DOI Number: 10.37506/v20/i1/2020/mlu/194432

Effect of Lactic Threshold Exercises using us Ginseng in the Development of Some Functional Variables of the Lungs and Lactic Tolerance and the Performance of Complex Offensive Skills in Basketball Youth

Rasha Abdul Ameer Jawad[1], Rana Fadhil [2], Hussein Menati Saget [3], Jaafer Ahmed Mahdi [4]

[1] University of Kerbala /college of Education for pure Sciences, Iraq, [2] University of Kerbala/College of veterinary Medicine, Iraq, [3] University of Kerbala / College of Physical Education and Sports Sciences, Iraq, [4] Directorate of Education Karbala, Iraq

Abstract

The aim of the study is to prepare the lactic threshold exercises using US ginseng in improving some functional variables of the lungs and the lactate tolerance and performance of the offensive skills of the young basketball players. The researcher used a curriculum Alter Webby B test kisses me and posttest of the two groups of experimental (Experimental and first trial) . Dosages of US ginseng were used in the form of capsules (400 mg) and 5% ginsosides, equivalent to 20 mg. Thus, the total US ginseng for the program is 60 g, Sexosides. The superiority of the first experimental group was determined by the second experiment with all the research variables. Effect of lactic threshold exercises using American ginseng in the development of some functional variables of the lungs, lactation and complex offensive skills in basketball for youth.

Keywords: *Lactic threshold exercises, Lungs, Lactic tolerance*

Introduction

The modern sports training depends on the concentration of its objectives for the development of energy production systems and the associated functional changes. The more aerobic or anaerobic exercise is possible, the more direct it will be on the level of physical and professional performance. Training also leads to many changes, whether physical , functional or chemical. The most important chemical changes that are affected by the training is the concentration of lactic acid in the muscles and blood as the anaerobic training, which lasts for (1-3) minutes, oxidizes the sugar to anaerobic, which leads to the production of acid The higher the duration of the anaerobic action, the higher the ratio of the accumulation of lactic acid in the muscle, which in turn leads to slower other chemical processes. As the game of basketball is a game in which the work of the anaerobic system (Lactic) high rate and this is a sign that during the games there will be accumulation of lactic acid in large quantities so players have to bear this accumulation in the muscle and blood and not stop the player and work fatigue early. This is also related to the functional variables of the lungs, which work on many important functions of runners, including oxidation of oxygen through the vesicles pulmonary. , Nutrition science is now one of the applied sciences that depend on it in the field of physical education and sports. Nutrition has been associated with exercise for health because it has an important role in weight control and control of body composition. Nutrition has also been linked to the competitive sports field during its various stages In training or in competition, nutrition plays an important role in the ability to tolerate training, delay the onset of fatigue, as well as the speed of recovery, as evidenced by its important role in the competition to raise the level of performance.

Methodology and field procedures

Research Methodology

The researcher used a curriculum Altger Webby B) Pre and post test for the experimental groups (first and second

experimental) to suit the nature of the research.

The research community and its design

Itwasidentifiedresearchsocietymyplayersbasketball youth belonging to the Sports Club MAHAWEEL ages (16-18 years) training for the season 2018-2019 and the 14 players. The sample was selected in a comprehensive inventory method and the sample was divided into two experimental groups with seven players per group.

Homogeneity and equivalence of the sample:

In order for the work of the researcher to proceed in the right direction and the objective of the work of the researcher , he found the homogeneity and equivalence between the two groups of research in terms of physical measurements (length, mass, and training age and time as well) on the functional variables of the lungs and lactic endurance and offensive skills complex using the appropriate statistical treatments to know the truth Differences between the two research groups as shown in Table (1, 2).

Table (1) Shows the homogeneity of the sample

T	Variables	measruing unit	Test Phrase Leven)		Indication of difference
			Calculated	Standard error	
1	Age	Year	1, 6 46	0, 4 22	Not significant
2	Training age	Year	0.3 9 2	0, 5 29	Not significant
3	Bloc	Kg	0, 089	0, 9 71	Not significant
4	Length	cm	1, 5 70	0, 4 20	Not significant

Table (2) It shows circles and standard deviations and the values of (t) And the significance of differences in the tests examined between the experimental groups in the pre- test

Variables	measuring unit	The second experimental group		First experimental group		Values t Calculated	mistake percentage	Significance of differences
		s	P	s	P			
Compulsive dynamic capacity	L / d	3.64	0.6 67	3.535	0.347	0.542	0. 5 31	random
Forced volume is one second	L / d	3.566	0.3 87	3.387	0.382	0. 1 87	0.3 22	random
Maximum lung ventilation volume	L / d	102.9	12.201	100.9	12.68	0. 2 83	0.3 43	random
Pick up and jump by 2 points	Degree	4.2 71	1.6 67	4.267	1. 318	0. 1 42	0.4 22	random
Pick up and jump 3 points	Degree	1.1 48	0.7 93	1.9 59	0:561	0.0 7 7	0.3 0 1	random
Receiving and high-pitched finished pacification	Degree	5.3 91	1.9 63	4. 891	0.8 29	0. 1 41	0.2 06	random
Hold the locket	Accurate	1. 331	0.1 19	1. 410	0.1 11	0.5 87	0. 4 73	random

* Significant at the level of significance (0.05) if the error level is less than (0.05).

Determination of measurements and tests used :

1/ measurement of lung function variables.

Functional variables of the lungs were measured through a device Vica test Spirometer. The variables are:

1- Compulsive dynamic capacity Forced Vital Capacity .

2- The expiratory volume is forced for one second Forced Explorative Volume in one Second

3- Maximum lung ventilation volume Maximum Voluntary Ventilation .

Measuring tolerances Lactic :

The researcher has access to a lot of scientific studies concerned with the physiological domain where Kojnham and Vlawkins test run for carrying lactic [2] . Where a questionnaire was distributed to a number of experts to clarify the validity of the tests and their suitability to the sample and after a statistical analysis proved to be valid for measuring the variables under study .

Measuring offensive basketball skills:

Through the researcher's knowledge of many sources and scientific studies in the field of basketball has been identified offensive skills compound is : (receipt + jump correction / two points) . (Receiving + jump correction / three points) and (receiving + high pitched + peaceful correction). And have been identified for offensive skills tests the vehicle surveyed by seeing a lot of references and scientific studies Ot three tests churned the nomination (Faris Sami) [3] . Where were distributed a questionnaire to a number of gentlemen experts form to clarify the extent of the validity of the tests and the suitability of the sample after it was found statistically analyzed in his favor to measure the variables under study.

Determination of US ginseng doses:

The US was determined Alzhinsnj doses used in research where the researcher reference studies, research and scientific references survey [4] Which dealt with the use of US ginseng to identify the permissible and effective doses in the human body, where it was found that:

1- Effective doses of adults aged 20-30 should be between 50-75 g and 2 to 8 g for a period of 8-12 weeks maximum.

2- American ginseng should be taken every 12 hours, twice a day.

3- It is best to take the American ginseng before eating to increase the absorption speed of the food and to take advantage of it more.

4- Use of US ginseng should not exceed 3 months because it leads to vitamin deficiency B6 In the body leading to feeling numbness and depression.

5- The good product for American ginseng is the one that contains ginsocide Ginsenoside By between 4 and 7 percent.

On this basis it was used doses of American Alzhinsnj in the form of capsules (400) mg and Psonbh Jnsosadat 5% is equivalent to 20 mg, bringing the total US Alzhinsnj program completely is (60 g), and the equivalent of (3 g) of Gansusaadat, table The following illustrates this.

Table (3) US ginseng dosages used in research

Subject	size Capsule	The dose Per day the one	The dose the college Of the program (10)weeks	The dose the college Of the program (G)
Ginseng American)capsule (	400milligrams	800 mg (2 capsules)	800 x 75 days = 60,000 mg	60 g
Sexesides	20 mg	40 mg	40 x 75 days = 3000 mg	3 g

8 - reconnaissance experience:

The researcher conducted the pilot experiment on a sample of (5) players on 5/12/2016 at 3:00 pm in the stadium of Al Mahaweel Sports Basketball Club. The exploratory experiment led the researcher to identify:

1- The validity of the equipment and tools used in the research.

2- The time taken to perform the tests.

3- Stand on the difficulties that may be exposed to it when the researcher giving a C of the President tests.

1/ scientific transactions for testing:

I. Honesty:

The researcher concluded the validity of the tests in question through the questionnaire distributed to the experts and specialists who indicated its validity to measure the (tactical endurance and complex offensive skills).

2 - Persistence: The researcher tried to find the coefficient of stability of the tests, by finding the correlation between the results of the first and second test after retesting on the survey sample after three days of the first test, and after calculating the coefficient of correlation (Seberman) of the ranks between the results of the first and second test and As shown in Table (4), the correlation coefficients were extracted by T-law. It was found that the correlation was significant at the degree of freedom (3) and the significance level (0.05). The calculated value (T) was greater than the maximum scale (2.11) The test has a high degree of stability.

III. Objectivity: The objective researcher concluded by finding the correlation between the results of two judgments. The correlation coefficient (Siberman) for the rank between the results of the two sentences confirms that the test is highly objective, since the value of (T) (2,11), at the degree of freedom (3), and the level of significance (0.05), see Table (4).

Table (4) Shows the value of the coefficient of stability and objectivity and statistical significance of the tests examined

the test	measuring unit	Stability coefficient	Values(T) calculated	Statistical significance	Subjectivity coefficient	Values(T) calculated	Statistical significance
Lactic endurance	Accurate	0, 897	4 , 221	moral	0, 878	3 , 998	moral
Pick up and jump by 2 points	Degree	0. 889	4.229	moral	0. 889	3. 987	moral
Pick up and jump 3 points	Degree	0. 889	5.129	moral	.873	4.228	moral
Receiving and high-pitched finished pacification	Degree	.858	3. 987	moral	0. 890	4.721	moral

Values (t) Table 2.11 at degree of freedom 3 and level of significance 0.05

9 / tribal tests: The researcher conducted tribal tests on Sunday , corresponding to 10/12/2018 three o'clock in the afternoon and after giving researchers a brief explanation of how to perform the tests and the aim of made and then taking measurements to height, weight, age and the time training and then conducted skills tests And physical research on the sample .

1. Presentation, analysis and discussion of the results of the two groups that are not involved in the variables investigated.

a- display the results of the differences between the pre and post tests experimental group first in the surveyed variables and analysis.

Table (5)Shows the difference in the computation and its standard deviation and the value of (t) And the significance of the differences between the results of the pre - and post - test of the first experimental group in the variables under consideration

the exams	measuring unit	Tribal Test		Post-test		Values t Calculated	Error level	Significance of differences
		s	P	s	P			
Compulsive dynamic capacity FVC	(L)	3.535	0.347	4.398	0.712	2.793	0.000	moral
Forced volume is one secondFEV 1	(liter)	3.387	0.382	3.787	1.397	2.561	0.021	moral
Maximum lung ventilation volume MVV	(L)	100.9	12.68	108.6	12.71	4.670	0.011	moral
Receiving +correction 2 points	Degree	4.276	1.218	7.876	2.132	7.761	0.000	moral
Receiving +correction 3 points	Degree	1.999	0 .541	3.761	1.897	5.776	0.023	moral
DOOR STEP +clapotement+ peaceful correction	Degree	4.221	0.869	7.359	2.111	7.136	0.000	moral
Lactic StressTest	Accurate	1.510	0.101	2.81	0.29	4.698	0.003	moral

* Significant at the level of significance (0.05) if the error level is less than (0.05)

Show me from the table (3) The level of error ranged from (0.00 to 0.023) For all search variables which is smaller than (0.05) b , indicating the significance of the differences between the tribal and remote tests at the level of error (0.05) in front of the degree of freedom (6) and for the post-test.

b- display the results of the differences between the pre and post tests of the experimental group second in the surveyed variables and analysis.

Based on the above results (Table 5 . 6 . 7) is clear we have significant differences in the number of lung function variables between pre and post tests for the two sets of research for the benefit of the post test, attribute the researcher the reason for this to the evolution in the level of players through the use of threshold training The importance of physiological abilities in improving construction and development as a natural result of training that contributed to the development of lung variables. The researcher also attributed this improvement to the improvement in the lungs by increasing the capacity of the vital, and increase the strength of breathing muscles and large volume of breath, To Zia The exchange of gases with the blood more after the training of the threshold of Latakia differential (8) weeks with (3) weekly training units. He confirmed (Mohamed Osman , 1990 "The world has started to rely entirely on energy systems in sports training. This has been demonstrated by the field experiments that have emphasized the need to match the special performance requirements during the exercise with the energy system working during the competition to ensure the largest percentage of the contribution of special exercises in refining the athlete and achieving the required achievement " [5].

CONCLUSION

Lactic threshold exercises using ginseng have contributed to the development of the investigated variables (combined offensive skills, lactation tolerance, and functional variables of the lungs) by: The results showed a superior superiority between the tribal and remote measurement in the (combined offensive skills) of the players of the first experimental group and for the benefit of the post measurement. The results showed a superior superiority between the tribal and remote measurement in the (non-tactical endurance) of the players of the first experimental group and for the benefit of the telemetry. The results showed a superior superiority between the pre - and post - natal measurement in the functional variables of the lungs for the first experimental group and for the post - measurement . The first experimental group is superior to the second experimental group in the telemetry of the investigated variables and for the benefit of the first experimental group .

Financial Disclosure: There is no financial disclosure.

Conflict of Interest: None to declare.

Ethical Clearance: All experimental protocols were approved under the University of Kerbala /college of Education for pure Sciences, Iraq and all experiments were carried out in accordance with approved guidelines.

References

1. Ibrahim Salem Al-Sakkar , two others : Encyclopedia of the physiology of track competitions , 1, the book center for publishing, Cairo. 1998 .
2. Abu El-Ela Ahmed Abdel-Fattah: Physiology and Morphology of Sports and Measurement Methods , Cairo , Dar Al-Fikr Al-Arabi, 1997.
3. Abu El-Ela Ahmed Abdel-Fattah . Physiology of Sports Training , 1, Cairo, Arab Thought House, 2003.
4. Abou El Ela , Ahmed Abdel Fattah : Sports Training and Physiological Foundations Arab Thought House , Cairo, 1997 .
5. Essam Abdel Khalek . Mathematical Training Theories and Applications , I 9, Cairo, Dar Al-Fikr Al-Arabi, 1999.
6. Fares Sami Yusuf : Building and Standardizing a Test Battery to Measure Some of the Skills of Basketball Basketball Reversal for Youth Unpublished PhD Thesis, Baghdad University, Faculty of Physical Education, 2006.
7. Mohamed Reza Ibrahim: Field Application of Mathematical Theory and Methods , 1, Baghdad, National Library, 2008.
8. Mohamed Osman: Encyclopedia of Athletics Technic-Training-Arbitration , Kuwait, Dar Al-Qalam, 1990.
9. Mohamed Ali Ahmed Al-Qatt : Physiology of Sport and Swimming Training , Arab Center for Publishing, Cairo 2002.

10. Andrew Pengelly Tomy : Panax quinefl American Ginseng, Appalachian Center for Ethno botanical studies , Miami, 2011 .
11. Wang CZ , Aung HH , NI M , EU JA, Tong R , Wicks: American Ginseng, Ginsendoside constituents and ant proliferative activities of heat-processed Panax Quinquefolium roots. Plantar 2007 .
12. Astrand, PO , Rodahl, K: Text book of work Physiology, Megraw - will book company, USA . 1979.
13. Chieh-fu Chen, Wen-fei Chiou, Jun-tian Zhang . Comparison of the pharmacological effects of Panax ginseng and Panax quinquefolium National Yang-Ming University, Taipei, China, 2001.