



introduction

Welcome to the world of resistance bands! Resistance training bands were ranked with stability balls as the most popular piece of exercise equipment in a 2011 IDEA Personal Training Equipment Trends report. Resistance tubing and bands are popular because they're lightweight and easy to transport, which means they can be used when traveling. Many trainers and therapists like the band because they can adapt any exercise to a functional application.

These latex training devices have been around since the 1970s, yet they're a mainstay of almost every fitness enthusiast. Bands were first used in therapy to introduce low-intensity resistance to rehabilitating patients. Today bands come in all shapes

and resistances and can be used by people of all ages and fitness levels.

Resistance Band Workbook features almost every conceivable exercise ever done with an exercise band. Whether you're looking to enhance your physique,

elevate your sports performance or simply improve functional fitness, this book will add a new dimension to your workout—regardless of your experience level with resistance training.



what is resistance training?

Chances are you're familiar with the term "strength training." You might also know about—and even perform—weightlifting, weight training, resistance training or progressive resistance exercise. Simply put, these terms are used interchangeably by the public to describe the act of harnessing a resistance to place a load/strain on a muscle to develop muscle or improve muscular endurance.

Strength training can take many forms, from lifting your own body against the resistance of gravity to using weights or exercise bands to challenge your muscles. It really doesn't matter what shape or form the resistance comes in because the ultimate goal is to improve strength, muscle size (hypertrophy), muscular endurance or power.

The best method to improve strength is often referred to as

progressive resistance exercise training. Here, a person engages in a set of exercises that slowly and progressively overload a muscle. When the muscle adapts to the challenge of a load/resistance and the resistance becomes easier, the person either increases the resistance/load or performs more repetitions. The general rule of thumb is when you can perform 10–15 reps easily and correctly, you need to increase the load. In

weight training you increase the weight, but in resistance band training you progress to the next harder band or combine two bands together.

As you improve in strength, it's advised to increase the volume of work you perform by adding "sets" to your workout. Two to three sets of each exercise are ideal.



why train with bands?

The adaptability and versatility of resistance training bands make them suitable for all levels, from those recovering from injury to world-class athletes. In addition, the beauty of performing resistance band training is that you don't need to buy or store heavy equipment or drive to a gym. Every exercise that can be done on a piece of exercise equipment or with weights can be done with an exercise band.

There may be even more opportunities with band training than with weight training. The bands come in varying resistances, so as you get stronger you can purchase heavier-resistance bands in order to accommodate your improvements in strength. They can be easily and quickly exchanged to increase or decrease the resistance depending upon the exercise. You can also exercise a muscle at various angles as well as both eccentrically and concentrically. A total-body resistance

band workout should take less than 15 minutes and can be done practically anywhere—even in the pool.

Here are additional benefits of training with bands:

- Increased strength in muscles and bones
- Improved balance
- Reduced lower back pain
- Improved blood sugar control
- Improved blood transport system
- Increased metabolism
- Reduced arthritic pain

Just keep in mind that exercise bands alone will not offer great changes in muscular hypertrophy, or massive muscle development, but for most people band training provides adequate results. The band is versatile and convenient, and it tones the muscles with low risk of injury. However, be aware that you may compromise the quality of your training by incorrectly placing your hands on the bands or allowing the band to control the movement.



choosing a band

Resistance bands are typically made of latex and come in several shapes and intensities. They're commercially available at most sporting goods stores and therapy outlets and through online vendors. Selecting the correct band for

your goals and body type is critical for obtaining ideal results. Ultimately, through personal trial and error you'll determine which shape and style works best for you and your objective.

Today manufacturers produce exercise bands that accommodate every level of ability. Depending on the manufacturer, the color of the band generally denotes the intensity. Usually a light color such as pink and yellow is the easiest resistance, green and red moderate and dark gray and black very intense. However, please keep in mind that no standards exist between band manufacturers (one manufacturer's pink band may be much harder than another manufacturer's pink band) so select the band you use based on how it feels rather than the color.

There are basically two forms of resistance bands: flat and tubular. The flat one is the most common and is available latex-free for those with a latex allergy. Sometimes bands come in rolls and can be cut for specific purposes; they can also be purchased pre-cut. Most exercises can be completed with a three- to six-foot piece of band; you can "choke up" on the band to make it fit your needs. If you've never used bands before, start with the flat band and progress from there.

The tubular version is becoming more popular because it's

more durable and comes with padded handles. You may even find tubing with adjustable handles in order to adapt the length of the tubing to the individual. However, you can purchase handles for the flat variety. Wrapping the flat band around a small piece of PVC pipe can also provide a wonderful handle. Some resistance training bands are loops that can be wrapped around your limbs to provide additional challenges. You may also come across a figure eight-shaped exercise band, an exercise bar and a braided exercise tube. Some of these bands can



Band wrapped around PVC pipe

be attached to free weights to increase resistance, which introduces additional training elements to an exercise, such as improving control and decreasing unwanted momentum in explosive maneuvers.

In general, all the exercises in this book can be done with either type of band. However, if you're just looking for an overall muscular toning routine, the flat band works very well. The flat

version can also be rolled up easily and transported.

Even more options exist, such as attachments that secure the band to a wall, your ankle or your thigh. Some manufacturers sell variable bands with brackets that attach securely and safely to a closed door and have three levels of bands attached with upper and lower handles.

Keep in mind, however, that both types of bands will deterioro-

rate over time. Exposure to the elements and hand oils accelerate the process. Therefore, it's wise to regularly review the status of your band.

The implementation of bands is limitless. While all these options are nice, they're by no means critical to get an ideal workout. If you do use these, always double-check that the band won't come loose when you apply force.





before you begin

Engaging in a resistance training program is generally a very safe way to participate in growing stronger. While resistance band training is considered safe, always train smart to prevent injuries or increased joint discomfort and muscle soreness. Try your best to execute each rep with the best form possible to avoid any discomfort and to obtain the best results.

As with any form of exercise, it's wise to consult your health provider before starting an exercise program to make sure the program is suited to your particular goals and health concerns. In Part 2 (see page 15) you'll find sample programs designed for specific goals. You might also have your health provider review the programs and tweak them specifically for your concerns.

Exercise bands can be used by everyone. If you have a serious joint condition, practice the moves without bands for one to two weeks to commit the movement to your muscle memory.

If you can perform the moves without any increase in pain, then introduce the lightest band into the program. Always keep in mind the two-hour rule: Two hours post-exercise, you should not experience increased pain. While slight muscle soreness might be expected, a significant increase in joint or muscle pain means that the way you're performing the exercise or the intensity of the band being used needs to be reassessed. You may need to select another exercise that addresses that muscle group or joint area.

Matching the correct band resistance to each exercise is

critical. Most people use the same band for all exercises, which is OK. However, using a lighter band for isolated exercises such as triceps exercises and a heavier band for compound exercises such as chest presses is ideal.

Perfect posture is also important for a good, safe training session. When sitting, sit on your "sit bones," which are the tips of your pelvis, not your tailbone; your feet should provide additional support. Be sure to sit tall—don't slouch.

When standing, engage in proper neutral spine posture. From a side view, your ears should be stacked over your shoulders, shoul-



Good posture sitting (top) and standing (bottom)

ders over hips and hips over ankles. Your weight should be evenly distributed over both feet and your knees are softly bent; your hips should neither tilt upward or downward. Keep your chest high without arching your back.

Here are 10 tips to a safe, effective and successful workout:

- Make sure you're healthy enough to perform the exercise. Don't make pain!
- Always prepare the body for resistance training by performing a complete warm-up.
- Always execute the movement with proper posture and with sound biomechanics. Don't sacrifice form to do sloppy repetitions.
- Never hold your breath. Holding your breath can increase your blood pressure and cause dizziness and other ill effects.

Exhale on the hardest part of the exercise and inhale on the return portion.

- Listen to your body. If your shoulder is bothering you one day, skip the shoulder exercises but train the other parts of the body instead. If you experience pain, stop. If you have pain two hours post-exercise, re-evaluate the exercise and the intensity of the band.
- Be regular—ideally aim to perform some form of strength training two to three times a week.
- Perform the exercise through the full range of motion.
- Perform the movements slowly and with control—don't allow the band to snap back. You control the band; don't let the band control you.
- Check the exercise band periodically for wear.
- Train, don't strain. It's OK to back off, but don't quit.