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**IMPLEMENTATION OF A HEALTHY
LIFESTYLE MODEL
IN EU COUNTRIES AND UKRAINE**

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**THE INFLUENCE OF EXTRACURRICULAR FOOTBALL
TRAINING ON THE PHYSICAL FITNESS OF BOYS
IN GRADES 5–6**

**ВПЛИВ СЕКЦІЙНИХ ЗАНЯТЬ З ФУТБОЛУ НА ФІЗИЧНУ
ПІДГОТОВЛЕНІСТЬ ХЛОПЦІВ 5–6 КЛАСІВ**

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Relevance. The problem of maintaining and improving the health of school-age children remains one of the most pressing issues in modern society. Statistical data show a tendency towards a decline in physical health indicators among pupils, an increase in the number of various diseases, and a decrease in overall physical activity [1; 3].

In the current educational system, extracurricular physical activities represent one of the most effective opportunities for children to compensate for the lack of movement that arises during classroom learning. The task of parents and physical education teachers is to help children choose the most suitable form of physical activity according to their interests and abilities[3; 4].

Football is one of the most popular types of sports activities among schoolchildren. It helps to reduce emotional and mental stress, fosters the development of volitional qualities, and promotes physical fitness [2; 5].

Since extracurricular football training is an excellent and accessible way for pupils of different ability levels to develop their physical condition, the purpose of this study was to determine the influence of extracurricular football training on the physical fitness of 5th–6th grade boys.

Research Methods. The following methods were used: analysis and generalization of scientific and methodological literature; pedagogical research methods (pedagogical observation, testing of physical fitness, and a formative pedagogical experiment); and methods of mathematical statistics.

The core of our research was a formative pedagogical experiment. At the beginning and at the end of the study, physical fitness testing was conducted among 5th–6th grade boys. Twenty boys aged 11–12 years participated in the experiment. All of them attended extracurricular football sessions organized by the physical education teacher. The boys trained twice a week for 60 minutes each session. The study lasted from October to May.

The physical training program for the 5th–6th grade boys included the targeted use of means and methods aimed at developing the main physical qualities of young football players – agility, speed, speed endurance, general endurance, flexibility, strength, and speed–strength abilities – following methodological recommendations regarding exercise volume and intensity.

To develop general endurance, the following were used: the method of continuous uniform exercise, which involved performing cyclical movements at a uniform pace (uniform running for at least 10 minutes, gradually reaching 20 minutes; moving uphill; running 200, 400, 800); the method of continuous variable exercise involved continuous movement with changes in the speed and direction of movement in certain areas.

The following methods were used to develop strength: repeated efforts; the dynamic effort method was used to develop speed and strength qualities; the static effort (isometric) method.

Speed qualities were developed using repeated, circular, interval, game and competitive methods.

One of the important aspects of football training is the proper selection of physical exercises. In this study, the principle of complex development of motor abilities was followed, using a wide range of physical exercises to achieve the training objectives [5].

Results. The results of the physical fitness testing are presented in Table 1. They demonstrate the effectiveness of the physical training methodology applied during extracurricular football sessions. Positive changes were observed in the development of all measured physical qualities.

Table 1

**Indicators of physical fitness of boys in grades 5–6 during
extracurricular football training (n = 20)**

Control test		Beginning of the study			End of the study				
		x	s	m	x	s	m	t	p
1	30 m run (s)	5,85	1,2	0,27	5,2	0,9	0,20	2,01	p<0,05
2	300 m run (s)	66,0	6,5	1,45	61,1	4,5	1,01	2,77	
3	6-minute run, m	1100	125,4	28,04	1250	113,4	25,36	3,97	
4	Standing long jump, cm	151,7	16,1	3,60	165,1	13,7	3,06	2,83	
5	Forward bend from a sitting position, cm	3,9	2,2	0,49	6,4	2,8	0,63	3,14	
6	Shuttle run 4×9 m (s)	12,7	1,6	0,36	11,9	1,4	0,31	1,68	p>0,05
7	Push-ups (reps)	11,7	3,5	0,78	16,3	3,3	0,74	4,28	p<0,05
8	Ball kick distance (m)	35,3	7,4	1,65	41,1	7,4	1,65	2,48	

Note: t limit = 2.02 at p<0.05; t indicates the reliability of the difference between the indicators at the beginning and end of the study

At the beginning of the study, the boys' performance indicators for speed, speed endurance, general endurance, and strength were below the age norms, while speed–strength abilities and agility were within the normative range. After the training program, most physical fitness indicators reached age-appropriate levels.

Overall, the improvement in the physical fitness indicators of the boys ranged from 1.6% to 12.1%. The greatest improvements were recorded in flexibility (12.1%) and arm strength (8.2%), while the smallest were in agility (1.6%) and speed endurance (2.1%) (Fig. 1).

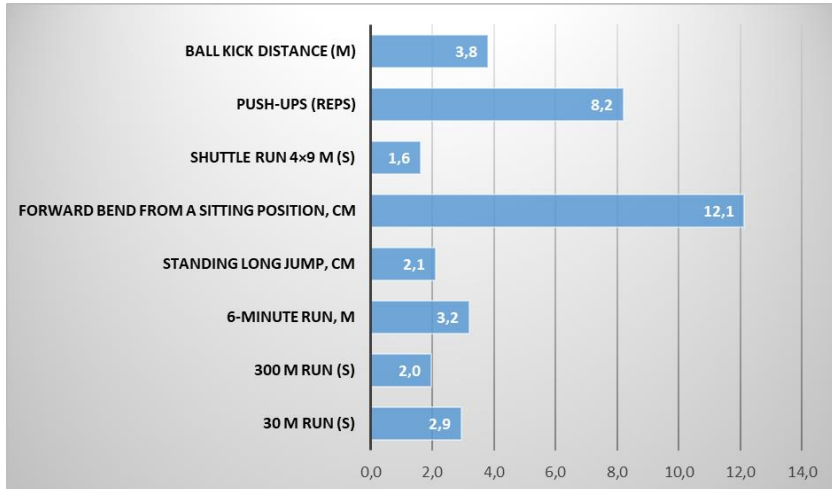


Fig. 1. Increase in physical fitness indicators during extracurricular football training of boys in grades 5–6 (%)

Conclusions. Extracurricular football training sessions are an effective form of increasing pupils' physical activity and contribute to the improvement of their physical fitness. The study revealed positive dynamics in the development of the main physical qualities of boys in grades 5–6 – speed, endurance, strength, flexibility, and agility.

The most significant changes were recorded in the development of flexibility and arm strength, which is due to the targeted use of appropriate exercises in the training process. The results confirm the feasibility of introducing football club activities as an effective means of physical education for middle school students.

Bibliography:

1. Антипкін Ю. Г., Волосовець О. П., Майданник В. Г., Березенко В. С., Моїсеєнко Р. Р. та ін. *Стан здоров'я дитячого населення – майбутнє країни. Здоров'я дитини*. 2018, вип. 13(1). С. 1–11.
2. Грубар І., Грабик Н., Гулька О. Вплив занять футболом на морфофункціональний стан школярів молодшого шкільного віку. *Фізична культура дітей, підлітків, молоді та дорослого населення у сучасному світі* : матеріали III міжнародної науково-практичної інтернет-конференції. Умань, 2022.
3. Рекомендації щодо стратегічного розвитку фізичного виховання та спортивної підготовки серед учнівської молоді на період до

2025 року. Наказ МОН № 194 від 15.02.2021 р. [Електронний ресурс]. Режим доступу: https://osvita.ua/legislation/Ser_osv/80880/

4. Сороколіт Н. С., Чопик Р. В. Нормативно-програмне забезпечення фізичного виховання в умовах Нової української школи. *Науковий часопис НПУ імені М. П. Драгоманова*. 2023. Вип. 5К (165). С. 130–133. DOI: 10.31392/NPU-nc.series15.2023.5K(165).29.

5. Сочинський А. Я., Шалар О. Г. Програма секційної (гурткової) роботи з футболу. *Фізичне виховання у школах України*. 2013. № 7. С. 27–39.

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THE IMPORTANCE OF RECREATIONAL AREAS IN THE ORGANIZATION OF LEISURE AND RECREATION

ЗНАЧЕННЯ РЕКРЕАЦІЙНИХ ЗОН В ОРГАНІЗАЦІЇ ДОЗВІЛЛЯ ТА ВІДПОЧИНКУ

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В останній час в світовому масштабі спостерігається велика зацікавленість новими сучасними технологіями в галузі дозвілля та відпочинку, що в свою чергу приводить до зростання ролі рекреаційних зон, які стають незамінними елементами організації дозвілля та відпочинку.