# Training In Accordance With The Method (OBLA) And Its Effect On The Anaerobic Capacity Of The Anaerobic And Cyclogenic And Enzyme (LDH) Of Some Advanced Swimmers In Short Distances 

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#### Abstract

Resse has for years been referring to reports on training programs used in European countries, which are the ideal methods for determining training intensity. Therefore, this study aimed to use the method (OBLA) when using the training program for advanced swimmers to see its effect on the anaerobic capacity of anaerobic and glycogenic and enzyme (LDH). (8) They also used several tools, methods and tests, the most important of which was the training program prepared for eight weeks and four training units per week at the time of each training unit (90-120) minutes in which the intensity according to the method (OBLA) was used to determine the training time for groups. For selected depending on the distance measured, and upon completion of this training program was conducted tribal posteriori tests and after obtaining the results were processed and about the researchers reached several conclusions was the most important:


- The OBLA training method in the use of severity has a significant effect on the anaerobic capacity of lactic and glycogen and LDH value.

As for the recommendations, the most important were:

- Focusing on the biological side when using the training intensity that accompanies the time of the training unit and the time of the capacity of the training program

Key words: OBLA method, non-anaerobic anaerobic ability, clikogenic capacity, enzyme (LDH

## 1. INTRODUCTION:

Today, the world has witnessed a clear development in the level of sports, and this has been achieved through the benefit of research prepared by scientists and academics, and specific to
laboratory experiments, for the importance of the diversity of exercises and training methods for the events of the major change in the values of giving equipment and functions of the body. Sports and swimming are one of them that requires a high level of endurance and speed. And the strength, flexibility and other events of the tangible development in the muscular ability to play a prominent role in determining the level of performance for swimming in various types and forms of swimming activities. A study of the pressures of training loads on the human body and the vital devices involved in order to contribute effectively in the medical and practical aspects in the design of the annual training program aimed at improving the level of basic physical and functional characteristics in specialized sports (Muhammad - 2018-6) (4) especially when the goal is adaptation Specialist in functional systems to achieve the required performance ((physiological adaptations such as increasing the rate of lactic acid transport from muscles and increasing their content of myoclopene play a big role in the development of swim endurance (Maglischo-1982-309)) (8) but here we need Accuracy in that, as using the training method as an OBLA method with choosing the correct time and distance based on the use of real training components will contribute to the development of the endurance potential of the physiological apparatus and function of swimming devices and their adaptation, whether it is when using the muscular side, the heart, breathing, etc. Here came the importance of research, which stems from the need for a regular examination of the swimmer's accomplishments in various respects and over a specific period of time according to a consistent and uniform method for the purpose of arriving at better solutions Training methods, especially the method used (OBLA) that requires control of training periods, intensity, and type of rest by using exercise coding with times and distances that help the muscle withstand lactic acid and the ability to transfer it from muscle to blood.

## research aims:

The study aimed to develop a training program to be implemented in an OBLA method, and to know the effect of the program on both the non-oxygenic and lactic capacity and the activity of the enzyme ( LDH ) of the study sample. The study also aimed to know the differences in the values of research variables in the remote options from them in tribal

## Research hypothesis:

- There are statistically significant differences between the pre and posttests in the non-lactic and non-oxygenic ability and the activity of the enzyme (LDH) of the research sample.


## 2. METHOD AND TOOLS:

## Research Methodology:

The researchers used the experimental method as ((reveals the causal relationships in order to give a descriptive picture of the existing topic, no matter how different the design of the experiment)) (Nuri and Rafi` 2004-61)

## The research sample:

An intentional sample was chosen with the number (8) of the players applying for free swimming. Their ages ranged between (+22.3 years) and their weights ranged between $(+68$ kg ), while their lengths were between $(+173)$, all of them underwent the same group design, where two of them were chosen for the experiment The exploratory study, as its presence here does not affect the sample of the main experiment whose number was (8)

## 3. THE TESTS USED:

## - Test for detecting enzyme values (LDH):

The laboratory sits on a comfortable chair and after (5 minutes) of rest, it performs a physical effort ( $12 \mathrm{~km} / \mathrm{hour}$ ) on the treadmill until fatigue. After the effort is finished, it sits on the chair a second time and a blood sample ( 4 cc ) is taken from it and treated in the laboratory by Use the special kit to obtain the values before starting the training program and after implementing the eight-week training program, knowing that the person who draws blood draws blood and saves it and transports it to the Jenin Hospital laboratory in Baghdad.

Selection of anaerobic anaerobic capacity: (Muhammad 1998-157) (5)
This test aims to measure the anaerobic (non-oxygenic) lactic capacity, and this test is carried out with a step box of height ( $40 \mathrm{~cm} /$ in addition to a stopwatch and a medical scale), as well as knowing the player's weight in addition to calculating the number of steps performed by the laboratory with the calculation of time ( $5 / \mathrm{sec}$ )

As for registration, it is done by applying the following equation:
Lactic anaerobic power (non-oxygenic) ( $\mathrm{kg} / \mathrm{s}$ ) $=$ body weight $\mathrm{x} 0.4 \mathrm{~m} \times$ number of steps x total time ( 60 s ).

Selection of the non-oxygenic capacity of the epidemic: (Abu El-Ela, Muhammad, 1997 228) (2)

This test aims to obtain the non-oxygenic calikogenic capacity, which requires the use of a vertical jump test device for a period of ( 60 seconds) or the so-called flight time of the laboratory, or the laboratory performs consecutive jumps for a period of ( 60 seconds), but with the curves of the knees and hands extended alongside the thighs, here registration is made according to the following formula :
$9.8 \times$ total flight time during bounce $\times 60$ seconds
Lactic non-oxygen energy $(\mathrm{W} / \mathrm{kg})=$ $\qquad$
4 x Number of leaps during (60) seconds (60-total flight time during traps)

## Exploratory experience:

The exploratory experiment was conducted on two of the sample on Tuesday, 1/8/2019 at three o'clock in the afternoon, to overcome the errors that may occur in the main experiment.

The researchers benefited from this experiment, especially with regard to understanding the requirements of implementing the training program

## Tribal tests:

Pre-test was conducted for two days, as follows:
On $12 / 1 / 2019$, the LDH enzyme test was performed as shown in this section
On $01 / 13 / 2019$ the tests were conducted for the anaerobic and non-anaerobic capacity as shown in this section

## The main experience:

The training program was applied at the beginning of the special preparation. The duration of the program was eight weeks, from 16/1/2019 to 12/12/2019.

Every week (4) training units, the time of each unit (90-120 d) is used in which the intensity is according to the method (OBLA), which is the method of developing speed at the beginning of the accumulation of lactic acid, and this means through the beginning of the accumulation of lactic acid at ( 4 mmol ). For the groups chosen for the measured distance and the training time for the distance, the researchers confirm that the application of this idea or training method also depends mainly on the short period of work so that complete recovery does not occur after this performance and after completing the training, the post-tests were conducted to complete the study requirements.

## Post-test:

The post-test was conducted according to the conditions and steps for the pre-test, as it was conducted for two days for the period from 3/18/2019 to 3/19/2019.

## Statistical means:

Researchers used statistical fact (SPSS) to address statistical processes.

## 4. RESULTS:

> Table (1)

Shows the statistical parameters of the research variables of the study sample

|  | Pre-test |  | Post-test |  | The value of the ttest | sig |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | sma | std | sma | std |  |  |
| Non-anaerobic anaerobic capacity ( $\mathrm{kg} / \mathrm{m} / \mathrm{s}$ ) | 18.25 | 0.51 | 24.87 | 0.83 | 15.76 | 0.000 |
| The anaerobic power of kleogenic watt / kg | 5.75 | 0.48 | 10.36 | 0.71 | 20.04 | $\begin{aligned} & \hline 0.000 \\ & 0.000 \end{aligned}$ |
| LDH enzyme L/u | 394.8 | 2.95 | 608.37 | 11.75 | 24.13 | $\begin{array}{l\|} \hline 0.000 \\ 0.000 \end{array}$ |

From Table (1), it appears that the statistical significance of the values of anaerobic lactic and glycogenic power and the value of the enzyme LDH) was significant by seeing the values (sig) that gave an indication that all values were smaller than (0.05) and also the values of (T) at a free degree (7) The significance level (0.05). The researchers attribute the reason for these differences to the training program, which was based on the time and distance of training and an estimate of the accumulation of lactic acid at ( 4 mmol ) depending on the heart rate and intensity that is dependent on it, in addition to that, the researchers exploit the idea that a complete recovery does not occur depending on Shortening the swim period for the swimmer also contributed to the occurrence of moral differences ((using exercises of extreme or near maximum training intensity with few repetitions and high performance speeds that increase activity in the activity of the enzymes responsible for producing energy and rebuilding them during aerobic work, as these enzymes work to destroy and break down The chemical bonds of creatine phosphate and muscle glycogen)) (Abu Al-Ella 2000 -78) (1) It also ((increasing the concentration of lactic in the blood after the effort indicates an improvement in the athlete's ability to lactic as it indicates an improvement in the ability to produce Energy through the anaerobic effect of cyclogen () (Resan 2002-107) (3), especially when engineering the stress on the loss of the heart rate and the percentage of lactic acid concentration ((the labor intensity, which is equivalent to $80 \%$ for the athlete, is at the rate of $185 \mathrm{~d} / \mathrm{d}$ (214-1989). Karvanem) (7) and that ((measuring the concentration of lactic acid concentration is a direct measure of the intensity of training and its effect on the muscle)) (50-2001. Skot) (9)

In addition to everything mentioned, researchers believe that the effect of the LDH enzyme is known in its effect on the conversion of pyruvate to lactic acid and the great role also in converting lactic in the opposite direction to pyrophite, but the activity of this enzyme depends on the type and intensity of sports training and this is what a study indicated (31). 1992) (Tan) (10) that training in swimming and running for a period of (4) weeks shows the
process of conditioning that occurs at the level of change in blood glucose and acetate, which occurs with different types of sports training)), including the swimming event that requires technicians tight to the requirements of the event and the player on Both

## 5. CONCLUSIONS:

- The OBLA training achieved great success with the physiological ability of swimmers for a distance of ( 100 m swimming).
- To shorten the work period and not complete hospitalization, it contributed to giving the opportunity for lactic acid to move to the muscle and obtain significant differences in the value of LDH and the capacity of Allekogenic and Altalke.

An eight-week period is sufficient to cause changes in physiological abilities when using the OBLA method.

- Lactic endurance training and race speed for distances less than the required distance led to an improvement in the ability of the swimmers to achieve the requirements of preparation very soundly.


## 6. RECOMMENDATIONS:

Adopt other training methods to assess the level of swimmers' abilities development.

- Full commitment to training hardships and training volumes when achieving a high swim ability.

Carrying out other studies based on the tests for maximum susceptibility to swimming and the application of energy systems.

- Focusing on the biological aspect when using the training stresses that accompany the time of the training unit and the capacity of the training program.


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