



ISSN: 2319-9490

Available online at <http://www.ijcrs.com>

*International Journal of Current Research in Life Sciences*  
Vol. 07, No. 04, pp.1575-1577, April, 2018



## RESEARCH ARTICLE

### CONICITY INDEX AS INDICATOR NUTRITIONAL STATUS

**\*Dr. Kankana De and Soma Chakraborty**

Research Scholar, Vidyasagar University, India

Received 20<sup>th</sup> February, 2018; Accepted 07<sup>th</sup> March, 2018; Published 15<sup>h</sup> April, 2018

#### ABSTRACT

Conicity index is an index of central obesity, it helps in measure of abdominal obesity. Conicity index and WHR as predictors of blood pressure level, in relation in weight and height conicity index help to evaluate waist circumference. central fat distribution is increased risk of ill health, as a whr it helps to find androgenic risk factors. central obesity is a discriminatory power to estimate to cardiovascular diseases. Subjects adolescents girls baudi village of west Medinipur, 1000 girls of 10 years to 18 years, different anthropometric measurements are taken for that study, Girls are divided into 2 categories premenarcheal girls and postmenarcheal girls, this study will show if there are any effect abdominal fat on menarche.

**Methodology:** For this study height, weight, waist hip circumferences are measured, weight is measured by weighing machine, height is measured by stadiometre, other circumferences are measured by still tapes, weight will be taken by bare foot. Height is taken by measuring length from floor to vertex. Result: Age wise of conicity is change and it is significant, postmenarcheal girls conicity index are higher, percent body fat has positive correlation with conicity index but conicity mean with every age not increase to much, but body mass index are negative correlation with conicity index. conicity index is indicator central obesity but mean of this conicity index is low so that study girls not centrally obese.

**Discussion:** conicity indicator of central obesity, here conicity index mean value is low so there are lack of chances of children cardiovascular disease in future but postmenarcheal girls has higher conicity index, but body mass index not related to conicity index so it is clear that if body mass index higher it does not mean central obesity will be high.

**Key words:** Postmenarcheal, Conicity index, Subjects adolescents.

**Copyright © 2018, Dr. Kankana De and Soma Chakraborty.** This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

**Citation:** Dr. Kankana De and Soma Chakraborty, 2018. Conicity index as indicator nutritional status” *International Journal of Current Research in Life Sciences*, 7, (04), 1575-1577.

#### INTRODUCTION

Conicity index is an index of central obesity, it helps in measure of abdominal obesity. Conicity index and WHR as predictors of blood pressure level, in relation in weight and height conicity index help to evaluate waist circumference. central fat distribution is increased risk of ill health, as a whr it helps to find androgenic risk factors. central obesity is a discriminatory power to estimate to cardiovascular diseases. To understand the various abdominal obesity measures, each measure was decomposed into relevant body frame factors and weight. Subjects adolescents girls baudi village of west Medinipur, 1000 girls of 10 years to 18 years, different anthropometric measurements are taken for that study, Girls are divided into 2 categories premenarcheal girls and postmenarcheal girls, this study will show if there are any effect abdominal fat on menarche. Methodology: For this study height, weight, waist hip circumferences are measured, weight is measured by weighing machine, height is measured by stadiometre, other circumferences are measured by still tapes, weight will be taken by bare foot.

Height is taken by measuring length from floor to vertex. Hip is measured largest measurement of hip midpoint between largest rib and iliac crest. Align the bottom edge of the measuring tape with the top of the hip bone. Wrap the tape measure all the way around the waist.

#### RESULTS

Age wise of conicity is change and it is significant, postmenarcheal girls conicity index are higher, percent body fat has positive correlation with conicity index but conicity mean with every age not increase to much, but body mass index are negative correlation with conicity index. conicity index is indicator central obesity but mean of this conicity index is low so that study girls not centrally obese.

#### DISCUSSION

conicity indicator of central obesity, here conicity index mean value is low so there are lack of chances of children cardiovascular disease in future but postmenarcheal girls has higher conicity index, but body mass index not related to conicity index so it is clear that if body mass index higher it does not mean central obesity will be high.

**\*Corresponding author: Dr. Kankana De,**  
Research Scholar, Vidyasagar University, India.

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Age	1009	10	19	14.54	2.892
conicityindex	1009	.0103	.1788	.134800	.0151283
Valid N (listwise)	1009				

**Descriptives**

conicityindex	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
					10	100		
11	100	.138648	.0139868	.0013987	.135873	.141423	.1041	.1761
12	100	.137757	.0132110	.0013211	.135136	.140378	.1108	.1637
13	100	.134054	.0139862	.0013986	.131279	.136829	.0852	.1673
14	100	.137330	.0157937	.0015794	.134196	.140464	.0951	.1722
15	100	.133125	.0153483	.0015348	.130080	.136170	.0955	.1640
16	100	.131930	.0193322	.0019332	.128094	.135766	.0103	.1673
17	100	.134721	.0131416	.0013142	.132113	.137329	.1029	.1609
18	100	.131213	.0140980	.0014098	.128416	.134010	.1039	.1671
19	103	.130783	.0122201	.0012041	.128395	.133172	.0982	.1546
Total	1003	.134779	.0151429	.0004781	.133841	.135717	.0103	.1788

**Conicityindex relation with Menarcheal Status**

Age	Menarealstatus	Mean	N	Std. Deviation
10	1	.137056	50	.0167368
	2	.139644	50	.0171882
	Total	.138350	100	.0169281
11	1	.137497	70	.0144160
	2	.141333	30	.0127562
	Total	.138648	100	.0139868
12	1	.138491	80	.0131258
	2	.134820	20	.0134795
	Total	.137757	100	.0132110
13	1	.134708	88	.0135041
	2	.129258	12	.0170205
	Total	.134054	100	.0139862
14	1	.135628	92	.0148771
	2	.156900	8	.0132203
	Total	.137330	100	.0157937
15	1	.133235	97	.0153355
	2	.129567	3	.0187788
	Total	.133125	100	.0153483
16	1	.131930	100	.0193322
	Total	.131930	100	.0193322
	17	1	.134730	99
17	2	.133800	1	.
	Total	.134721	100	.0131416
	18	1	.131388	99
2		.113900	1	.
Total		.131213	100	.0140980
19	1	.130655	101	.0123069
	Total	.130655	101	.0123069
	Total	1	.134187	876
Total	2	.138890	125	.0162939
	Total	.134774	1001	.0151576

**Correlations**

		BMI	conicityindex
BMI	Pearson Correlation	1	-.163**
	Sig. (2-tailed)		.000
	N	1018	1009
conicityindex	Pearson Correlation	-.163**	1
	Sig. (2-tailed)	.000	
	N	1009	1009

\*\* Correlation is significant at the 0.01 level (2-tailed).

**Correlations**

		conicityindex	pbf_A
Conicityindex	Pearson Correlation	1	.029
	Sig. (2-tailed)		.360
	N	1009	1009
Percent body fat	Pearson Correlation	.029	1
	Sig. (2-tailed)	.360	
	N	1009	1009

## REFERENCES

- K De Assessment of Nutritional Status of Adolescent Girls by Mid-Upper Arm Circumferences of PaschimMedinipur, India. Primary health care-open access 6 (4), 1-2
- KDe Physical growth and relation of menarche with anthropometry Anthropology 4 (4), 1-2.
- K De Nutritional status and menarcheal age of rural adolescent girls of Paschim Medinipur, Westbengal, *India Indian journal of youth and adolescent health* 3 (3), 42-45
- K De Nutritional status and menarcheal age of rural adolescent girls of Salboni block of PaschimMedinipur, West Bengal, India, *J Child Adolesc Behav* 4 (5), 1-4.
- K De, S Das, K Bose, R Chakraborty Nutritional status of rural bengalee girls aged 10-18 years of Salboni, Paschim Medinipur, Westbengal, India
- K De A Comparative Study on Nutritional Status of Adolescents Girls of Different Rural Area of West Bengal Anthropology 4 (4), 1-3
- Influence of socio-economic status on nutritional status of rural adolescent girls D Kankana Anthropology 4 (3), 5
- K De Measurement of body composition by upper arm anthropometry current pediatric research 21 (1), 112-114
- K De Effect of parents economic status on teenage school girls growth. *Epidemiology: Open Access* 7 (1)
- K Dewaist Circumference and waist hip ratio and body mass index help in assessing nutritional status and central obesity of adolescent *Global journal of Archaeology and anthropology* 1 (1), 1-3
- K De Comparison of menarcheal status of adolescent girls *Journal of Pregnancy and Child health* 4 (1), 1-3
- Effect of Socio-Economic Status on Nutritional Status on Adolescent Girls of PaschimMedinipur, West Bengal, India
- K De Vitamins and minerals 5 (3), 1-3 Study of bio-social behavior of rural adolescent girls
- K De Journal of community and public health nursing 3 (2), 1-3.
- K De Study Nutritional Status by Waist Circumference and Waist Hip Ratio *Journal of Health and Medical informatics* 8 (1), 1-2
- K De Anthropometric Status of Adolescent Girls of Rural India, *Journal of traditional medicine and clinical naturapathy* 6 (1), 1-3
- K De Management control system:a case study of Rural Hospital of Salboni Block, Paschim Medinipur, West Bengal *Annals of clinical of laboratory research* 5 (1:150), 1-6
- K De Health awareness among tribes rural *India J Mol Genet Med* 11 (244), 1747-0862.1000244.
- K De Armspan with relation with menarche Scholar journal of arts, humanities, *social science* 10 (5), 1371-1373
- K De Relationofmean age at menarche with anthropometric index *Journal of Psychiatry:Open Access Journal* 20 (4)
- K DE Role of couselling in managing stress to buiness professional *Annals of clinical and laboratory research* 5 (2:172), 1-3K De Growth pattern and relation with age at menarche *Pediatric and Health research* 2 (1), 1-4
- K De Study of anthropometriccharacteristicPremenarcheal and postmenarcheal girls of West Medinipur, *India Journal of Probiotic and Health* 5 (1), 1-3
- K De Health status evaluation of adolescent girls by rohrer index *Journal of Community Medicine and health education* 7 (2), 1-5
- K De Study variation of Anthropometric variables at time of puberty *Journal of General practice* 5 (10.4172/2329-9126.1000297), 2-4
- K De Study of body composition of Adolescent cellular and molecular medicine-open access 3 (1), 1-3
- KDE Relation of anthropometric and socio-economic status on adolescent *Journal of Pediatric medicine and care* 1 (1), 1-3
- K De Effect of parents socio-economic status on teenage girls growth *Epidemiology-open access* 7 (1), 1-3

\*\*\*\*\*