

## PLIOSPECIFIC Physical Training Plan

The participants had experienced approximately four years since playing tennis and a minimum of 2 years since participating in the Portuguese national tournaments. Some of the participants were also going to international games. Previously, all twenty-five participants from the experimental group took part in similar activities in which they were performing similar activities, such as jumping or running. From the beginning of the experiment, all participants were healthy, and there were no injuries during the process. Informed consent was taken from all the participants and their parents, who entered voluntarily with complete information. Further, the procedures have been explained to the coaches and athletes. To be included, the tennis players had to participate in at least 85% of the total training sessions and have a minimum experience of 2 years in tournaments. Also, the athletes should have executed training programs or strength-related exercises three weeks before starting the tests and training. At the start, the athletes performed some familiarisation with the practices used. The Portuguese tennis players completed their regular tennis training five times per week and added the pliospecific training 3 three times per week. The pliospecific training was built on two parts: tennis-specific and Plyometric training. It lasted between 60 and 90 minutes, three times per/week: Monday, Wednesday, and Friday, between 12:00 to 13:30. Regarding the control group, they were training specifically, meaning they were playing tennis five times a week.

### Training plan on mesostructure

#### Pre-competition stage

Number of athletes: 25

Number of training sessions: 30

25 male athletes aged 14-16 years followed the training program called PLIOSPECIFIC for a fixed period of 10 weeks, allocating one week before and one week after for the testing.

Type of training proposed: PLIOSPECIFIC = training with implementation of plyometric exercises (for speed, agility and strength) combined with specific tennis fitness training (running with repeated sprints, direction changes and lateral running).

Duration: 10 weeks

Frequency: 3 times/week of 60-90 min each



Intensity: Medium and high-intensity training

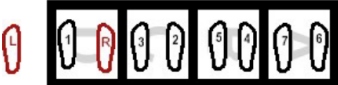


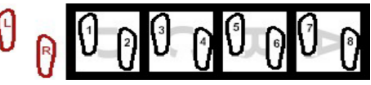
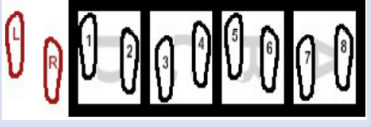
Rest: Depending on the exercise

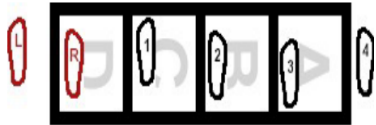
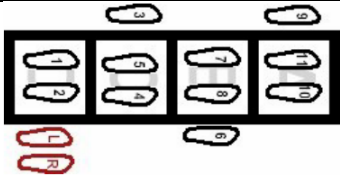
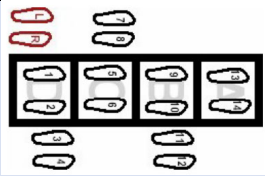
Fitness training objectives:

- To develop speed in all its forms (repetition speed, execution, reaction, movement)
- development of endurance speed
- agility development
- mobility development
- strength development

## Lessons

Methods	Volum	Intensity	Break
<i>Warm-up</i>			
Running	5'	45%	0
Running with the knees to the chest			
Backward leg swing run			
Lateral run			
Skipping step			
Jumping step	10'	50%	0
Sprints			
Jumping-Jack			
Arm rotations			
Squats and torso bends from a standing position			
Trunk rotations from a standing position			
<i>Fundamental part</i>			
<i>Ladder exercises</i>			
1. One foot in every square	5 x 1	80%	10'' between repetitions
			20'' between series
			
2. Small jumps in each square	5 x 1	80%	10'' between repetitions
			20'' between series
			
3. Ex. With one leg to the side	5 x 1	80%	10'' between repetitions
			20'' between series

			
4. Lateral side jumps	5 x 1	80%	10'' between repetitions
			20'' between series
			
5. in in out out exercise	5 x 1	80%	10'' between repetitions
			20'' between series
			
6. Exercise "X-over and sideways"	5 x 1	80%	10'' between repetitions
			20'' between series
			
7. Exercise "Carioca in each"	5 x 1	80%	10'' between repetitions
			20'' between series
			
8. 'Carioca on the jump' exercise	5 x 1	80%	10'' between repetitions
			20'' between series

			
9. "Ickey Shuffle" exercise	5 x 1	80%	10'' between repetitions
			20'' between series
			
10. Exercise "X across the zigzag"	5 x 1	80%	10'' between repetitions
			20'' between series
			
Total	30'	80%	5'
<i>Specific tennis drills</i>			
1. Sprint from the baseline to the service line	5,5m x 4	80%	2'
2. Sprint from baseline to net	10 m x 8	70%	3'
3. Sprint from baseline to net and back	22 m x 6	80%	3'
4. Sprint from midcourt across the service line, followed by added step along the length of the service line. Further, the athletes performed backwards run diagonally to the starting line.	6x1	90%	3'

5. - spider test, except that on the way back each time they ran backwards towards the direction of return.  This exercise was performed once with added steps and once with running pace.	4x1	90%	3'
<b>Total</b>	<b>25'</b>	<b>82%</b>	<b>14'</b>
<i>Concluding part</i>			
<i>Light jogg</i>	5'	40%	0

- a 1, training time 90 min

## Lesson 2

Table 100. Lesson 2

Methods	Volum	Intensity	Break
<i>Warm up</i>			
<b>Rope jumps</b>			
On both inferior libs	60''	70%	1'
On one leg (left or right)	30' x 2	70%	2'
Alternating left and then right leg	60''	70%	1'
Alternating knees to chest	60''	70%	1'
<b>Total</b>	<b>4'</b>	<b>70%</b>	<b>5'</b>
<i>Fundamental part</i>			
Same as lesson 1			
<i>Concluding part</i>			
Light jogg	5'	40%	0

## Lesson 3

Table 101. Lesson 3

Methods	Volum	Intensity	Break
<i>Warm up</i>			

Squad and press exercise with medicine ball	10 x 2	20''	10''
One leg chop exercise with medicine ball	10 x 2	20''	10''
Lunge and reach with the medicine ball	10 x 2	20''	10''
Chop and twist with the medicine ball	10 x 2	20''	10''
Figure 8 exercise	10 x 2	20''	10''
Lat Lunge and Twist exercise with the medicine ball	10 x 2	20''	10''
<b>Total</b>		<b>2'</b>	<b>1'</b>
<i>Fundamental part</i>			
Idem lesson 1			
<i>Concluding part</i>			
Light jogg	5'	40%	0

Table 102. Lesson 4

Methods	Volum	Intensity	Break
<i>Warm-up</i>			
Running	5'	45%	0
Running with the knees to the chest			
Backward leg swing run			
Lateral run			
Skipping step			
Jumping step	10'	50%	0
Sprints			
Jumping-Jack			
Arm rotations			
Squats and torso bends from a standing position			
Trunk rotations from a standing position			
			5'
<i>Fundamental part</i>			
<i>Ladder exercise</i>			
idem lesson 1			

<i>Other plyometric exercises</i>			
Jumps on one limb	6 x 14 m (3')	70%	20''
Single limb high jumps	8 repetări/picior (1')	80%	20''
Two legged step jump (40 cm h)	6 repetări x 20 scări (3')	80%	20''
<b>Total</b>	<b>7'</b>	<b>76,6%</b>	<b>3' 30''</b>
<i>Specific tennis drills</i>			
1. <b>Sprint from the baseline to the service line</b>	5,5m x 4	80%	2'
2. <b>Sprint from baseline to net</b>	10 m x 8	70%	3'
3. <b>Sprint from baseline to net and back</b>	22 m x 6	80%	3'
<b>Total</b>		<b>76,6%</b>	<b>8'</b>
<i>Concluding part</i>			
Light jogg	5'	40%	0

## Lesson 5

Table 103. Lesson 5

Methods	Volum	Intensity	Break
<i>Warm up</i>			
<b>Rope jumps</b>			
On both inferior libs	60''	70%	1'
On one leg (left or right)	30' x 2	70%	2'
Alternating left and then right leg	60''	70%	1'
Alternating knees to chest	60''	70%	1'
<b>Total</b>	<b>4'</b>	<b>70%</b>	<b>5'</b>
<i>Fundamental part</i>			
<i>Ladder exercises</i>			
idem lesson 1			
<i>Other plyometric exercises</i>			
Jumps on one limb	6 x 14 m (3')	70%	20''

Single limb high jumps	8 repetări/picior (1')	80%	20''
Two-legged step jump (40 cm h)	6 repetări x 20 scări (3')	80%	20''
<b>Total</b>	<b>7'</b>	<b>76,6%</b>	<b>3' 30''</b>
<i>Specific tennis drills</i>			
1. Sprint from the baseline to the service line	5,5m x 4	80%	2'
2. Sprint from baseline to net	10 m x 8	70%	3'
3. Sprint from baseline to net and back	22 m x 6	80%	3'
<b>Total</b>		<b>76,6%</b>	<b>8'</b>
<i>Concluding part</i>			
Light jogg	5'	40%	0

## Lesson 6


Table 104. Lesson 6






Methods	Volum	Intensity	Break
<i>Warm up</i>			
Squad and press exercise with medicine ball	10 x 2	20''	10''
One leg chop exercise with medicine ball	10 x 2	20''	10''
Lunge and reach with the medicine ball	10 x 2	20''	10''
Chop and twist with the medicine ball	10 x 2	20''	10''
Figure 8 exercise	10 x 2	20''	10''
Lat Lunge and Twist exercise with the medicine ball	10 x 2	20''	10''
<b>Total</b>		<b>2'</b>	<b>1'</b>
<i>Fundamental part</i>			
<i>Ladder exercises</i>			
idem lesson 1			
<i>Other plyometric exercises</i>			
Jumps on one limb	6 x 14 m (3')	70%	20''
Single limb high jumps	8 repetări/picior (1')	80%	20''
Two-legged step jump (40 cm h)	6 repetări x 20 scări (3')	80%	20''
<b>Total</b>	<b>7'</b>	<b>76,6%</b>	<b>3' 30''</b>
<i>Specific tennis drills</i>			
1. Sprint from the baseline to the service line	5,5m x 4	80%	2'





2. Sprint from baseline to net	10 m x 8	70%	3'
3. Sprint from baseline to net and back	22 m x 6	80%	3'
<b>Total</b>		<b>76,6%</b>	<b>8'</b>
<i>Concluding part</i>			
Light jogg	5'	40%	0

## Lesson 7

Table 105. Lesson 7

Methods	Volum	Intensit y	Break
<i>Warm up</i>			
Running	5'	45%	0
Running with the knees to the chest			
Backward leg swing run			
Lateral run			
Skipping step			
Jumping step	10'	50%	0
Sprints			
Jumping-Jack			
Arm rotations			
Squats and torso bends from a standing position			
Trunk rotations from a standing position			
<i>Fundamental part</i>			
<i>Ladder exercises II (linear exercise sessions)</i>			
1. Linear jumps 1	5 x 1	80%	10'' between repetitions
			20'' between series
			

2. Linear jumps 2	5 x 1	80%	10'' between repetitions
			20'' between series
			
3. Single limb jumps 1	5 x 1	80%	10'' between repetitions
			20'' between series
			
4. Single limb jumps 2	5 x 1	80%	10'' between repetitions
			20'' between series
			
(Lateral exercise sessions)			
5. Lateral jumps on both limbs 1	5 x 1	80%	10'' between repetitions
			20'' between series
			
6. Lateral jumps on both limbs 2	5 x 1	80%	10'' between repetitions
			20'' between series
			

7. Lateral jumps with legs outside shoulder width (from 2 on 1 leg)	5 x 1	80%	10'' between repetitions
			20'' between series
			
8. Lateral jumps with legs outside shoulder width (on both legs)	5 x 1	80%	10'' between repetitions
			20'' between series
			
9. Side jumps on one limb 1	5 x 1	80%	10'' between repetitions
			20'' between series
			
10. Side jumps on one limb 2	5 x 1	80%	10'' between repetitions
			20'' between series
			
<i>Specific tennis drills</i>			
1. Sprint from the baseline to the service line	5,5m x 4	80%	2'
2. Sprint from baseline to net	10 m x 8	70%	3'

3. Sprint from baseline to net and back	22 m x 6	80%	3'
4. Sprint from midcourt across the service line, followed by added step along the length of the service line. Further, the athletes performed backwards run diagonally to the starting line.	6x1	90%	3'
5. - spider test, except that on the way back each time they ran backwards towards the direction of return.  This exercise was performed once with added steps and once with running pace.	4x1	90%	3'
<b>Total</b>	<b>25'</b>	<b>82%</b>	<b>14'</b>
<i>Concluding part</i>			
Light jogg	5'	40%	0

## Lesson 8

Table 106. Lesson 8

Methods	Volum	Intensity	Break
<i>Warm up</i>			
<b>Rope jumps</b>			
On both inferior libs	60''	70%	1'
On one leg (left or right)	30' x 2	70%	2'
Alternating left and then right leg	60''	70%	1'
Alternating knees to chest	60''	70%	1'
<b>Total</b>	<b>4'</b>	<b>70%</b>	<b>5'</b>
<i>Fundamental part</i>			
Idem lesson 7			
<i>Concluding part</i>			
Light jogg	5'	40%	0

Tabel nr.11 Lecția 8

## Lesson 9

Table 107. Lesson 9

Methods	Volum	Intensity	Break
<i>Warm up</i>			
Squad and press exercise with medicine ball	10 x 2	20''	10''
One leg chop exercise with medicine ball	10 x 2	20''	10''
Lunge and reach with the medicine ball	10 x 2	20''	10''
Chop and twist with the medicine ball	10 x 2	20''	10''
Figure 8 exercise	10 x 2	20''	10''
Lat Lunge and Twist exercise with the medicine ball	10 x 2	20''	10''
<b>Total</b>		<b>2'</b>	<b>1'</b>
<i>Fundamental part</i>			
Idem lecția 7			
<i>Concluding part</i>			
Light jogg	5'	40%	0

## Lesson 10

Table 108. Lesson 10

Methods	Volum	Intensity	Break
<i>Warm up</i>			
<b>Running</b>	5'	45%	0
<b>Running with the knees to the chest</b>			
<b>Backward leg swing run</b>			
<b>Lateral run</b>			
<b>Skipping step</b>			
<b>Jumping step</b>	10'	50%	0
<b>Sprints</b>			
<b>Jumping-Jack</b>			
<b>Arm rotations</b>			
<b>Squats and torso bends from a standing position</b>			
<b>Trunk rotations from a standing position</b>			

<i>Fundamental part</i>			
Idem lesson 7			
<i>Concluding part</i>			
Light jogg	5'	40%	0

# Lesson11

Table 109. Lesson 11

Methods	Volum	Intensity	Break
<i>Warm up</i>			
<b>Rope jumps</b>			
On both inferior libs	60''	70%	1'
On one leg (left or right)	30' x 2	70%	2'
Alternating left and then right leg	60''	70%	1'
Alternating knees to chest	60''	70%	1'
<b>Total</b>	<b>4'</b>	<b>70%</b>	<b>5'</b>
<i>Fundamental part</i>			
Idem lesson 7			
<i>Concluding part</i>			
Light jogg	5'	40%	0

# Lesson 12

Table 110. Lesson 12

Methods	Volum	Intensity	Break
<i>Warm up</i>			
Squad and press exercise with medicine ball	10 x 2	20''	10''
One leg chop exercise with medicine ball	10 x 2	20''	10''
Lunge and reach with the medicine ball	10 x 2	20''	10''
Chop and twist with the medicine ball	10 x 2	20''	10''
Figure 8 exercise	10 x 2	20''	10''
Lat Lunge and Twist exercise with the medicine ball	10 x 2	20''	10''
<b>Total</b>		<b>2'</b>	<b>1'</b>
<i>Fundamental part</i>			

Idem lesson 7			
<i>Concluding part</i>			
Light jogg	5'	40%	0

### Lesson 13

Table 111. Lesson 13

Methods	Volum	Intensity	Break
<i>Warm up</i>			
Running	5'	45%	0
Running with the knees to the chest			
Backward leg swing run			
Lateral run			
Skipping step			
Jumping step	10'	50%	0
Sprints			
Jumping-Jack			
Arm rotations			
Squats and torso bends from a standing position			
Trunk rotations from a standing position			
<i>Fundamental part</i>			
Ladder exercises			
Idem lesson 7			
<i>Other plyometric exercises</i>			
Jumps on one limb	6 x 14 m (3')	70%	20''
Single limb high jumps	8 repetări/picior (1')	80%	20''
Two legged step jump (40 cm h)	6 repetări x 20 scări (3')	80%	20''
Zig zag jumps over a drawn line	6 repetări x 10 m	80%	20''
<b>Total</b>	<b>10'</b>	<b>77,5%</b>	<b>4'</b>
<i>Concluding part</i>			
Light jogg	5'	40%	0

# Lesson 14

Table 112. Lesson 14

Methods	Volum	Intensity	Break
<i>Warm up</i>			
<b>Rope jumps</b>			
On both inferior libs	60''	70%	1'
On one leg (left or right)	30' x 2	70%	2'
Alternating left and then right leg	60''	70%	1'
Alternating knees to chest	60''	70%	1'
<b>Total</b>	<b>4'</b>	<b>70%</b>	<b>5'</b>
<i>Fundamental part</i>			
Idem lesson 7			
<i>Other plyometric exercises</i>			
Jumps on one limb	6 x 14 m (3')	70%	20''
Single limb high jumps	8 repetitions/leg (1')	80%	20''
Two legged step jump (40 cm h)	6 repetitions x 20 stairs (3')	80%	20''
Zig zag jumps over a drawn line	6 repetitions x 10 m	80%	20''
<b>Total</b>	<b>10'</b>	<b>77,5%</b>	<b>4'</b>
<i>Concluding part</i>			
Light jogg	5'	40%	0

# Lesson 15

Table 113. Lesson 15

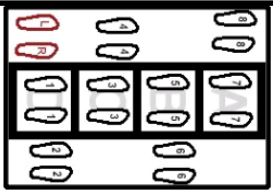
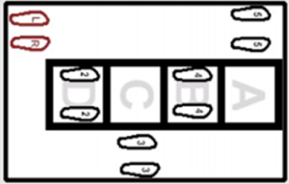
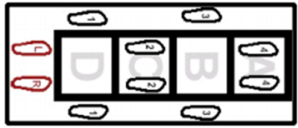
Methods	Volum	Intensity	Break
<i>Warm up</i>			
Squad and press exercise with medicine ball	10 x 2	20''	10''
One leg chop exercise with medicine ball	10 x 2	20''	10''
Lunge and reach with the medicine ball	10 x 2	20''	10''
Chop and twist with the medicine ball	10 x 2	20''	10''
Figure 8 exercise	10 x 2	20''	10''
Lat Lunge and Twist exercise with the medicine ball	10 x 2	20''	10''

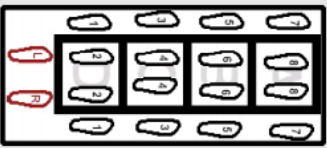

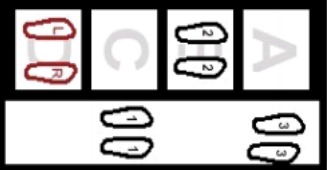
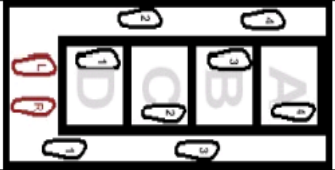
<b>Total</b>		<b>2'</b>	<b>1'</b>
<i>Fundamental part</i>			
Idem lesson 7			
<i>Other plyometric exercises</i>			
Jumps on one limb	6 x 14 m (3')	70%	20''
Single limb high jumps	8 repetitions/leg (1')	80%	20''
Two legged step jump (40 cm h)	6 repetitions x 20 stairs (3')	80%	20''
Zig zag jumps over a drawn line	6 repetitions x 10 m	80%	20''
<b>Total</b>	<b>10'</b>	<b>77,5%</b>	<b>4'</b>
<i>Concluding part</i>			
Light jogg	5'	40%	0




Lesson 16

Table 114. Lesson 16

<b>Methods</b>	<b>Volum</b>	<b>Intensity</b>	<b>Break</b>
<i>Warm up</i>			
<b>Running</b>	5'	45%	0
<b>Running with the knees to the chest</b>			
<b>Backward leg swing run</b>			
<b>Lateral run</b>			
<b>Skipping step</b>			
<b>Jumping step</b>	10'	50%	0
<b>Sprints</b>			
<b>Jumping-Jack</b>			
<b>Arm rotations</b>			
<b>Squats and torso bends from a standing position</b>			
<b>Trunk rotations from a standing position</b>			
<i>Fundamental part</i>			
<i>Ladder exercises 3</i>			
Linear or diagonal exercises			

1. Zig zag model 1	5 x 1	80%	15'' between repetitions
			20'' between series
			
2. Zig zag model 2	5 x 1	80%	15'' between repetitions
			20'' between series
			
3. Hop Scotch model 1	5 x 1	80%	15'' between repetitions
			20'' between series
			
4. Hop scotch model 2	5 x 1	80%	15'' between repetitions
			20'' between series

			
5. Side jump model 1	5 x 1	80%	15'' between repetitions
			20'' between series
			
6. Side jump model 2	5 x 1	80%	15'' between repetitions
			20'' between series
			
7. Zig zag jumps over a drawn line	5 x 1	80%	15'' between repetitions
			20'' between series
			
8. Linear scissor model	5 x 1	80%	15'' between repetitions
			20'' between series

			
9. On one leg, jumping side to side 1	5 x 1	80%	15'' between repetitions
			20'' between series
			
10. On one leg, jumping side to side 2	5 x 1	80%	15'' between repetitions
			20'' between series
			
Specific tennis drills			
1. Sprint from the baseline to the service line	5,5m x 4	80%	2'
2. Sprint from baseline to net	10 m x 8	70%	3'
3. Sprint from baseline to net and back	22 m x 6	80%	3'
4. Sprint from midcourt across the service line, followed by added step along the length of the service line. Further, the athletes performed backwards run diagonally to the starting line.	6x1	90%	3'

5. - spider test, except that on the way back each time they ran backwards towards the direction of return.	4x1	90%	3'
<b>Total</b>	<b>25'</b>	<b>82%</b>	<b>14'</b>
<i>Concluding part</i>			
Light jogg	5'	40%	0

## Lesson 17

Table 115. Lesson 17

Methods	Volum	Intensity	Break
<i>Warm up</i>			
<b>Rope jumps</b>			
On both inferior libs	60''	70%	1'
On one leg (left or right)	30' x 2	70%	2'
Alternating left and then right leg	60''	70%	1'
Alternating knees to chest	60''	70%	1'
<b>Total</b>	<b>4'</b>	<b>70%</b>	<b>5'</b>
<i>Fundamental part</i>			
<i>Ladder exercises 3</i>			
Idem lesson 16			
<i>Concluding part</i>			
Light jogg	5'	40%	0

## Lesson 18

Table 116. Lesson 18

Miethods	Volum	Intensity	Break
<i>Warm up</i>			
Exercițiu squad and press cu mingea medicinală	10 x 2	20''	10''
Exercițiu one leg chop cu mingea medicinală	10 x 2	20''	10''
Exercițiu lunge and reach cu mingea medicinală	10 x 2	20''	10''

Exercițiu chop and twist cu mingea medicinală	10 x 2	20''	10''
Exercițiu Figure 8 cu mingea medicinală	10 x 2	20''	10''
Exercițiu Lat Lunge and Twist cu mingea medicinală	10 x 2	20''	10''
<b>Total</b>		<b>2'</b>	<b>1'</b>
<i>Fundamental part</i>			
<i>Ladder exercises 3</i>			
Idem lesson 16			
<i>Concluding part</i>			
Light jogg	5'	40%	0

## Lesson 19

Table 117. Lesson 19

Methods	Volum	Intensity	Break
<i>Warm up</i>			
<i>Warm-up</i>	5'	45%	0
<b>Running</b>			
Running with the knees to the chest			
Backward leg swing run			
Lateral run			
Skiping step	10'	50%	0
Jumping step			
Sprints			
Jumping-Jack			
Arm rotations			
Squats and torso bends from a standing position			
<i>Fundamental part</i>			
<i>Ladder exercises 3</i>			
Idem lesson 16			
<i>Concluding part</i>			
Light jogg	5'	40%	0

Lesson 20

Table 118. Lesson 20

Methods	Volum	Intensity	Break
<i>Warm up</i>			
<b>Rope jumps</b>			
On both inferior libs	60''	70%	1'
On one leg (left or right)	30' x 2	70%	2'
Alternating left and then right leg	60''	70%	1'
Alternating knees to chest	60''	70%	1'
<b>Total</b>	<b>4'</b>	<b>70%</b>	<b>5'</b>
<i>Fundamental part</i>			
<i>Ladder exercises 3</i>			
Idem lesson 16			
<i>Concluding part</i>			
Light jogg	5'	40%	0

Lesson 21

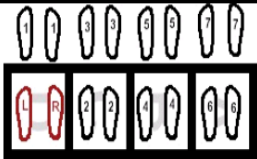
Table 119. Lesson 21

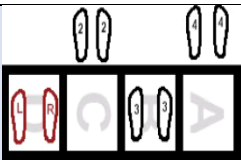

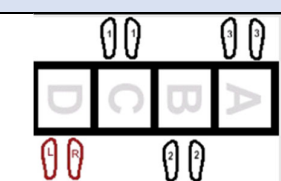
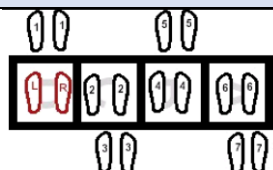
Methods	Volum	Intensity	Break
<i>Warm up</i>			
Squad and press exercise with medicine ball	10 x 2	20''	10''
One leg chop exercise with medicine ball	10 x 2	20''	10''
Lunge and reach with the medicine ball	10 x 2	20''	10''
Chop and twist with the medicine ball	10 x 2	20''	10''
Figure 8 exercise	10 x 2	20''	10''
Lat Lunge and Twist exercise with the medicine ball	10 x 2	20''	10''
<b>Total</b>		<b>2'</b>	<b>1'</b>
<i>Fundamental part</i>			
<i>Ladder exercises 3</i>			
Idem lesson 16			

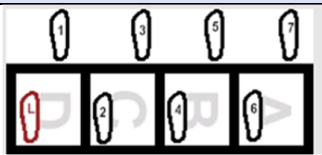
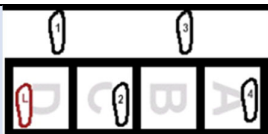
<i>Concluding part</i>			
Light jogg	5'	40%	0

## Lesson 22

Table 120. Lesson 22

Methods	Volum	Intensity	Break
<i>Warm up</i>			
Running	5'	45%	0
Running with the knees to the chest			
Backward leg swing run			
Lateral run			
Skipping step			
Jumping step	10'	50%	0
Sprints			
Jumping-Jack			
Arm rotations			
Squats and torso bends from a standing position			
Trunk rotations from a standing position			
<i>Fundamental part</i>			
Ladder exercises 4			
Side or diagonal exercises			
1. Forward and backward jumps 1	5 x 1 (2')	85%	15'' between repetitions
			25'' between series
			
2. Forward and backward jumps nr. 2	5 x 1 (2')	85%	15'' between repetitions

			25'' between series
			
3. Forward and backward diagonal jumps 1	5 x 1 (2')	85%	15'' between repetitions
			25'' between series
			
4. Forward and backward diagonal jumps 2	5 x 1 (2')	85%	15'' between repetitions
			25'' between series
			
5. V Model	5 x 1 (2')	85%	15'' between repetitions
			25'' between series
			

6. Jumps on one leg forward and backward no.1	5 x 1 (2')	85%	15'' between repetitions
			25'' between series
			
7. Jumps on one leg forward and backward no.2	5 x 1 (2')	85%	15'' between repetitions
			25'' between series
			
<b>Total</b>		<b>85%</b>	<b>4,25</b>
<i>Specific tennis drills</i>			
1. Sprint from the baseline to the service line	5,5m x 4	80%	2'
2. Sprint from baseline to net	10 m x 8	70%	3'
3. Sprint from baseline to net and back	22 m x 6	80%	3'
4. Sprint from midcourt across the service line, followed by added step along the length of the service line. Further, the athletes performed backwards run diagonally to the starting line.	6x1	90%	3'
5. - spider test, except that on the way back each time they ran backwards towards the direction of return.  This exercise was performed once with added steps and once with running pace.	4x1	90%	3'
<b>Total</b>	<b>25'</b>	<b>82%</b>	<b>14'</b>

<b>Concluding part</b>			
Light jogg	5'	40%	0

## Lesson 23

Table 121. Lesson 23

Methods	Volum	Intensity	Break
<b>Warm up</b>			
<b>Rope jumps</b>			
On both inferior libs	60''	70%	1'
On one leg (left or right)	30' x 2	70%	2'
Alternating left and then right leg	60''	70%	1'
Alternating knees to chest	60''	70%	1'
<b>Total</b>	<b>4'</b>	<b>70%</b>	<b>5'</b>
<b>Fundamental part</b>			
<i>Ladder exercises 22</i>			
<b>Concluding part</b>			
Light jogg	5'	40%	0

## Lesson 24


Table 121. Lesson 24


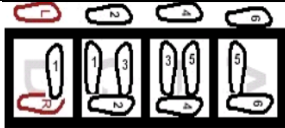
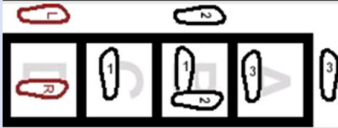
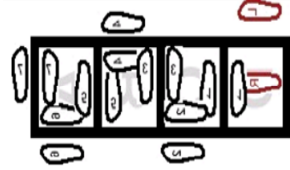
Methods	Volum	Intensity	Break
<b>Warm up</b>			
Squad and press exercise with medicine ball	10 x 2	20''	10''
One leg chop exercise with medicine ball	10 x 2	20''	10''
Lunge and reach with the medicine ball	10 x 2	20''	10''
Chop and twist with the medicine ball	10 x 2	20''	10''
Figure 8 exercise	10 x 2	20''	10''
Lat Lunge and Twist exercise with the medicine ball	10 x 2	20''	10''
<b>Total</b>		<b>2'</b>	<b>1'</b>


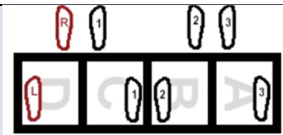
<i>Fundamental part</i>			
<i>Ladder exercises 22</i>			
<i>Concluding part</i>			
Light jogg	5'	40%	0

## Lesson 25

Table 122. Lesson 25

Methods	Volum	Intensity	Break
<i>Warm up</i>			
Running	5'	45%	0
Running with the knees to the chest			
Backward leg swing run			
Lateral run			
Skiping step			
Jumping step	10'	50%	0
Sprints			
Jumping-Jack			
Arm rotations			
Squats and torso bends from a standing position			
Trunk rotations from a standing position			
Running			
<i>Fundamental part</i>			
Ladder exercises V			
1. Exercise model with 90-degree rotation	5 x 1	85%	15'' between repetitions
			20'' between series
			
2. Exercise model with 180 degree rotation	5 x 1	85%	15'' between repetitions
			20'' between series

			
3. Wide degree rotation model 1	5 x 1	85%	15'' between repetitions
			20'' between series
			
4. Wide degree rotation model 2	5 x 1	85%	15'' between repetitions
			20'' between series
			
5. Serpentine	5 x 1	85%	15'' between repetitions
			20'' between series
			
6. Side scissors nr. 1	5 x 1	85%	15'' between repetitions
			20'' between series

			
7. Side scissors nr. 2	5 x 1	85%	15'' between repetitions
			20'' between series
			
<i>Specific tennis drills</i>			
1. Sprint from the baseline to the service line	5,5m x 4	80%	2'
2. Sprint from baseline to net	10 m x 8	70%	3'
3. Sprint from baseline to net and back	22 m x 6	80%	3'
4. Sprint from midcourt across the service line, followed by added step along the length of the service line. Further, the athletes performed backwards run diagonally to the starting line.	6x1	90%	3'
5. - spider test, except that on the way back each time they ran backwards towards the direction of return.  This exercise was performed once with added steps and once with running pace.	4x1	90%	3'
<b>Total</b>	<b>25'</b>	<b>82%</b>	<b>14'</b>
<i>Concluding part</i>			
Light jogg	5'	40%	0

Lesson 26

Table 123. Lesson 26

Methods	Volum	Intensity	Break
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<b>Warm up</b>			
Rope jumps			
On both inferior libs	60''	70%	1'
On one leg (left or right)	30' x 2	70%	2'
Alternating left and then right leg	60''	70%	1'
Alternating knees to chest	60''	70%	1'
<b>Total</b>	<b>4'</b>	<b>70%</b>	<b>5'</b>
<b>Fundamental part</b>			
Idem lesson 25			
<b>Concluding part</b>			
Light jogg	5'	40%	0

## Lesson 27

Table 124. Lesson 27

<b>Methods</b>	<b>Volum</b>	<b>Intensity</b>	<b>Break</b>
<b>Warm up</b>			
Squad and press exercise with medicine ball	10 x 2	20''	10''
One leg chop exercise with medicine ball	10 x 2	20''	10''
Lunge and reach with the medicine ball	10 x 2	20''	10''
Chop and twist with the medicine ball	10 x 2	20''	10''
Figure 8 exercise	10 x 2	20''	10''
Lat Lunge and Twist exercise with the medicine ball	10 x 2	20''	10''
<b>Total</b>		<b>2'</b>	<b>1'</b>
<b>Fundamental part</b>			
Idem lesson 25			
<b>Concluding part</b>			
Light jogg	5'	40%	0

## Lesson 28

Table 125. Lesson 28

Methods	Volum	Intensity	Break
<i>Warm up</i>			
Squad and press exercise with medicine ball	10 x 2	20''	10''
One leg chop exercise with medicine ball	10 x 2	20''	10''
Lunge and reach with the medicine ball	10 x 2	20''	10''
Chop and twist with the medicine ball	10 x 2	20''	10''
Figure 8 exercise	10 x 2	20''	10''
Lat Lunge and Twist exercise with the medicine ball	10 x 2	20''	10''
<b>Total</b>		<b>2'</b>	<b>1'</b>
<i>Fundamental part</i>			
Idem lesson 7			
<i>Other plyometric exercises</i>			
Jumps on one limb	6 x 14 m (3')	70%	20''
Single limb high jumps	8 repetări/picior (1')	80%	20''
Two legged step jump (40 cm h)	6 repetări x 20 scări (3')	80%	20''
Zig zag jumps over a drawn line	6 repetări x 10 m	80%	20''
<b>Total</b>	<b>10'</b>	<b>77,5%</b>	<b>4'</b>
<i>Concluding part</i>			
Light jogg	5'	40%	0

## Lesson 29

Table 126. Lesson 29

Methods	Volum	Intensity	Break
<i>Warm up</i>			
<b>Rope jumps</b>			
On both inferior libs	60''	70%	1'
On one leg (left or right)	30' x 2	70%	2'
Alternating left and then right leg	60''	70%	1'

Alternating knees to chest	60''	70%	1'
<b>Total</b>	<b>4'</b>	<b>70%</b>	<b>5'</b>
<i>Fundamental part</i>			
Idem lesson 7			
<i>Other plyometric exercises</i>			
Jumps on one limb	6 x 14 m (3')	70%	20''
Single limb high jumps	8 repetări/picior (1')	80%	20''
Two legged step jump (40 cm h)	6 repetări x 20 scări (3')	80%	20''
Zig zag jumps over a drawn line	6 repetări x 10 m	80%	20''
<b>Total</b>	<b>10'</b>	<b>77,5%</b>	<b>4'</b>
<i>Concluding part</i>			
Light jogg	5'	40%	0

## Lesson 30

Table 127. Lesson 30

<b>Methods</b>	<b>Volum</b>	<b>Intensity</b>	<b>Break</b>
<i>Warm up</i>			
Squad and press exercise with medicine ball	10 x 2	20''	10''
One leg chop exercise with medicine ball	10 x 2	20''	10''
Lunge and reach with the medicine ball	10 x 2	20''	10''
Chop and twist with the medicine ball	10 x 2	20''	10''
Figure 8 exercise	10 x 2	20''	10''
Lat Lunge and Twist exercise with the medicine ball	10 x 2	20''	10''
<b>Total</b>		<b>2'</b>	<b>1'</b>
<i>Fundamental part</i>			
Idem lesson 7			
<i>Other plyometric exercises</i>			
Jumps on one limb	6 x 14 m (3')	70%	20''
Single limb high jumps	8 repetări/picior (1')	80%	20''
Two legged step jump (40 cm h)	6 repetări x 20 scări (3')	80%	20''

Zig zag jumps over a drawn line	6 repetări x 10 m	80%	20''
<b>Total</b>	<b>10'</b>	<b>77,5%</b>	<b>4'</b>
<i>Concluding part</i>			
Light jogg	5'	40%	0