are used repetitively or at very high levels by athletes in that sport, and to achieve muscle balance by working muscles that are underdeveloped as a result of sport-specific adaptations. Lunge exercises, for example, would be appropriate for athletes who jump or push off in an explosive, powerful manner because they work the quadriceps, gluteals, and calf musculature used by athletes during lower body movement. External shoulder rotation exercises would suit rotational sport athletes, not by developing the external rotators that provide power to strike or throw a ball, but by enhancing balance and stability to counteract the adaptation in the more powerful internal rotators brought about by sport participation.

Performing sport simulation movements with the overload provided by elastic resistance serves to develop the primary muscles that are used during sport-specific movement patterns, as well as specifically train the body to do the movements required to achieve success within the sport.

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