

Introduction

GymParks4All is a community-focused initiative aimed at promoting physical activity and health within neighborhoods. Recognizing the importance of outdoor spaces for fitness and well-being, GymParks4All introduces the concept of "pocket gyms" – small-scale fitness facilities installed in public areas. These pocket gyms offer structured physical activity opportunities, fostering a culture of active living and social interaction among community members. Collaborating with municipalities and advocating for new public training facilities, GymParks4All seeks to address disparities in access to fitness resources, particularly in areas facing unemployment and poverty. With an emphasis on inclusivity and accessibility, GymParks4All endeavors to create healthier and more vibrant communities for all individuals.

The Accessibility Plan of Outdoor Gyms for People with Physical Disabilities is an integral component of GymParks4All's mission to promote inclusive fitness opportunities. This plan aims to ensure that outdoor gym facilities are accessible to individuals with disabilities, thus fostering equal participation in physical activity. Assessing current accessibility status, adaptations to existing equipment, and installation of accessible features, GymParks4All aims to remove barriers and create an inclusive environment for all users. Educational outreach and training programs will further support the utilization of outdoor gyms by individuals with disabilities while prioritizing accessibility in outdoor gyms, GymParks4All demonstrates its commitment to creating healthier and more equitable communities.

In the pursuit of inclusivity, it is essential to design exercise routines that cater to individuals with varying physical disabilities. Each type of equipment in the outdoor gym is paired with specific adaptations that make it accessible and beneficial for users with different abilities. The exercises proposed for each type of equipment have been carefully designed to ensure they provide effective physical engagement while accommodating the unique challenges posed by various conditions. Whether it's for users with mobility impairments, neuromuscular disorders, or chronic pain conditions, these exercises promote strength, flexibility, and overall well-being. The following section outlines six types of gym equipment, along with tailored exercises, for individuals with a range of physical disabilities.

A QR code has been created and installed in various Gym Parks across Greece, Cyprus, and other parts of Europe to provide easy access to exercises and related materials.



Accessibility Plan of Outdoor Gyms for People with Physical Disabilities

What Makes an Outdoor Gym Park Accessible

Ensuring that an outdoor gym park is accessible involves inclusive design and consideration of various factors to accommodate individuals with disabilities and diverse abilities. An accessible outdoor gym park aims to provide an inclusive environment where everyone can participate in physical activity and enjoy the amenities offered. Several key elements contribute to making outdoor gym parks accessible:

Clear and Wide pathways- Accessible outdoor gym parks should feature clear and wide pathways that are free of obstacles, allowing individuals using mobility aids such as wheelchairs or walkers to navigate comfortably. Smooth surfaces and adequate pathway width ensure safe and easy movement throughout the park.

Accessible Equipment - Gym equipment within the park should be designed with accessibility in mind, featuring adjustable settings and clear instructions. This allows users of varying abilities to engage in workouts independently and safely. Equipment placement considers reach and maneuverability to ensure usability for individuals with disabilities.



Figure 1. Picture of a wide pathway accessible by wheelchair at an outdoor park.



Figure 2. Picture of water fountains with different accessible heights for users with different physical abilities.

Accessible Amenities - The presence of accessible amenities enhances the overall usability of the outdoor gym park. Accessible seating areas with back support offer resting spots, while water fountains with varying heights cater to users of different abilities. Restrooms equipped with grab bars and spacious layouts ensure comfort and convenience for individuals with disabilities.

Assistive Devices and Features - The incorporation of assistive devices such as handrails, grab bars, and tactile guides throughout the park assists individuals with the environment confidently. Accessible communication features, including braille signage and tactile maps, provide essential information to users with visual impairments.

Inclusive Design Principles - Outdoor gym parks adopt universal design principles to promote accessibility for individuals with diverse needs. Consideration of color contrast, lighting, and tactile elements improves usability for individuals with sensory impairments, creating an inclusive and welcoming atmosphere.

Community Engagement and Awareness - Educating park staff, volunteers, and visitors about accessibility considerations fosters a culture of inclusivity and respect within the community. Encouraging feedback and participation from individuals with disabilities ensures that their needs are heard and addressed, leading to continuous improvement in park accessibility.



Figure 3. Picture of a sign with inclusive communication features.

Training program

Curriculum area: Outdoor gym

Key stage: Mild - Moderate

Age: Adults

Assistant Name: _____

Inclusivity, safety, and accessibility:

- Conduct a needs assessment: Evaluate the exercisers' abilities in order to understand the specific needs to tailor exercises accordingly
- Appropriate footwear and clothing
- Enough space to do activities
- Check the area if safe to use and equipment also.
- Ensuring all content, including videos, tutorials, and interactive elements, is appropriate and suitable for people with physical disabilities.
- Providing guidelines for safe communication and interaction within the project, emphasizing respectful behavior and zero tolerance for bullying or harassment.
- Focus on controlled, stable motions that don't require excessive balance
- Provide single-limb or double-limb exercises or modified grips for exercisers

Learning objectives:

- ❖ Body Awareness: Develop an awareness of body positioning and movement, including balance and stability.
- ❖ Problem-Solving: Develop problem-solving skills
- ❖ To improve communication skills and social interaction
- ❖ To improve motor skills; enhance coordination and balance skills through physical demands of outdoor gyms
- ❖ Functionality: Focus on exercises that improve everyday functions, such as pushing, pulling, or lifting, which can increase independence in daily life.
- ❖ Flexibility and stretching: Incorporate stretching and mobility exercises that are especially useful for individuals with muscle tightness or limited range of motion.
- ❖ Balance and coordination: Where appropriate, include balance and coordination exercises to reduce the risk of falls
- ❖ Set personalized goals: Encourage exercisers to work toward personal fitness goals that are realistic and meaningful based on their abilities.

Warm up (15 minutes)

1. Balance and Coordination to improve stability and body awareness. Introducing simple footwork patterns, such as side steps or gentle hops, to challenge coordination skills.
2. Dynamic Stretching further loosen up muscles and increase blood flow. Perform leg swings forward and backward, alternating between legs, to stretch the hamstrings and quadriceps. Follow with arm circles and torso twists to engage the upper body and core muscles.
3. Joint Mobility to increase flexibility and range of motion. Proceeding to shoulder circles, arm swings, and hip rotations, Arm Circles, Leg Swings, Arm Swings, Toe Touches, High Knees ensuring smooth and controlled movements.

There are several types of physical disabilities that can benefit from adapted exercises using both conventional and specialized equipment. Here are the primary categories:

Mobility Impairments:

1. Paralysis (e.g., paraplegia, quadriplegia)
2. Cerebral Palsy Muscular Dystrophy
3. Multiple Sclerosis (MS)
4. Amputations

Orthopedic Conditions:

5. Arthritis (Osteoarthritis, Rheumatoid Arthritis)
6. Joint or Bone Injuries (e.g., fractures, dislocations)
7. Scoliosis

Neuromuscular Disorders:

8. Parkinson's Disease
9. Stroke Survivors
10. Peripheral Neuropathy

Chronic Pain Conditions:

11. Chronic Back Pain: Long-term pain in the back due to injury, degenerative disc disease, or other spinal conditions.

Respiratory and Cardiovascular Conditions:

12. Chronic Obstructive Pulmonary Disease (COPD)
13. Congenital Heart Defects

Note: Individuals who use wheelchairs will require a specially designed platform or surface that they can access to enable them to perform the following exercises.

The loss of a limb or part of a limb, requiring adaptations in exercise and movement strategies.

RIDER



Type: Strength training

Function: Workout/strengthening of upper and lower limb muscles. Full body workout/stretching.

Note: Maximum allowed weight of a user is 120 kg. The area of 2 meters from the user/machine must stay clear during the workout.

Exercise 1a

Description of exercise

The exerciser is seated on the machine, placing both hands and feet in their designated positions. By pressing with the legs and simultaneously pulling with the arms, he/she engages the equipment to perform the exercise.

Instructions

Aim for 2 sets of 12-15 repetitions

There are several types of physical disabilities that can participate in the particular exercise:

2,3,5,6,7,8,9,10,11,12,13

Training video

Click [here](#) to watch a video with exercise instructions.

Exercise 1b

Description of exercise

The exerciser is seated on the machine, placing both hands and feet in their designated positions. By pressing with the legs and simultaneously pulling with the arms maintain an upright stance with arms and legs fully extended for 5 seconds.

Instructions

Aim for 2 sets of 8-10 repetitions

There are several types of physical disabilities that can participate in the particular exercise:
2,3,5,6,7,8,9,10,11,12,13

Training video

Click [here](#) to watch a video with exercise instructions.

Exercise 1c

Description of exercise

The exerciser positions themselves on the opposite side of the machine, placing their hands in the designated spots. He/she then pushes the machine to its maximum extension before returning it to its starting position.

Instructions

Aim for 2 sets of 10-12 repetitions

There are several types of physical disabilities that can participate in the particular exercise:
2,3,5,6,7,8,9,10,11,12,13

Training video

Click [here](#) to watch a video with exercise instructions.

WAIST TWISTER DOUBLE

Type: Exercise and relaxation

Function: Training and relief of waist muscles, improvement of mobility/flexibility of lumbar area.

Note: Maximum allowed weight of a user is 120 kg. The area of 2 meters from the user/machine must stay clear during the workout.



Exercise 2a

Description of exercise

The arm is outstretched, grasping the gymnastic instrument, and the legs slowly rotate.

Instructions

- This exercise, using both the left and right hands
- Aim for 2 sets of 10-12 repetitions

There are several types of physical disabilities that can participate in the particular exercise:
1,2,3,4,5,6,7,8,9,10,11,12,13

NOTE: The loss of a limb or part of a limb, requiring adaptations in exercise and movement strategies.

Training video

Click [here](#) to watch a video with exercise instructions.

Exercise 2b

Description of exercise

The legs slowly rotate and the hands are above the knees.

Instructions

Aim for 3 sets of 10-12 repetitions

There are several types of physical disabilities that can participate in the particular exercise:

1,2,3,4,5,6,7,8,9,10,11,12,13

NOTE: The loss of a limb or part of a limb, requiring adaptations in exercise and movement strategies.

Training video

Click [here](#) to watch a video with exercise instructions.

Exercise 2c

Description of exercise

Both hands are placed on the handles of the instrument while the feet perform a rotational movement.

Instructions

Aim for 3 sets of 10-12 repetitions

There are several types of physical disabilities that can participate in the particular exercise:

1,2,3,4,5,6,7,8,9,10,11,12,13

The loss of a limb or part of a limb, requiring adaptations in exercise and movement strategies.

Training video

Click [here](#) to watch a video with exercise instructions.

Exercise 2d

Description of exercise

Both hands are placed on the handles of the instrument, one leg performs a rotational movement, and the other leg remains straight.

Instructions

- This exercise is performed for the left and right leg
- Aim for 2 sets of 8-10 repetitions

There are several types of physical disabilities that can participate in the particular exercise:

1,2,3,4,5,6,7,8,9,10,11,12,13

NOTE: The loss of a limb or part of a limb, requiring adaptations in exercise and movement strategies.

Training video

Click [here](#) to watch a video with exercise instructions.

TAI-CHI WHEEL

Development and strengthening of upper limb muscles, improvement of flexibility and activity of arm and shoulder joints, wrists, elbows and collar bones.

Type: Relaxing

Function: Development and strengthening of upper limb muscles, improvement of flexibility and activity of arm and shoulder joints, wrists, elbows and collar bones. Suitable for rehabilitation purposes.

Note: Maximum allowed weight of a user is 120 kg. The area of 2 meters from the user/machine must stay clear during the workout.



Exercise 3a

Description of exercise

The exerciser grips the handle with one hand and turns the gymnastic instrument.

Instructions

- This exercise, using both the left and right hands
- Aim for 2 sets of 12-15 repetitions

There are several types of physical disabilities that can participate in the particular exercise:

1,2,3,4,5,6,7,8,9,10,11,12,13

NOTE: The loss of a limb or part of a limb, requiring adaptations in exercise and movement strategies.

Training video

Click [here](#) to watch a video with exercise instructions.

Exercise 3b

Description of exercise

The exerciser grips the handles with both hands and turns the gymnastic instrument. The first rotation is done in one direction, while the second rotation is performed in the opposite direction.

Instructions

Aim for 2 sets of 12-15 repetitions

There are several types of physical disabilities that can participate in the particular exercise:

2,3,5,6,7,8,9,10,11,12,13

NOTE: The loss of a limb or part of a limb, requiring adaptations in exercise and movement strategies.

Training video

Click [here](#) to watch a video with exercise instructions.

Exercise 3c

Description of exercise

The individual holds the gymnastic instrument with both hands and performs a 90-degree rotational movement, completing one repetition by rotating to the right and another by rotating to the left side.

Instructions

Aim for 2 sets of 12-15 repetition

There are several types of physical disabilities that can participate in the particular exercise:

2,3,5,6,7,8,9,10,11,12,13

Training video

Click [here](#) to watch a video with exercise instructions.

BODY WHEEL

Development and strengthening of upper limb muscles, improvement of flexibility and activity of arm and shoulder joints, wrists, elbows and collar bones.

Type: Relaxing

Function: Development and strengthening of upper limb muscles, improvement of flexibility and activity of arm and shoulder joints, wrists, elbows and collar bones. Suitable for rehabilitation purposes.

Note: Maximum allowed weight of a user is 120 kg. The area of 2 meters from the user/machine must stay clear during the workout.



Exercise 4a

Description of exercise

The individual holds the gymnastic instrument with both hands and performs a 90-degree rotational movement, completing one repetition by rotating to the right and another by rotating to the left side.

Instructions

Aim for 2 sets of 12-15 repetition

There are several types of physical disabilities that can participate in the particular exercise:
2,3,5,6,7,8,9,10,11,12,13

NOTE: The loss of a limb or part of a limb, requiring adaptations in exercise and movement strategies.

Training video

Click [here](#) to watch a video with exercise instructions.

Exercise 4b

Description of exercise

The individual holds the gymnastic instrument by the handle with one hand and executes a full 360-degree circular rotation.

Instructions

- This exercise, using both the left and right hands
- Aim for 2 sets of 12-15 repetition

There are several types of physical disabilities that can participate in the particular exercise:
2,3,5,6,7,8,9,10,11,12,13

Training video

Click [here](#) to watch a video with exercise instructions.

Exercise 4c

Description of exercise

The exerciser grips the handle with one hand and turns the gymnastic instrument 90-degree circular rotation.

Instructions

- This exercise, using both the left and right hands
- Aim for 2 sets of 12-15 repetitions

There are several types of physical disabilities that can participate in the particular exercise:
2,3,5,6,7,8,9,10,11,12,13

Training video

Click [here](#) to watch a video with exercise instructions.

Exercise 4d

Description of exercise

The exerciser maneuvers the instrument in either a continuous clockwise or counterclockwise rotation, aiming to maintain uninterrupted motion without pausing.

Instructions

Aim for 2 sets of 12-15 repetitions

There are several types of physical disabilities that can participate in the particular exercise:
2,3,5,6,7,8,9,10,11,12,13

Training video

Click [here](#) to watch a video with exercise instructions.

AIR WALKER

Type: Strength training

Function: Improvement of lower limbs mobility, body coordination and balance, heart and lungs capacity, strengthening of legs and glutes.

Note: Maximum allowed weight of a user is 120 kg. The area of 2 meters from the user/machine must stay clear during the workout.



Exercise 5a

Description of exercise

The exerciser holds the handle with both hands, ensuring the legs are positioned at the predetermined points. Both legs are moved together in a coordinated motion, alternating between forward and backward movements.

Instructions

Aim for 2 sets of 8-10 repetitions

There are several types of physical disabilities that can participate in the particular exercise:
2,3,5,6,7,8,9,10,11,12,13

Training video

Click [here](#) to watch a video with exercise instructions.

Exercise 5b

Description of exercise

The exerciser holds the handle with both hands, ensuring that the feet are placed at the predetermined points. Then, one leg also moves forward while the other moves back, alternately.

Instructions

Aim for 2 sets of 8-10 repetitions

There are several types of physical disabilities that can participate in the particular exercise:
2,3,5,6,7,8,9,10,11,12,13

Training video

Click [here](#) to watch a video with exercise instructions.

ELLIPTICAL TRAINER

Type: Exercise, body development and coordination

Function: Improvement of flexibility of upper and lower limbs and also activity/flexibility of joints.

Note: Maximum allowed weight of a user is 120 kg. The area of 2 meters from the user/machine must stay clear during the workout.



Exercise 6a

Description of exercise

The exerciser grips the handles with both hands and positions the feet at the predetermined points. The exerciser then alternates pushing with the arms and legs to generate movement of the instrument.

Instructions

Aim for 2 sets of 12-15 repetitions

There are several types of physical disabilities that can participate in the particular exercise:
2,3,5,6,7,8,9,10,11,12,13

Training video

Click [here](#) to watch a video with exercise instructions.

Exercise 6b

Description of exercise

The exerciser stands beside the instrument, gripping its handle with one hand. The exerciser applies force to push the instrument and subsequently returns it to its original position.

Instructions

- This exercise, using both the left and right hands
- Aim for 2 sets of 12-15 repetitions

There are several types of physical disabilities that can participate in the particular exercise: 1,2,3,4,5,6,7,8,9,10,11,12,13

NOTE: The loss of a limb or part of a limb, requiring adaptations in exercise and movement strategies.

Training video

Click [here](#) to watch a video with exercise instructions.

Exercise 6c

Description of exercise

The exerciser stands in front of the instrument, gripping the handles with both hands. The exerciser pushes the instrument forward and then returns it to its original position.

Instructions

Aim for 2 sets of 10-12 repetitions

There are several types of physical disabilities that can participate in the particular exercise: 1,2,3,5,6,7,8,9,10,11,12,13

NOTE: The loss of a limb or part of a limb, requiring adaptations in exercise and movement strategies.

Training video

Click [here](#) to watch a video with exercise instructions.

Conclusion

Creating an accessible outdoor gym park requires adherence to specific guidelines and principles to ensure that the park environment is inclusive and welcoming to individuals with disabilities. The following guidelines serve as a roadmap for designing and implementing accessibility features within outdoor gym parks:

Compliance with Accessibility Standards - Ensure that the design and construction of the outdoor gym park comply with relevant accessibility standards and regulations, such as the European and national accessibility guidelines. These standards provide specific requirements for pathways, ramps, parking, signage, and amenities to ensure accessibility for individuals with disabilities across European member states.

Pathway Design and Surfacing - Design pathways within the park to be wide, level, and free of obstacles to accommodate mobility aids such as wheelchairs and walkers. Utilize smooth surfacing materials such as asphalt or concrete to ensure ease of movement. Incorporate curb cuts and ramps at intersections and transitions to facilitate seamless navigation for individuals with mobility impairments.

Accessible Equipment Selection - Select gym equipment that is accessible to individuals with diverse abilities, including adjustable settings and clear instructions for use. Ensure that equipment placement allows for sufficient space for users to maneuver safely, especially those using mobility aids. Consider incorporating tactile indicators or audio cues for individuals with visual impairments.

Accessible Amenities Provision - Provide accessible amenities such as seating areas with back support, water fountains at varying heights, and restrooms equipped with grab bars and spacious layouts. Ensure that amenities are located along accessible pathways and meet relevant accessibility standards for usability.

Assistive Devices and Features - Install assistive devices and features throughout the park to assist individuals with disabilities in navigating the environment independently. This may include handrails, grab bars, tactile guides, and audible signals at intersections. Ensure that these features are properly maintained and clearly marked for visibility.

Inclusive Signage and Communication - Implement clear and accessible signage throughout the park, utilizing large fonts, high color contrast, and tactile elements such as braille or raised lettering. Provide informational signage at key locations to assist individuals with wayfinding and orientation. Ensure that communication materials are available in multiple formats to accommodate diverse needs.

Community Engagement and Training - Engage park staff, volunteers, and community members in accessibility training and awareness initiatives to promote understanding and respect for individuals with disabilities. Encourage ongoing dialogue and feedback from park users to identify areas for improvement and ensure that accessibility considerations remain a priority.



MindSpin



Co-funded by
the European Union

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