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Preparation microcycle programs

The microcycle of a training process encompasses a series of training exercises carried out within several days providing complex solution in a given stage of the preparation of sportsmen. The period of a microcycle does not help to achieve essential and long-term shifts in the organism of the sportsmen. Microcycles constitute a part of the plan in the preparation structure for the regulation of training load.

In the training sessions (TS) of national and club teams of Russia, 2 to 4 days microcycles with the general number of training exercises from 4 to 10 are used. Three-day training microcycles are most characteristic (up to 60 %) followed by one rest day. The microcycles of four days account for 28 % of TS. The two-day cycles are used in 12 % of the cases only. Preparation of club teams outside of TS module is maintained with the use of training microcycles with duration of 4 to 6 working days – independent from the stage of preparation – with number of trainings from 8 to 12.

At the general preparatory stage in three-day microcycles with three exercises a day, the dynamics of volume and duration of trainings is changed into an opposite direction. The maximal volume of the work performed is on the first day and the maximum of duration is on the last day of a microcycle. During a single microcycle, the volume of load carried out decreases gradually with the simultaneous growth of its duration. Thus, if the time of training work in the first day is 316 min, than the second and the third days are 310 and 290 minutes accordingly. The amount of load carried out increases from 1302 points on the first day to 1490 points on the second and to 1503 points on the final day. Thus, during a microcycle there is a growth of training intensity carried out by the sportsmen.

The total amount of the training work carried out during a separate three-day preparation microcycle reaches 915 minutes, while the amount of loading is 4295 points. The amount of work performed depends most on the duration and the motor density of exercises. The degree of specialisation is defined by the percentage of exercises of aerobic and of mixed character.

The impellent tasks demanding anaerobic participation of mechanisms of power supply have, as a rule, small coordination complexity. The motor density of trainings is substantially limited by exercises with greater coordination



complexity.

There is no unified approach to utilising the load of different directions for the definite days of preparation microcycles. This was seen in a large number of observations at the TS of highly qualified teams. The motor exercises directed to improve the speed abilities are not used on the first day of a microcycle.

The purpose of the second day is exercising high-speed abilities and explosive force of hands with the use of heavy balls. On the second day load aimed to develop special endurance, jumping abilities, coordination and general endurance is used. The final day of the microcycle is most often devoted to improving special endurance and jumping abilities.

The scheme of building microcycles of functional preparation of high class handball players of various duration at the basic preparatory and special preparatory stages is presented in table 1 and 2. On the first day of each functional microcycle, the combination of power and coordination load is preferred.

The goal of the second training day is to develop high-speed abilities and explosive force of hands with the use heavy balls. In two-day microcycles, instead of high-speed exercises, it is possible to plan tasks for developing special endurance or jumping abilities.

The main task of the third day of three-, four- and six-day microcycles, serves the development of special endurance. On the third and fourth days it may be combined with exercising jumping abilities. The basic purpose of the third day of a five-day microcycle is to develop jumping abilities. The last days of four-, five- or six-day microcycles in the basic preparatory and special preparatory stages, should be focused on improvement or maintenance of the level of general endurance of sportsmen.

Table 1

2-, 3- and 4-day microcycle schemes for functional preparation of handball high class players

Direction of loading	Duration of a microcycle								
	2		3			4			
	Days of a microcycle								
	1	2	1	2	3	1	2	3	4
Power abilities	XX	X	XX	X		XX	X		X
High-speed abilities	X	XX	X	XX		X	XX		
Special endurance (mobility)		XX		X	XX			XX	X
General endurance		X			X				XX



Coordination abilities	XX	X	XX	X	X	XX	X	X	X
Speed-power (heavy ball)	X	XX	X	XX	X	X	XX	X	X
Jumping abilities		XX		X	XX		X	XX	X

XX : preferable, X : possible

Table 2

5-day and 6-day microcycle schemes for functional preparation of handball high class players

Direction of loading	Duration of a microcycle										
	5					6					
	Days of a microcycle										
	1	2	3	4	5	1	2	3	4	5	6
Power abilities	XX	X		X		XX	X		X	X	X
High-speed abilities	X	XX		X			XX	X	X		
Special endurance (mobility)			X	XX	X			XX	X	XX	X
General endurance					XX						XX
Coordination abilities	XX	X	X	X		XX	X	X	X	X	X
Speed-power (heavy ball)		XX	X	X	XX		XX	X	X	XX	X
Jumping abilities		X	XX	XX			X	X	X	XX	

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