

## Functional and Morphological Indicators of Girls Weightlifters in the Training Group

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### **Abstract:**

in this article, the functional and morphological indicators of weightlifting girls at the initial stage of improvement in the training group are considered.

**Keywords:** morphological and functional indicators, the initial stage of preparation, OMC.

**Relevance:** At the present stage of socio-economic development of the independent Republic of Uzbekistan, when much attention is paid to the activation of the human factor, the issues of developing and improving the system of physical training of the younger generation are becoming increasingly important. In this regard, sport in Uzbekistan has become one of the most important activities of the state. For the upbringing of a healthy generation, it is necessary to develop physical culture and sports at a high scientific and technical level [1,2,3].

In the process of harmonious physical development, a special place is occupied by the role of girls in the productive sphere, sports and public life. The development of the future generation depends on strengthening their health. This makes it necessary to provide a comprehensive scientific substantiation of physical education and sports training for girls. The desire of women to achieve high sports results, as well as this circumstance, leaders in the program of the Olympic Games, help to increase the role of women's sports.

**Introduction:** Knowledge of the structural features of the female body, stages of biological maturation, periods of the menstrual cycle, the functionality of body systems, and the recoverability of functions is necessary when planning training loads.

Purpose of the study: Morphofunctional indicators of weightlifting girls at the initial stage of improvement.

**Research objectives:** 1. Reducing the duration of the competitive and increasing the preparatory periods; 2. The use of exercises in the training process that most effectively affect the sports result; 3. The use of the training program based on the identified indicators of the morphofunctional development of weightlifters Research methods: analysis of scientific and methodological literature; pedagogical observation; pedagogical experiment;

In the study of the state of the issue, we studied the literary sources of both domestic and foreign authors. Particular attention was paid to morphological and functional indicators, which considered the features of the influence of biological cycles on sports results, the physical development of weightlifters (somatometric, physiometric, somatoscopic).

Increasing the level of sports achievements in women's sports can be achieved on the basis of:

- taking into account the specific biological rhythm of the female body,
- taking into account the dynamics of sports performance in various phases of the ovarian-menstrual cycle (OMC),

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- taking into account the hormonal status of athletes.

In the process of analysis, a generalization of the data of experimental studies given in the literature was carried out, aimed at the distribution of the main functional indicators of weightlifters.

The highest rates of special endurance and speed capabilities were shown in girls at the beginning of the post-menstrual and post-ovulatory phases of the cycle, which corresponds to the peaks in the content of sex hormones and the associated fluctuations in the data from the examination of the performance of athletes. The lowest indicators of special endurance and speed capabilities of girls in strength sports were found in the menstrual and ovulatory phases.

**Practical significance of the research results.** The volume of means and loads that effectively affect the effectiveness of exercises in the construction of training sessions for girls weightlifters,

- reducing the duration of the competitive and increasing the preparatory periods;
- application of a minimum in terms of the volume of an adequate training load during periods of training, which ensures an increase in sportsmanship;
- use in the training process of exercises that most effectively affect the sports result;
- use of the training program based on the identified indicators of the morphofunctional development of weightlifters.

**Table 1. Functional and morphological indicators of female weightlifters in the training group**

Group		measurements	Body weight (kg)	Morphofunctional indicators								
				standing body length (cm)	Chest circumference (cm)	Shoulder circumference (cm)	Thigh circumference (cm)	Calf circumference (cm)	NPV	heart rate	VC	Deadlift
Control	Before ex		46,20	148,10	127,40	64,40	23,10	52,40	30,50	21,40	102,00	2,23
			46,40	148,40	127,60	64,60	23,41	52,99	30,70	21,60	110,10	2,24
	After ex		0,20	0,30	0,20	0,20	0,31	0,59	0,20	0,20	8,10	0,01
			0,55	0,20	0,16	0,31	1,34	1,13	0,66	0,93	7,94	0,45
experimentalax	Before ex		46,20	148,10	127,40	64,40	23,10	54,40	30,50	21,40	102,00	2,23
			49,25	150,10	129,00	65,55	24,50	55,25	32,50	22,50	106,00	2,38
	After ex		3,05	2,00	1,60	1,15	1,40	0,85	2,00	1,10	4,00	0,15
			3,05	148,10	1,60	1,15	1,40	0,85	2,00	1,10	4,00	0,15

**Research results and discussion.** The indicators we identified served as the basis for the development of educational and methodological literature, the emphasis of which was on the right approach, where knowledge was formed about what weightlifting is, how to properly develop and motivate yourself in this sport, how to properly compose a training session taking into account morphological and functional indicators, taking into account the menstrual cycle for girls in the initial preparatory period. Thus, in the practical work of the trainer, it is necessary to take into account the decrease in the working capacity and psychophysiological functions of the girl's body in different phases of the cycle. For example, you can complicate the training program as much as possible on post-menstrual and post-ovulatory days. During the period of reduced performance, it is necessary to avoid heavy physical exertion, both in terms of volume and intensity, and alternate them with more frequent rest breaks.

**Conclusion:** Currently, there are many conflicting opinions regarding the participation of girls in power sports. In the sport of the highest achievements, and in the fitness system. An analysis of the literature and practical work experience showed that most trainers use the same means and methods in working with girls as they do when training boys. Moreover, the trend towards an increase in training loads among girls is strengthening. The ever-increasing sports competition necessitates the search for new ways to improve sports results. Over the past decades, a sufficient number of observations have accumulated that show that great physical activity is not indifferent to the girl's

body, her reproductive health. Dimorphic differences in sports achievements depend on the different biology of boys and girls, as well as on the effectiveness of sports training, which selectively affects the factors and determines the sports result of girls.

Throughout the work, we operated with average data, which made it possible to identify those functional features of the neuromuscular, cardiovascular and respiratory apparatus, which manifested themselves as a result of sports training in young weightlifters, as well as in their peers - young men and untrained peers. However, within each group, as a rule, there were individuals with unequally developed adaptive mechanisms designed to ensure an adequate response to the load.

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