COMMODITY ASPECTS IN RESEARCHES OF PEDOMETER

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Introduction. This device was invented two hundred years ago. The first inventor of such kind of a device was Thomas Jefferson. The device consisted of a special lever and a magnet. When walking man raised his hand, he began to move all joints. Thus steps were counted. Later the device was improved, became more compact, easier to use, the principle of work also has changed. Pedometers are used to measure energy expenditure of walking person.

Aim. The aim of this paper is merchandising analyze of the range, use and consumer properties of pedometers on the national market.

Materials and methods. Information, based on the study of normative documents, materials of Internet resources and our own conclusions.

Results and discussion. Pedometer – is small sized device, which intended to count the steps, performed during running or walking in a given period of time or for the whole day. Purpose of pedometer is to count your steps, on the basis of which calculation of the length of the traveled distance and number of burned calories is done.

From a medical point of view, in order to avoid inactivity, everyone should pass at least 15,000 steps a day. Pedometer allows you to keep track of the level of activity. Of course, the average number of kilometers can be calculated from the time and guided only by the hour. But it's much more efficient to use your own pedometer, which in addition to considering the number of steps, has a timer that will calculate the optimal rhythm of movement, depending on the time of day and intensity of side exercise stress. They are no heavier hours and very comfortable, so it does not cause inconvenience to wear them and almost imperceptibly. They are very sensitive and can accurately count the number of steps, their length, tempo, intensity, and so on.

The presence of the pedometer is especially important, according to recent studies of British specialists, who carried out that man should do at least a hundred steps per minute during walking to count that one as really beneficial for the organism. The pacemaker will automatically be recorded, and the gadget may report about an unplanned failure during that mode. In any case, a person inner self-esteem will rise after looking at the display, which shows the excess of the minimum number of steps required to maintain health.

They can be mechanical, electronic and electro-mechanical. During the walking, the device transmits impulse oscillation, that are comes from each step of

the person, to the sensor. Counter treats the received data and outputs the specific value.

Mechanical models work by converting energy into mechanical shaking pulses that activates the operation of the system for counting the number of steps. They precisely determine the number of steps and distance covered, with fixing the time.

Electronic-mechanical devices consist of a sensor, which converts mechanical shaking in momentum and an electronic system, which counts your steps.

Electric models are equipped with microprocessors and accelerometers for counting steps. They are more perfect than other types, and allow you to store information in its memory. And if you have a special application for your computer, you can transfer this data into the database and make a schedule of changes. Modern electronic pedometers can be attached to the belt, arm or leg. Also, there a lot of apps for mobile phones, allowing the owner to calculate the activity on their devices.

Pedometers also can be in several forms: stand-alone electronic (they are small devices that can be carried in a pocket or bag, fastened to clothing; design and weight of the device depends on the manufacturer) synchronized with your phone and other devices; pedometers-watches, pedometers-bracelets, mobile applications-pedometers.

Pedometers should meet the following requirements: calculation of steps (basic); calculation of the distance; count number of burned calories and heart rate; monitoring of fat, the burned grams per day; monitoring of additional calories (active energy); protection against vibrations. Some of them have integrated calendars, where you can create a training schedule, these records can be stored in the memory for the certain period of time. All devices are different, so the requirements may vary from model to model, from manufacturer to manufacturer.

The most popular manufacturers of pedometers: “Master Kit” (Ukraine), “OOO Fisk” (Ukraine), “Shagi” (Russian), Beurer (Germany), NOZOMI PD 101 (Japan); OMRON (Japan), KYTO (China), Shenzhen Fastgo Electronics Co., Ltd. (China), Kangfu Medical Equipment Factory (China) and others.

Packing of pedometers performed in primary containers (cartons, packs, blister containers, cases) with corresponding closures, ensuring their safety during storage, sale and transportation. Allowed to transfer by any kind of transport.

Store this type of product protected from precipitation location, avoiding mechanical, chemical and physical effects, with stable temperature, avoiding high humidity and mold.

Conclusions. Pedometers by depending on the use, can perform various functions that are necessary to control and maintain the physical condition of the person, determine the level of physical activity and correct lifestyle. It will allow to expand consumer properties of the goods and make pedometers more significant for human use.