



Mansoura University
Faculty of Sports Education
Athletic Training Department

**The Effect of Antioxidants Intake on the Effectiveness
of skill performance and some Biological Variables
for Junior Wrestlers**

A Thesis Prepared by
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in Damietta - Mansoura University

A research Presented among the requirements obtain
For Ph . Degree in Sports Education

Supervisors

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The Research problem and its Importance:

Wrestling sport is characterized with a competitive feature, where the competition takes place between the competitors in a circle 9 meter spheric, in a game consists of two round, two minutes per each, with 30 seconds break time.

According to amendment occurred in the game's law , playing could be extended to the third round in case each competitor wins a game, in addition, all the same weight games take place on the same day.

This requires the wrestlers must be active and tolerant all the day, and they must do the best to avoid tiredness and exhaustion resulted in the physical and neurological load which come into their shoulders.

The researcher, during his work in wrestling field and following up the republic championship and the universities Tournaments, noticed that the players efficiency are getting decreased in the second round, and getting deteriorated in end of each round rather in the beginning , ie, with more extended performance time the players efforts get less.

Through out the studies which referred to the relationship between time duration and hard physical performance and increasing the free radical exhaustion level due to fat oxidation , which in turn lead to feelings of stress and inability to keep exerting efforts, then decreasing the players efficiency levels and be prone to get sustained by long-termed serious diseases such as cardio-diseases, arteriosclerosis, tumors and others.

- From this scientific point, the researcher believes that using antioxidants which content bee honeys, Antox tablets (Antioxidants contents selenium substances and vitamins A, C, E) as one of prohibited alternative drugs internationally, which could positively effect the performance and some biological variables for Junior Wrestlers.

The Aims of the research:

The aim of research Recognizing the effect of Antioxidants intake on effectiveness of skill performance for Junior Wrestlers throw:

- Recognizing the differences between pre & post measurements for the controlling group in variables under researching (effectiveness of skill performance – biochemical- function - anthropometric).
- Recognizing the differences between pre & post measurements for the empirical group in variables under researching (effectiveness of skill performance – biochemical- function - anthropometric).
- Recognizing the differences between both empirical and controlling group between pre & post measurements (differences clearance) in variables under researching (effectiveness of skill performance – biochemical- function - anthropometric).

The Research thesis :

- There are statistical functional between pre & post measurements for the controlling group in variables under researching (effectiveness of skill performance – biochemical- function - anthropometric).
- There are statistical function between pre & post measurements for the empirical group in variables under researching (effectiveness of skill performance – biochemical- function - anthropometric).
- There are statistical functional differences between both empirical and controlling groups between pre & post measurements (differences clearance) in variables under researching (effectiveness of skill performance – biochemical- function - anthropometric).

Methods and procedures of the research :

- The researcher used the empirical curriculum.
- Wrestlers samples reached 10 from Mansoura University team that distributed vertically into equivalent groups, the first was empirical included (five) wrestlers and the second was controlling team included five wrestlers .
- The equivalence was occurred between groups individuals regarding age, tall, weight, training age .
The following tests and measurements were applied on both groups before and after the test.

-Testing the effectiveness of skill performance :

with calculating numbers of the correct attempts and number of points which the player score them by his performance of back cast movements with dolling the third (one by three) of the player's weight, that through 2 rounds. 90 seconds for each, with 1 minute break time.

-Biochemical measurements :

Blood picture – lipid profile – enzyme S.G.O.T, S.G.P.T – Creatinine , Glucose, Malon dialdehyde – Total Antioxidants Capacity – urine analysis.

-Function measurements :

Puls rate – Blood pressure – maximal - oxygen consumption .

-Anthropometric measurements :

Body weight – Rate and weight of fat in the body

pilot Studies :

first study :

The researcher conducted a pilot study to examining a sample of honey bee which used in study in Agric. , chem., Dept. Micro Analysis Unit in Faculty of Agriculture. Mansoura University to sure it be safe and the percent of sucrose , material solid , moisture and ash .

second study :

The researcher conducted a pilot study on feb.11-2006 – 10 days before applying the essential study on a sample of 4 wrestlers in the same age, not related to research sample,

The Research brief

The Effect of Antioxidants Intake on the Effectiveness of skill performance and some Biological Variables for Junior Wrestlers.

Name of researcher : *Ahmed Sharawy Mohamed Ahmed.*

This research aims to recognizing the effect of Antioxidants Intake on the Effectiveness of skill performance and some biological Variables for Junior Wrestlers .

First pilot study to examining a sample of honey bee which used in study in Agric. , chem., Dept. Micro Analysis Unit in Faculty of Agriculture. Mansoura University to sure it be safe and the percent of sucrose , material solid , moisture and ash .

Second pilot study was conducted on Feb. 11-2006 to instruct the leaders and assistants to execute the tests, register the results, arrange performing tests and to recognize the time needed to do these tests.

The essential study got applied on a sample of 10 wrestlers where they were divided into two groups, 5 as an emperical group; 5 as a controlling group from Feb. 21 to March 8-2006.

The conclusions :

Taking of antioxidants (under researching) Led to improving the effectiveness of skill performance, increasing (red blood cells and Hemoglobain) keeping the total Antioxidants Capacity, decreasing fat oxidization, decreasing plus rate and improving food metabolism, while they didn't lead to presence any statistical functional differences in platelites, white blood cells lipid profiles , S.G.P.T, S.G.O.T enzymes, Creatinine , Blood glucose level, Blood pressure variability (Contracting & expanding) , The maximal oxygen consumption , rate and weight of fate in the body.



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