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DIFFERENCE IN STATE OF NUTRITION BETWEEN ACTIVE AND NON ACTIVE WOMEN

INTRODUCTION

Minimized activities compared with normal or bad nutrition make people fat. This all causes lot of diseases, such as neurosis, depression, cardiovascular diseases and respiratory diseases, diseases of locomotors system, cancer of digestive system and other.

Unfortunately, nothing is being done in prevention of this diseases, although this could save lot of money. Organized physical activities like recreative education, talking part in sport, can be powerful prevention. With those activities, we make our organs function better and better health condition of all organism.

Modern women's live, bad habit, physical inactivity, put off maternity for later are the majority bad factors for women halty and working capacity .

AIM OF RESEARCH

The main target of this work is to show difference in anthropometrical characteristics and state of nutrition of women athlets and women non-athlets average ages of 30 to 35 years. They are working active but don't have maternity activities.

WORKING METHODS

We carry out this research among 22 female recreatives average age 30-35 years and 22 non active women average age 30-35Years old.

We measured 14 anthropometrics and 3functional variables.

Anthropometrics variables are: circumference of thorax in cm (AOGKŠ), circumference of upper arm in cm (AOBUT), maximal circumference of upper leg in cm (AOPOT), skin thickness of upper arm in cm (AKNNA), skin thickness of scapular angle in cm (AKNLE) and skin thickness of abdomen in cm (AKNTR). The measurements were taken by International biological program Winner J., Lourie J.(1969).(4)

RESULTS WITH DISCUSSION

Our results are showed at table 1,2,3. The table shows arithmetic average (SV) and standard deviation (SD). Importance is showed by using T-test.

Table 1. Statistic importance of difference average anthropometric variables of athletes women and non active women

Variables	Actives		Non active		T	P
	SV	SD	SV	SD		
AMAST u kg	54.43	8.05	60.25	5.64	3.92	<0.01
AVIST in cm	168.09	6.60	164.22	6.61	1.41	>0.05
AOGKS in cm	82.86	3.74	80.34	4.67	1.55	>0.05
AOTB in cm	66.80	2.40	72.00	3.70	1.78	>0.05
AONAD in cm	23.88	1.77	23.78	2.18	0.02	>0.05
AOBUT in cm	55.15	3.11	51.22	3.13	4.09	<0.01
AKNNA in cm	10.36	3.07	12.39	4.42	-1.81	<0.05
AKNLE in cm	10.53	3.11	9.70	3.48	0.82	<0.05
AKNTR in cm	8.62	2.69	12.54	5.11	-3.06	<0.01
AKNPO in cm	10.60	2.60	14.20	4.38	1.40	<0.01

The table shows arithmetic average (SV) and standard deviation (SD). Importance is showed by using T-test.

We find out difference at body composition with statistic importance at athletes group than at non active group, so we can conclude that players are similar to athlete type of body composition. Less skinfold at scapular angle at athletes with statistic importance, and less at upper limb and umbilicus, show that athletes have bigger muscle mass, what is better for health status. Bigger skinfold at lower limb at nonactive women is a result of retention of water in lower limb and problems with menstrual cycle.

Table 2. Basic statistic parameter of state of nutrition of non active women

Variables	SV	SD	Cv	MIN	MAX
BMI	24.60	3.20	6.00	23.00	25.00
KETLE	366.88	6.00	7.00	360	370
LORENC	-7	3.00	5.00	-2	-10
%FEAT	25	5.00	6.00	23	28

Table 3. Basic statistic parameter of state of nutrition of active women

Variables	SV	SD	Cv	MIN	MAX
BMI	22.00	3.00	5.00	19.00	25.00
KETLE	323.81	5.00	8.00	320.00	330
LORENC	8.00	2.00	3.00	6.00	12.00
%FEAT	18.00	3.00	3.00	15.00	22.00

Table 4. Statistic importance of difference average values of state of nutrition between active and non active women

Variables	Active women		Non active women		P	T
	SV	SD	SV	SD		
BMI	22.00	3.00	24.60	3.20	3.35	<0.001
KETLE	323.81	5.00	366.88	6.00	17.40	<0.001
LORENC	8.00	2.00	-7	3.00	12.84	<0.001
%FEAT	18.00	3.00	25	5.00	4.00	<0.001

We can see that active women are much thinner than non active women and have less %fat, and have less values of circular dimension of abdomen and less values of skin thickness at umbilicus.

CONCLUSION

We can conclude that:

1. Active women are statistically better anthropometric parameters than non active women, with less values of skinfold.
2. Average values of heart beat per minute are smaller at active female group. The average values of maximal oxygen uptake, in both absolute and relative, are higher in active group.
3. Women who are active female are similar to athlete type of body structure than non active women, and better function of organ system and better health status.

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Modern sedentary women's live, physical inactivity, put off maternity for later are the majority bad factors for women health and working capacity .

The main target of this work is to show difference in anthropometrical characteristics and state of nutrition women athletes and women non-athletes average ages of 30 to 35 years. They are working active but don't have maternity activities.

The results of this longitudinal investigation show that women who takes any activity are better than non active women. We find difference in circular dimension, skin fold, % body fat and BMI.

Key words: sport, women, anthropometry, functional abilities, oxygen uptake

RAZLIKE U STANJU UHRANJENOSTI ŽENA REKREATIVACA I NEAKTIVNIH ŽENA

Sedentarni način života, loše navike u ishrani, fizička neaktivnost ali i odlaganje materniteta na račun karijere za kasnije godine života, glavni su faktori koji negativno utiču na zdravstveni status, ali i radnu sposobnost žena.

Cilj ovog rada je da se utvrdi razlika u morfološkim karakteristikama i stanju uhranjenosti žena koje su aktivno uključene u rekreativni program fizičke aktivnosti i žena koje su neaktivne starosne dobi od 30 do 35 godina koje su radno angažovane ali sebe još nisu reproduktivno realizovale.

Rezultati ovog longitudinalnog istraživanja pokazuju da je zdravstveni status žena rekreativaca znatno bolji u odnosu na neaktivne žene. U morfološkom prostoru razlika postoji u cirkularnim dimenzionalnostima, debljini kožnih nabora, procentu masti u organizmu kao i u indeksu stanja uhranjenosti.

Ključne reči: fizička aktivnost, žene, antropometrija, funkcionalne sposobnosti.