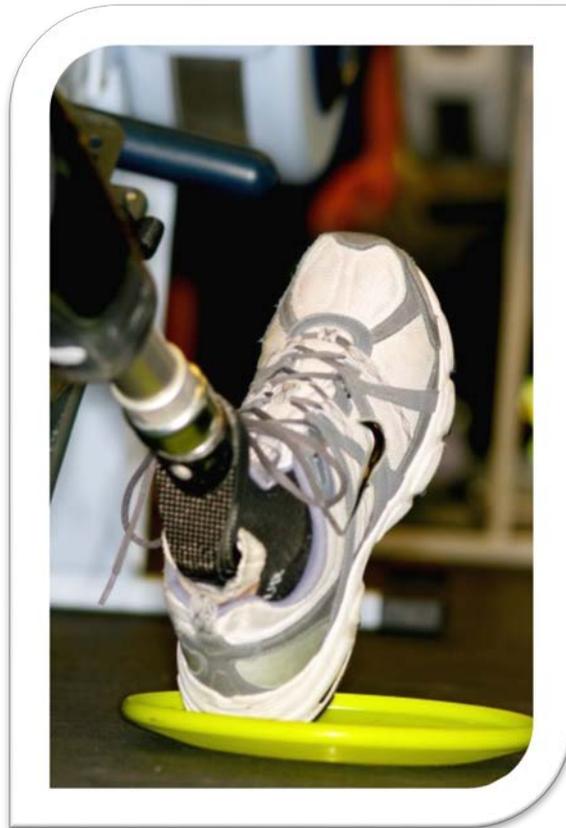


WORKING OUT WITH AT

“Exercise” is a task that tops many people’s to-do lists or New Year’s resolutions. How about you?

The Surgeon General [has reported](#) that regular physical activity, or exercise, can help:

- increase your heart and lung function;
- improve your stamina and muscle strength;
- reduce your blood pressure;
- control joint swelling and pain associated with arthritis; and
- reduce symptoms of anxiety and depression, improve your mood, and enhance overall feelings of well-being.



A common misconception that you may have is that participating in physical activity is not a possibility for you because of your disability. This is a myth that needs to be dispelled along with the belief that all exercise equipment is inaccessible. This is not the case at all!

Assistive technology (AT) exercise equipment designed specifically for people with disabilities is available on the market. Also, some of the workout equipment available on the market is universally designed, which means that it is purposefully designed to support exercisers of varying heights, proportions, and abilities. This guide will take you on an exploratory tour of some of the different types of exercise equipment that are available.

Planning Your Workout Routine

According to the [Physical Activity Guidelines for Americans](#), all adults—including those with disabilities—should engage in at least 150 minutes (2.5 hours) of moderate-intensity aerobic physical activity each week. However, before you start any exercise routine, talk to your doctor or other health care provider first. Together, you can develop a physical fitness plan that is right for you. Here are a few questions to help get the ball rolling:

- ✓ How much exercise can I do each day and each week?
- ✓ What type of exercise should I do?
- ✓ What exercises or activities should I avoid?
- ✓ Should I take medication at a certain time around my exercise routine?

Once you have developed a fitness plan with your doctor, you can start exploring the different types of exercises and equipment that are right for you.

Equipment Designed Specifically for Upper-Body Workouts

Many types of AT and universally designed equipment are available to assist you in working out your upper body even when you have limited upper body strength and/or mobility. You may also be able to use some of the equipment presented below to tone and strengthen your upper body while remaining seated in your wheelchair.

The [CanDo Twist-n-Bend Exerciser](#) is a universally designed 12-inch-long rubber bar that can help you strengthen the muscles in your hands, wrists, and shoulders through twisting and bending. It is more lightweight than similar products on the market to more effectively reduce strain on your muscles while still giving you a productive workout. It is designed to improve your coordination and increase your range of motion (ROM).

A similar option is [Thera-P Bars](#). These are barbells that enable you to perform therapeutic bilateral exercises such as shoulder girdle and forearm exercises. These bars, which have non-slip handles, are intended to help you improve your upper extremity strength, ROM, and endurance. They gradually increase in weight and are lighter than standard weight bars and sets on the market. You can begin with the lowest weight bar (i.e., a one-pound bar) and use heavier bars as your strength increases. Bars may be purchased separately or in a five-barbell set with weights ranging from one to five pounds.

If you are looking for more advanced equipment, one option is the [Pro1 Upper Body Exerciser](#). This universally designed exercise machine allows you to perform cardio and strength exercises while standing or sitting in a chair or wheelchair (if you use one). It is

designed to assist you with strengthening your arms, shoulders, core, and rotator cuff muscles. The Pro1 comes equipped with bi-directional and resistance pedals that you can cycle forward and backward with your hands, changing directions at any time and as often as you want. It also offers adjustable arm cranks that you can use to perform rowing exercises to help improve your ROM. Plus, you can adjust the resistance level to match your strength (the Pro1 offers 191 different resistance levels). The higher the resistance level, the more strength is required. You can also keep track of your progress on its 7-inch LCD touch screen, which displays the resistance level, time, distance, metabolic equivalents (i.e., a measurement of the amount of energy you are using during your workout), heart rate, calories used, rotations per minute, and watts (i.e., a measurement of the strength you are using during your workout). It also comes with integrated dual cooling fans that you can turn on while you exercise. They also automatically turn on to help you cool down after each completed exercise routine.

If you use a wheelchair and are looking for more advanced equipment, you may want to consider the [Rickshaw Rehab Exerciser \(Model 3000\)](#). This AT is specially designed for wheelchair users and enables you to strengthen specific arm and shoulder muscles by facing forward or backward while seated in your wheelchair and pumping weighted oars. It essentially helps you build muscle strength by duplicating the arm and shoulder motions you use to propel, as well as transfer in and out of your wheelchair. You can move the oars independently or together, and you can customize your workout even further by mounting the same amount of weights on both oars or a lesser amount on one oar. The machine uses standard disc weights (not included). Constructed of heavy-duty stainless steel, it has an adjustable oar-grip height and fits around the width of any standard wheelchair.



Rickshaw Rehab Exerciser (Model 3000)



Uppertone Gym

Another option you may want to consider if you use a wheelchair and are looking for more advanced equipment is the [Uppertone Gym](#). This AT allows you to do all upper-body exercises without hand-grip strength or assistance. You place your thumb and forefinger into one handle and your wrist between two others to secure your hands eliminating the need to grip any handles to operate the machine. With this equipment, you can independently perform deltoid presses, bicep curls, shoulder rotations,

and triceps extensions-exercises that can help you perform activities of daily living, such as loading and unloading your wheelchair, lifting objects, repositioning your legs, and opening manual doors, autonomously. This multi-station machine allows you to do multiple exercises, each targeting a major upper-body group (i.e., back, chest, arms, or shoulders). You can also use it to exercise one arm at a time or both simultaneously. It is height-adjustable and offers varying levels of resistance that you can customize to fit your needs. It comes with a set of standard weights, but if you want, you can purchase and add additional weights.

[Equipment Designed Specifically for Lower-Body Workouts](#)

Many types of AT and universally designed equipment are also available to assist you in working out your lower body. You may be able to use some of the equipment presented below to tone and strengthen your lower body even if you have limited or no upper-body mobility or limited lower-body mobility.

One option that may help you strengthen your foot, ankle, and lower leg muscles is the [ROCK Ankle Exercise Board](#). This universally designed device, which is a textured disc with a rocker bottom that can be used either seated or standing, may help you improve your balance and maintain or increase your ROM. If you want to use it while sitting down, place it under your feet and slowly rotate it several times in each direction to help improve your ankle's ROM and control. Another way to use the exercise board is to stand on top of it, with feet shoulder-width apart (you can hold on to the back of a chair for support if necessary). Then try rocking the board forwards and backwards, side to side, then around and around for several minutes.

A similar universally designed option is the [Elginex Elgin Leg and Ankle Exerciser](#), a progressive resistance exerciser for your lower legs. After adding standard 1-inch disk weights to any one of the four prongs, you can perform load-resisting inversion (i.e., pointing the sole of your foot towards the opposite foot), eversion (i.e., pointing the sole of your foot away from the opposite foot), dorsiflexion (i.e., bending your foot backward), and plantarflexion (i.e., flexing your foot or toes toward the sole of your foot) exercises – all while remaining seated. This exerciser allows you to concentrate on one motion at a time, and it is also useful for passive stretching (i.e., a type of stretch that uses an external force – in this case weight – to help you achieve a stretch).





Exercise Unit (Model NK45)

Another option for more advanced equipment is the [Exercise Unit \(Model NK 45\)](#) machine. This universally designed unit is useful for resistive exercise programs for the knee, quadriceps, and hamstring muscles. The unit consists of an electric welded steel frame with the top covered by Naugahyde over foam padding for seating. The chrome torque unit has an easy-to-read ROM indicator, padded adjustable leg rest, and stationary weight holder with securing cuff. The torque unit can be placed on either the right or left side so you can exercise either your right or left leg. An additional torque unit can be added to exercise both legs at the same time. To start, you put a weight in the

weight holder and secure it with the cuff. To exercise your hip flexors, you stand, place your shin behind the leg rest, and move your shin forward against the leg rest to move the weight. To exercise your quadriceps, you sit on the seating pad, place your shin behind the leg rest, and move your shin forward against the leg rest to move the weight. To exercise your hamstrings, you stand, place your calf behind the leg rest, and move your calf backward against the leg rest to move the weight.

Another more advanced universally designed option is the [Deluxe Electronic Exerciser](#). This bicycle unit, which can be used in front of your chair, at the side of your bed, etc., is designed to help you improve your circulation, muscle strength, joint ROM, and coordination. Place your feet on the pedals-which are equipped with nonskid footpads, secure them with the wraparound foot straps, and start pedaling. The fully automatic, multifunctional electronic monitor with LED display reflects your speed, distance traveled, number of calories burned, and other statistics.



Deluxe Electronic Exerciser

Equipment Designed for Both Lower- and Upper-Body Workouts

Some exercising units allow you to work both your upper and lower body. Depending on your mobility, you may be able to use these for lower- or upper-body workouts or both.

The universally designed [InStride® Total Body Cycle](#) is one option. As its name suggests, this device consists of a set of pedals designed to provide your body (i.e., your arms, shoulders, back, and lower body) with a full ROM workout. It allows you to control the intensity of your workout as well as the areas of your body you want to target. For example, if you want to exercise your lower body, place the cycle on the floor, rest your

feet on top of the molded pedals, secure the straps over your feet, and start pedaling. Then when it's time to work out your upper body, place the cycle on a table or desk and begin pedaling with your hands. You can also keep track of your progress using the cycle's electronic monitor. Controlled by a single button, the monitor displays your distance, speed, and time and the number of calories you've burned.

Another similar option is the universally designed [Colorado Sport Cycle](#) arm or leg exerciser. This adjustable, stationary exercise cycle is placed on a table and used with hand grips for upper extremity exercises. The unit can also be placed on the floor and used with the optional foot pedals for lower extremity exercises. It provides a choice of forward, backward, or bi-directional resistance. Standard features include lever-controlled resistance adjustment; an electronic digital display of elapsed time, speed, and distance; QuickExchange standard hand grips; a padded, adjustable forehead rest; nylon strap resistance; a 20-pound solid front flywheel; nonslip rubber pods for stability; mobility casters for portability; a safety chain guard that encloses moving gears and sprockets; and a hand-adjustable table clamp.



Colorado Sport Cycle

More advanced multifunctional AT is also available, such as the [Universal Exercise Bed \(Model A\)](#). It allows you to workout lying down. Lying down can help reduce tension in your neck, back, knees, ankles, and feet, thereby creating a more comfortable workout position. You can perform a variety of gentle to rigorous exercise routines using the Universal Exercise Bed, which consists of a full-size bed with a specially fitted mattress and a metallic frame that can hold up to 1,200 pounds. At the head of the bed is an arm, chest, and shoulders bar with a 120-pound weight stack for upper-body strength conditioning, and at the foot of the bed is a foot bar to assist you in performing sit-ups and other abdominal exercises. You can also attach a magnetic recumbent exercise bike to the foot of the bed if you want to add cycling to your exercise routine.



Universal Exercise Bed (Model A)

For More Information

[Contact us](#) at AbleData to learn more about the AT presented in this guide and to find others.

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This publication was written and produced by AbleData. AbleData is funded by the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR) of the U.S. Department of Health and Human Services (HHS) under contract number ED-OSE-13-C-0064 and operated by New Editions Consulting, Inc.

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