

Effect of Wheatgrass Powder on the Performance of 3000 Meter Runner Junior College Level Boys from Pune

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ABSTRACT-

Wheatgrass has many benefits such, as the wheatgrass have many types of vitamins, minerals, amino acid and enzymes presents in it. It helps in the metabolism of the human dietary system as per experiment the 3000 metr. Runner required lot of nutritional requirement. This can be replaced through wheatgrass powder. The object study of comparison 50 metr.dash, bleep test, 3000 metr. running between experimental group and control group. The hypothesis done where not significantly improve the performance of 50 meters dash, bleep test and 3000 metr.running test. The method use experimental methodology.in this study the two groups where in use this are experimental group and control group. In which the pretest and posttest where taken. By using this purposive sampling technique 30 students were selected 3000m boy's athletes from Azam Campus Pune. In the study the three test where in use 50 metr. dash, bleep test, 3000 metr. Running. The subject's score of the tests is analyzed using different statistical technique such as mean, median, Standard Deviation, and two- tailed independent samples t-test to examine the difference between the scores of experimental group and control group. After concluding the entire test the result found was negative the researcher concluded the study stating that there will be no effect of consumption of wheatgrass powder on the performance of athletes from Pune city.

Keywords: -Wheatgrass, Performance, 3000 Meter Runner

Introduction -

In India name of wheat grass is not much popular, but the country like United States of America, Canada, Germany and many European countries are using it since 1940. The

consumption of wheatgrass in the western world began in the 1930's as a result of experiments by Charles F. Schnabel and his attempts to popularize the plant. He was an agricultural chemist and conducted many experiment on it. He did his research at outdoor grown of experiments on it. He did his research at outdoor grown of wheatgrass in Kansas (U.S) and made it popular in 1940.

Wheatgrass is naturally rich source of vitamin, minerals, Amino acids, Enzymes, chlorophyll and dietary fiber. Wheat grass is said to contain more than 90 different nutrition substances and 19 amino acids including 9EAA (essential amino acids) Wheatgrass powder is highly in dietary fiber and thus helps to maintain blood sugar level, Cholesterol level, prevents constipation and cancer. Helps to strengthen natural immune (resistance) system. Helps in detoxification and thus reduces stress, tension, foul odors of breath and sweat. Supplements intake of dietary fibers which helps control blood sugar, cholesterol level and prevent constipation. Only 1 kg of wheatgrass can supply nourishment equal to the obtained from 23 kg of carefully selected vegetable.' Wheatgrass is obtained by allowing the sprouted organic wheat grains to grow up to a height of about 6 inches till the green leaf begins to form stem. Wheatgrass powder contain different variety of nutrients such as, vitamin like A,B,C,E. Enzymes (catalyst), Chlorophyll, Dietary fiber, proteins and Amino acids, minerals like Calcium, iron, sodium, potassium, magnesium, Zinc, phosphorus, selenium, etc.

3000 meter run requires lot of cardiovascular endurance, good level of body metabolism, water balance in body and intake of good vitamins and nutrition. Researcher conducted study on 3000 meter runner as this event requires lot of nutritional requirement which can be replaced through wheatgrass powder.

Objectives of the study

1. To determine the effect of wheatgrass powder on the performance of 3000 meter run on Experimental group.
2. To compare the performance of 50 meter dash between experimental group and control group.

.Research methodology

Experimentalmethodology adopted is given. On the basis of the objective of the study and as per the formulated hypothesis, research design adopted by the researcher, data collection procedures is provided in details in the following sections.

Design of the study

Pretest – posttest equivalent group design (Quasi experimental) was employed to conduct the present intervention. The study consisted of one control group and one experimental group. The experimental group is given a nutritional treatment of wheat grass powder as well as training. Whereas, the control group was given training without any nutritional treatment of Wheatgrass powder. The research design is as follow:

R: O1-X-O3

R: O2-C-O4

R - is a Randomization

X - is a treatment given to the experimental group

C - is a control group

O1: is a pre-test conducted on experimental group

O2: is a pre-test conducted on control group

O3: is a post test conducted on experimental group

O4: is a post test conducted on control group.

Population

Boys Athletes from Pune city are considered as the population for this study.

Out of this population, the study is delimited to 3000m athletes only.

Sample

The 3000m boy's athletes from Azam Campus Pune are considered as sample for this study.

The purposive sampling technique is used for selecting the sample. Thirty 3000m boys' athletes from Azam Campus Pune are selected as the sample.

Variables

The following dependent and independent variables were chosen to collect the data during pre-test and post-test.

- **Dependent variables**

In the present study, the 3000m boy's athletes from Azam Campus Pune are considered as dependent variable.

- **Independent variables**

In this present study, nutritional wheatgrass powder given to the 3000m boys athletes from Azam Campus Pune are considered as independent variables.

Data collection tool

In this present study, the researcher intends to conduct below mentioned tests to examine the nutritional effect of the wheatgrass powder on the performance of 3000m boy's athletes from Azam Campus Pune.

Sr.No.	Name of the Test	Recommended measures
1	3000 meter run	To measure the cardio- respiratory fitness.
2	Bleep test	To measure aerobic fitness or VO2 max.
3	50 meter Dash	To measure the maximum speed.

Statistical tools

The subject's score of the tests is analyzed using different statistical technique such as mean, median, Standard Deviation, and two- tailed independent samples t-test to examine the difference between the scores of experimental group and control group.

Analysis

14.1 Descriptive Statistics for Pretest on Experimental & Control group

Measures N= 15 each	50 m dash		Bleep test		3000 m Run	
	Ex Gr	Control Gr	Ex Gr	Control Gr	Ex Gr	Control Gr
Mean	8.78	7.14	43.07	57.13	20.35	20.42
SD	0.76	0.43	11.17	14.98	1.41	2.01
Skewness	0.14	1.99	0.01	0.43	0.08	0.50
Kurtosis	1.33	6.75	1.33	0.06	0.90	0.48
Minimum	7.62	6.72	25	28	17.1	17.6
Maximum	7.62	8.72	61	84	23.28	24.24

14.2 Descriptive Statistics for posttest on Experimental & Control groups

Measures N= 15 each	50 m dash		Bleep test		3000 m Run	
	Ex Gr	Control Gr	Ex Gr	Control Gr	Ex Gr	Control Gr
Mean	8.69	7.27	46.03	57.6	19.42	20.46
SD	0.79	0.44	11.22	12.11	1.61	1.41
Skewness	6.07	1.47	0.21	1.06	1.41	0.31
Kurtosis	1.12	4.66	1.12	0.43	1.12	1.08
Minimum	7.4	6.66	29	30	17.1	17.21
Maximum	10.0	8.56	65	70	23.28	22.86

14.3 Difference in the 50 m Dash performance

50 Meter Dash test	T-Test For Equality Of Means				
	T	df	Sig. (2-tailed)	Mean Difference	SEM
Equal variances assumed	0.78	28.00	0.44	0.05	0.07
Equal variances Not assumed	0.78	26.89	0.44	0.05	0.07

The table 4.2 shows the difference in 50 meter dash performance of control and experimental groups at the end of the intervention. The T value .782 for degree of freedom 28 is not significant at 0.05 levels. Hence it is said that consumption of wheat grass does not have any significant effect on performance of 50 meter dash.

Difference in the Bleep test performance

T-Test For Equality Of Means					
Bleep Test	T	Df	Sig.(2-tailed)	MeanDifference	SEM
Equal variances assumed	1.73	28.00	0.09	2.53	1.46
Equal variances not assumed	1.73	19.47	0.10	2.53	1.46

The table 4.3 shows the difference in Bleep test performance at the end of the intervention. The T value 1.731 for degree of freedom 28 is not significant at 0.05 levels. Hence it is said that consumption of wheat grass does not have any significant effect on performance of bleep test.

Difference in the 3000 meter performance

T-Test For Equality Of Means					
3000 m	T	df	Sig. (2- tailed)	Mean Difference	SEM
Equal variances assumed	2.15	28.00	0.14	0.99	0.46
Equal variances not assumed	2.15	22.22	0.14	0.99	0.46

The table 4.5 shows the difference in 3000 meter performance at the end of the intervention. The T- value 2.150 for degree of freedom 28 is not significant at 0.05 level. Hence it is said that consumption of wheat grass does not have any significant effect on performance of 3000 meter test.

1. Conclusion


Since the findings for consumption of wheatgrass powder on the performance of 3000m male runners from Azam Campus aging between 16-18 years is negative, the researcher concluded the study stating that there will be no effect of consumption of wheatgrass powder on the performance of athletes from Pune city.

REFERENCES

- Armstrong, L. et al. (2006). *ACSM's Guidelines for Exercise Testing and Prescription*, (7th Edition), Philadelphia: Lippincott Williams & Wilkams,
- W John, and Khan J.V. (2006) *Research in education* (10thed) Pearson practice Hall by Pearson education.
- Kaknsal D.K.(2008). *Applied measurement evolution and sports selection*, DVS publication New Delhi.
- Kreider R, Leutholtz B, Katch F, Katch V: *Exercise & Sport Nutrition*. 2009, Santa Barbara: Fitness Technologies Press
- Sherman WM, Jacobs KA, Leenders N: *Carbohydrate metabolism during endurance exercise. Overtraining in Sport*. Edited by: Kreider RB, Fry AC, O'Toole ML. 1998, Champaign: Human Kinetics Publishers, 289-308. <https://link.springer.com/article/10.1186/1550-2783-7-7>
- Ransone J, Neighbors K, Lefavi R, Chromiak J: *The effect of beta-hydroxy beta-methylbutyrate on muscular strength and body composition in collegiate football players*. *J Strength Cond Res*. 2003, 17 (1): 34-9. 10.1519/1533-4287(2003)017<0034: TEOHMO>2.0.CO;2.




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