

## Creating terrenkur system in an industrial city

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**Funding Acknowledgements:** None.

**Background:** Walking as a method of functional recovery is used to treat many diseases. It is an accessible, natural and widespread form of physical activity. Terrenkur is defined as distance, time, and angle dosed hiking; a method of training and treating patients with cardiovascular diseases. One alternative method of rehabilitation is Nordic Walking which leads to increasing both the number of muscles involved in movement and physical and aerobic load.

**Purpose:** To create terrenkur systems in the 5 parks of our city, ensuring maximum accessibility for residents and guests of the city to terrenkurs.

**Results:** We developed a methodology base for the terrenkur organization and proposed a system of 25 trails laid out in 5 parks (evenly placed in different parts of the city). It is the first terrenkur system in the world located in a non-recreational area. The organizational, methodological and preparatory work was carried out by a team of professors from different universities and practicing physicians and rehabilitologists.

When creating the routes, we divided them into three types based on the level of complexity: 1) an easy route - from 500 to 1500 meters, with minor terrain changes, almost no difference in elevation; 2) a moderate route - from 1500 to 2500 meters, the frequency and difference of terrain inequalities increases, includes sections with a variable walking pace; 3) a difficult route – more than 2500 meters, significant terrain changes, many sections with a variable walking pace.

In each park the terrenkur systems have been equipped with 25 information boards at the beginning and intermediate points of the routes, including a map, information about healthy and Nordic Walking, a brief history of the terrenkur, places of active recreation, the general map of the city, which indicates the parks with terrenkur. The trails are marked using poles, containing direction and covered distance information from the beginning of each route. A unified system of numbering of all the trails has been developed, where the first digit in a number means the level of difficulty of the route, and the second, respectively, the serial number in the particular park. For example, routes №11, №12 are easy routes, №21, №22 are moderate routes and №31, №32 are difficult ones.

On September 30, 2023, we held a charitable event «Day of Health for Victory» in one park, where terrenkur was created. During the event, participants had the opportunity to try different types of physical activity (terrenkur and Nordic walking), listen to lectures about a healthy lifestyle, as well as check their state of health and determine their cardiovascular risk.

**Conclusions:** Terrenkur can be considered as an affordable and safe method of primary and secondary prevention of cardiovascular pathology and rehabilitation for other ailments. The implementation of this method in industrial cities does not require large financial expenses and can promote patients wellbeing.