

THE IMPACT OF THE USE OF THE VITAMIN (D3) ON SOME OF THE PHYSICAL CAPABILITIES OF THE FOOTBALL PLAYERS

Mohammed Latif Hussain, Prof.Dr. Rafie Saleh Fathi

University of Baghdad / College of Physical Education and Sports Sciences

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ABSTRACT

The study aimed to know the effect of using vitamin (D3) on some physical abilities of the first team of Karkh breeding team. The researcher used the experimental approach to suit the solution of the research problem as well as using a sample of (13) players. Use the nutritional supplement in the form of daily doses for a period of eight weeks and three Training units per week, as he used several tools, means and devices that contributed to the implementation of the procedures after they were subjected and the research sample to the exploratory experience and after conducting the pre and post tests were statistically treated and as explained in Chapter IV of this The researcher reached several conclusions, the most important of which were:

The use of dosages for nutritional supplementation helped to develop values of physical abilities in remote tests than in tribal

He also reached several recommendations, the most important of which were:

The use of nutritional supplements when training contributes to maintaining the player's energy level.

INTRODUCTION

The world has witnessed during the recent years a rapid and remarkable development in the level of sports performance for various sports in general and football in particular, that this development was not by chance but rather as a result of the development of various sports sciences such as sports training science sports physiology biomechanics functional anatomy and other related sciences And that research in sports performance of all kinds has become a basic duty, especially in the teams events that need a high skill and tactical physical effort which requires that these athletes possess high and converging capabilities as a result of their training based on the use of a Misleading modern training methods as

well as using scientific methods that are very important, especially if mixed with field experience, as it complements the training process, which achieves the result of the occurrence of convergence and progress in performance, and hence the overarching goal, which is results, that these things collectively are in the interest of the athlete to improve and reach performance The higher than these methods that help the athlete to maintain in making the effort for the longest possible period are the nutritional supplements that support the muscles and bones responsible for movement or performance. This comes through the use of a training curriculum in order to reach the athlete's functional devices to the state The adaptation and development of his physical capabilities to improve his athletic level, especially that the

components of the external training load in terms of size, intensity and comfort during training sessions are unknown to most coaches, which requires an understanding and note of the extent to which the components of this pregnancy match the athlete's physiological ability during the performance of physical exercise groups

The importance of the research lies through the use of the use of vitamin (D3) and knowledge of its effect on some physical capabilities of football players and for the development of the level of performance of the training sample.

Research problem

Through observing the researcher and his work in the field of football and informing him of some research and studies in general and football in particular, he noted that there is a decrease in physical effort and a decline in the efficiency of working muscles, ligaments and tendons, especially in the period of special preparation, which requires the researcher to think about developing practical scientific studies to avoid a decrease The level during physical performance, especially at the level of physical fitness, so the researcher prepared a training curriculum and accompanied special dietary supplements to see through it the effect of the curriculum on some biochemical variables and physical capabilities of football players for one of the school teams not It is the first team of karkh education, as nutritional supplementation plays an important role in the life of the athlete in general and football players in particular because it contains the basic elements that contribute to providing the body with sufficient energy for the purpose of continuing to perform specialized activity, whether during training or matches from here came the research problem And that lies in the systematic use of supplement developed in research and in various training conditions.

Research Objectives

- Knowing the effect of using vitamin (D3) in the form of doses for a period of eight weeks on some physical abilities.
- Knowing the differences in the tribal tests about them in the dimension of physical capabilities.

Imposition of research

There are significant differences in the tribal tests compared to the dimension in the physical abilities due to the effect of using the supplement.

Research fields

The human field: A sample of the first-team athletes from the Baghdad Al-Karkh Education team.

Timeline: From 1/10/2019 to 5/12/2019

Spatial domain: Sports activity stadium in the first Karkh and medical laboratories.

Physical capabilities

Physical abilities are one of the basic and important elements for the player's progress, skillfully and tactically, and that any weakness in the physical abilities of the athlete leads to weakness in skill and planning performance and weak level of play, as the player cannot keep up with the requirements of modern play that requires strength in performance and speed of reaction and other Physical traits

Explosive force

The explosive power plays an important role in the physical performance that the player must have to overcome the requirements for performing the required skill, especially those that need jumping, jumping, throwing, and barriers in athletics, handling and shooting, as in handball, soccer, and volleyball, and other games.

Larson and Jochem defined her as "the ability to produce the maximum force in the shortest time" and sees McCloy "as the average time of work and is the ability to detonate the force quickly" .

The force marked with velocity

"The force marked with velocity is the maximum resistance that must be overcome in the shortest period of time, and the provision of the force marked with speed requires a high degree of muscle strength and velocity and a high degree of motor performance where the strength and speed are integrated. Also, the force marked with velocity requires the athlete's ability to show the maximum strength in the fastest A possible period of time and the force marked by speed appears when the muscles contract in dominance over resistance, i.e. appear in the cases of bullying and resistance and linking between them, (Abdul Amir Sherba) quoting

(Holman) explains the term power characterized by speed as the muscle strength or group of muscles that the athlete reaches as a result of T War motor track volitional versus what resistance training is a distinctive force as quickly as shown by the course of action moving and muscular emphasis on the status of hard authoritarianism (passive muscle tension when using special exercises to help and use of motor track compound of muscular work and wrought authoritarianism) (

Speed handling

It is a kinetic physical ability and consists of the length and speed characteristics and means the player's ability to maintain speed for the longest period of time.

Speed tolerance is one of the combined physical capabilities of endurance and speed, and thus represents the relationship between them as it is seen as an important form of speed, which many sports activities and races depend on, and its achievement depends on this element such as athletics, short distance swimming, football, and football Hand and others (Essam Abdel-Khalek) states that it is a combined physical ability of endurance and speed, as it means "the individual's ability to maintain speed in continuous working conditions by developing the ability to resist fatigue when carrying a high degree of intensity (75-100%) of the individual's ability and overcome oxygenated breathing to gain Energy "

:Dietary supplements used for the study

The researcher used the nutritional component that contains vitamin D3. For the importance of this topic, the researcher will address it in order to give the scientific and practical concept to it.

First: vitamins:

The word "vitamin" is derived from the Latin word (vita), meaning life. Vitamins are found in very small quantities in foodstuffs, which are chemicals or organic compounds that the body needs in quantities from micro grams to grams per kilogram of body weight. It works as an organizer. Or an enzyme aid, and although the vitamins are not chemically similar, they are functionally similar

So from here, we show the importance of vitamins for a non-athlete, so what about the athlete, who needs more vitamins as a result of his performance of the high physical effort, especially as our athletes always or most

likely have their incomplete nutrition from the necessary nutrients to him.

The importance of vitamins for the athlete :

- Vitamins should be doubled for athletes while performing physical activity due to the insufficiency of the relative vitamins as a result of the increased need for them.

- The signs of lack of vitamins do not appear at the beginning of the training season, but they appear in the extreme brown effort and in cases of stress, as these signs appear in the lack of muscle strength, decreased athletic efficiency, and fatigue speed.

.The necessity of eating a variety of foods in order to get most vitamins -

.Physical exercise increases the body's total vitamin needs -

MATERIALS AND METHODS:

Research Methodology:

The experimental approach is one of the scientific approaches, as each problem has a special approach in solving it. The researcher used the experimental approach to design a single experimental group that is appropriate to the nature of the problem.

Search community and sample:

"The sample of the study indicates that any group from which the information is derived (1). Therefore, the sample was chosen intentionally, and they are the players of the Baghdad Karkh Education Team, the first with (13) players, three of whom were surveyed and ten players representing the experimental group.

Means of gathering information, tools and devices used in research:

Laptop computer. -

Ten (10) characters. -

Legal football, number (10), size (5). 0

Stick number agility (10). -

Whistle (2). -

Conical cones, number (10). -

Scientific sources (Arabic and foreign). -

- Field Observation.

Field research procedures:

The tests used:

:Biochemical tests related to the research

The researcher invited the research sample one by one to withdraw a sample of blood estimated at (3 cc) after the player sits in a comfortable position on the chair where

blood is drawn from the sample from the resting position where this blood sample was taken to extract the values of the subjects discussed and that will be the test, namely:

.Measuring the percentage of CK in the blood -

Tools used:

Compressive belt attached to the humerus region -

Medical cotton, sterile materials -

A medical syringe (syringe) -

EDTA blood-clotting tubes -

A pipette to pull the serum from the blood -

Centrifuge -

Kitat where blood is taken from the sample -

Laboratory Assistant Team -

Laboratory procedures:

After completing blood drawing procedures in the medical laboratory by the assistant medical team, they are treated in the laboratory and the results are reached for statistical treatment, as explained in Chapter Four.

First: Distinguished Force Test for Speed

The name of the Partridge test is the maximum possible distance in ten seconds for each individual man

The purpose of the test

Measuring the force marked by the muscles of the legs

Tools:

Football field - Stopwatch number (2) - Metric tape measure - Whistle for start and end signal - Recorder calling on the names and recording the results from the tape measure.

Test:

Drawing lines on the ground and placing markers indicating the measurement in meters. Then the player stands up when hearing the starting whistle on the part on one leg along the line drawn on the ground in the field and at the maximum possible speed to record the largest distance, then the same test is repeated for the other leg.

Second: Explosive force test

Vertical jump from firmness)(

The purpose of the test: to measure the explosive strength of the two men

Instruments and tools used for measurement: a metal tape measure - a suitable height wall - a chair - chalk - recorder - a registration form

Performance specifications: The player stands facing the wall with the shoulder of the arm holding the piece of chalk and he raises it high along its entire stretch to

make a mark on the wall at the most point you reach, then bends the knees, and the weight of the arms in front high with the knees extended to jump up to make another mark at the maximum point you reach Hand in while jumping.

Note: The heels should not be lifted from the ground when making the first sign.

Recording: the distance between the first mark (from standing) and the second score (from jumping) is calculated and the player is given three attempts to score for him the best.

Third: speed handling test

Shuttle run test 25m x 8 times per second and parts thereof (Abdel Hamid and Hassanein, 1980, pp. 287-288)

Purpose of the test:

. Speed measurement measurement

Tools

Metric tape, stopwatch, flat ground length (25m).

Method and Specifications for Performance:

Two parallel points are drawn the distance between them (25 m), the player stands on one of the two points, upon hearing the starting signal the player runs at the maximum speed going to the second point to touch it with her foot, then turns to return at the same speed to the first point again, this performance is repeated eight times to become the distance traveled (25m x 8 times) = (200m)

Registration

He records the player's time in the distance traveled and for the nearest tenth of a second.

:the conditions

a. Time is recorded from the moment of the start until the player touches the starting point again at the end of the eighth stage

B. The points specified in the foot must be touched each time the player reaches.

Exploration Experience

The auxiliary team, under the supervision of the researcher, conducted an exploratory experiment on 9/9/2019 at (10) am on (3) players from the following:

.The invalidity of the mastaba -

.Knowing the test time -

.Learn about the efficiency of the work team -

Main experience

Carry out research:

:Pre-test

Tribal tests were conducted on the research sample and with the assistance of the assistant work team after the approval of the trainer in order to determine the biochemical variables as well as to identify the level of physical abilities of the subject of the study among the members of the research sample. On 4-5 / 10/2019, as physical tests were conducted on Friday 4/10/2019 at ten in the morning, and biochemical tests were conducted at ten in the morning on Saturday 5/10/2019 as shown in the tests axis.

The researcher and with the assistance of the supervisor prepared the training units and the main experiment was started on Friday, 4/10/2019 and ended on Saturday (7/12/2019) by (3) units per week in days (Sunday, Tuesday, Thursday (24) training units during the special preparation period during (8) weeks.

Mechanism of taking vitamin (D3)

Experimental group players take vitamin D3 daily from the first training unit until the end of the total trial period.

Dimensional tests

Dimensional tests were conducted on the research sample in the sports activity stadium of the f

irst Karkh Education Directorate and Al-Rahma Medical Laboratory on Friday and Saturday corresponding to 20 and 21/3/2015 and for a period of two days the researcher followed the same procedures that he followed in the tribal tests.

Statistical means

The researcher used the statistical bag (SPSS) to process the experiment data statistically, and from that the appropriate statistical laws were chosen for the research, namely:

- . - Arithmetic mean
- .Standard deviation -
- .Torsional coefficient -
- .- T-test for related samples
- .- T-test for unrelated samples

RESULT AND DISCUSSION:

View, analyze, and discuss the results of the tests for the velocity, velocity, and tribal and dimensional explosive strength of the research sample:

Table (2)

Shows the difference between the arithmetic mean, its standard deviation, the calculated value (t) and the significance of the differences between the results of the pre and post tests

Statistical significance	Calculated value of t	F.	Post-test		Pre-test		measuring unit	Statistical parameters Variables
			standard deviation	Arithmetic mean	standard deviation	Arithmetic mean		
moral	6.896	2.40	1.505	35.10	1.636	32.7	meter	Part right man
moral	7.686	3.20	1.337	35.70	1.433	32.5	meter	Partridge left man
moral	7.411	1.99	1,174	41.55	0,999	43.54	second	Speed gain
moral	4.176	7.20	4,785	51.70	9.180	44.5	cm	Explosive force

From Table (2) it appears that the mean mean for the variable (right-footed part) in the pre-test was (32,70), and the standard deviation is (1,636), while in the dimensional test the mean was the mean for the same variable (35,10) and the standard deviation (1,505) It turns out that the mean of the variable (the left leg's log) is in the pre-test (32,5), and the standard deviation is (1,433), while in the dimensional test the mean was the

mean of the variable (35,70) and the standard deviation (1,337). It turns out that the mean of the variable (velocity modulus) in the pre-test was (43,540), and the standard deviation is (0,999), while in the dimensional test the mean was the mean of the variable itself (41,55) and the standard deviation (1,174) and it turns out that the arithmetic mean of the variable (force The explosive) in the pre-test was (44,5), and the standard deviation is (9,180), but in the dimensional test the mean was the

mean of the variable itself (51,70) and the standard deviation (4,785) and the researcher attributes the significance of the differences to the mechanism regulating the use of giving nutritional supplements to Individuals of the research sample that relied on the use of vitamin D3 with exercises for the training method The researcher attributed this development in the strength marked by the speed of the muscles of the two men to the special exercises used in the curriculum, which were prepared on a scientific basis in order to affect the working muscles, and this was confirmed by (Abu Al-Ala and Ahmed Nasr El-Din) that "the force characterized by speed means the ability of the muscular system to produce strength Fast, which requires a degree of compatibility in combining the quality and speed traits into one component . As for the variable speed handling, the researcher attributes the significance of the differences to rationing in taking the dose quantities of the food supplement, which was built on the

requirements of special effectiveness, especially the speed practice because of its basic correlation with the capabilities of the football game because of the requirements of the implementation of the planned performance and here Abu El-Ela (1997) shows that The development of anaerobic anaerobic capabilities aims to develop the muscle's ability to withstand the muscle performance resulting from the anaerobic energy system with the lactic acid system, and the reason for the differences in the explosive force's significance to improve and develop the explosive force with a specific rate to reach the overlooking level B To the player Murad leads him in the competition effectively without landing a high efficiency performance and thus obtain satisfactory results as seen (Fawzi vegetative 1997) that "exercise regularly greatly affect the lifting of the body's energy level"

Presentation, analysis and discussion of pre and post ck test results for the research sample:

Table (3)

Shows the difference between the arithmetic mean, its standard deviation, the calculated value (t) and the significance of the differences between the results of the pre and post tests

Statistical significance	Calculated value of t	F.	Post-test		Pre-test		measruing unit	Statistical parameters Variables
			standard deviation	Arithmetic mean	standard deviation	Arithmetic mean		
moral	6.22	204.9	2.66	178.9	156.66	383.8	L/U	Ck

From Table (3) it turns out that the mean of the variable (CK) in the pre-test was (383,8), and the standard deviation is (156,66), while in the dimensional test the mean was the mean of the variable (178.9) and the standard deviation (2 , 66) As for the significance of the differences of the variable CK, the researcher attributes it to the optimal use of nutritional supplements, which contained vitamin D3 and strength, speed and elongation exercises, as well as - exercises that combine these characteristics at one time - different and scientifically studied, which are appropriate to the nature of the physical effort required by skill performance in a game Football, and the curriculum contains daily intake of vitamins during its implementation To increase the activity of the enzyme, as ((the fact that the body needs vitamins and minerals in certain quantities for good health and to reach the optimum level of performance, as well as many vitamins are the main parts of the enzyme

systems that are involved in energy production and exercise)

CONCLUSIONS:

- The adoption of the training curriculum accompanying vitamin D3 works to develop the strength characterized by the speed of the left and right men in a greater proportion in favor of the experimental sample of football players.
- The adoption of the training curriculum accompanying vitamin D3 works to develop the explosive strength of the legs by achieving a higher level when jumping by a greater percentage in favor of the experimental sample of football players.
- The adoption of the training curriculum accompanying Vitamin D3 works to develop the ability to handle speed by reducing performance time and for the benefit of the experimental sample of football players.

- The training approach accompanying the nutritional supplement leads to an increase in the activity of the creatine kinase (ck) as a result of the development it brought about on the experimental sample greater than it is in the control sample by taking regular doses of vitamins.

- Use Vitamin D3 with training and competition in order to conserve the player's energy.
 - The use of supplements reduces the rates of cell laceration and continues to work.
 - Choose other enzymes to carry out work with physical abilities and see how they are affected by the supplements used.

ENDORSEMENT:

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Annex (1)

