

# Comparative study of working and non-working women and its relation with obesity

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■ **ABSTRACT** : Obesity or over nutrition is a menace to health and it is a public health problem of the well to do people. Obesity is a condition in which there is excessive weight gain in the body. An increase of 10 per cent over the ideal weight or optimal weight is termed obesity. Excessive weight gain is mainly due to high intake of food. When more energy is taken through food and less is utilized through activities, the excess energy is converted into fat and is deposited as adipose tissues. Modern medicine emphasizes this statement. Apart from physical handicaps, it produces psychological setbacks. Working and non-working women were selected for the study because obesity is a burning problem, not only in India but all over the world. In the present study, 30 working and 30 non-working women were studied. A questionnaire was designed to collect the information along with personal interview of the subjects like standard weight for females, socio-economical status, various reasons of increasing the weight, food habit, physical and mental health and obesity. Age of onset of obesity was between 30 and 40 years, which could be due to hormonal changes. Other important causes of obesity seen in the study were irregular menstruation and caesarian. Consumption of junk food and high calorie bakery items are also responsible for obesity. Obesity invites several physical and mental health problems. Awareness about preventive and curative measures for obesity was found less. Sedentary life style and use of television as a means of entertainment has major role to play in causing obesity.

■ **KEY WORDS** : Obesity, Women, Overweight, Nutrition calorie

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Obesity or over nutrition is a public health problem of the well to do people. Obesity is a condition in which there is excessive weight gain in the body. An increase of 10 per cent over the ideal weight or optimal weight is termed obesity. Excessive weight gain is mainly due to high intake of food. When more energy is taken through food and less is utilized through physical activities, the excess energy is converted into fat and is deposited as adipose tissues. Excessive weight is a predisposing factor for cardio-vascular disease, osteoarthritis, diabetes, gout, liver and gall bladder disease and hernia. Surgery is always a risk with obese people. There is an old saying, "The longer the belt, the shorter the life." Modern medicine emphasizes this statement. In obese persons physical activity is limited and fatigue, backache and foot aches are common after little exertion. Apart from physical

handicaps, it produces psychological setbacks.

Below is a list of the states of India ranked in order of percentage of people who are overweight or obese, based on data from the 2007 National Family Health Survey.

State	Males (%)	Males rank	Females (%)	Females rank
India	12.1	14	16	15
Gujarat	15.1	10	17.7	7

Working and non-working women were selected for the study because obesity is a burning problem, not only in India but also all over the world. In the present study, 30 working and 30 non-working women, aged 20 to 60 years old were studied. A questionnaire was designed to collect the information along with personal interview of the subjects. The questions were related

to standard weight for females, socio-economic status, various reasons of excessive weight, food habits, physical and mental health, other activities and obesity.

It was observed from Table 1 higher number of obese women were in the age group of 30 to 40 years, in working and non-working women. The beginning period of obesity was 31 to 40 years in working and non-working women due to

hormonal change. The reason of increasing weight was irregular menstruation and caesarian in working women, while food habit was the main reason in non-working women. Higher number of obese women was found in nuclear family of working and non-working women. Because they had no worries about adjustment with other family members and felt liberty with their work in life (Table 2).

<b>Table 1 : Information about age</b>					
	Age				
	20 to30 years	31 to 40 years	41 to 50 years	51to 60 years	Above 60
Working women	03	12	10	03	02
Non-working women	02	10	08	08	02
Beginning period of increasing weight					
	20 to30 years	31 to 40 years	41 to 50 years	51to 60 years	Above 60
Working women	01	19	03	03	04
Non-working women	02	20	02	01	05
Reasons of increasing weight					
	Heredity	Food habits	Irregular enstruation	Caesarian	Miscarriage
Working women	01	05	09	13	02
Non-working women	00	10	08	11	01

<b>Table 2: Information about Socio-economic status and obesity</b>				
Marital status	Single	Married	Widow	Separate
Working women	03	22	03	02
Non working women	02	26	02	00
Type of family				
	Nuclear family		Joint family	
Working women	26		04	
Non working women	23		07	
Economical status				
	Lower class	Middle class	Higher class	
Working women	05	15	10	
Non working women	05	12	13	

<b>Table 3 : Information about food habits</b>				
Food habit	Alternate day	Once in a week	Once in a fortnight	Once in a month
Deep fried recipes				
Working women	00	00	22	08
Non-working women	04	21	03	02
Bakery items				
Working women	00	17	09	04
Non-working women	06	15	05	04
Ice-cream, cold drinks				
Working women	10	06	08	06
Non-working women	00	02	07	21
Fast food/ junk food				
Working women	09	10	06	05
Non-working women	12	10	06	02

Higher number of obese women was found in middle class working women and in higher economical group in non-working women because they had no financial problems (Table 2).

It is clear from the observation of Table 3 that weekly intake of deep fried recipes was more in non-working than working women. Fortnightly intake of deep fried recipes was more in working than non working women. More than 50 per cent of working and non-working women consumed bakery items once in a week.

Amount of ice-cream and cold- drink consumption was more in working than non-working women. High amount of

fast food and junk food consumption was observed in both the groups.

Information regarding physical and mental health has been depicted in Table 4. Higher number of working women suffered from B.P., diabetes, arthritis, problems due to mental stress, target approach, time bound, double responsibility and insecurity in job. Higher number of non working women suffered from depression and negative thought than the working women due to menopause and free hours.

Working women watched television for 1 to 2 hours, while the duration was 6 to 7 hours in non-working women. Working women worked with computers for 6 to 7 hours, while

Table 4 : Information about physical and mental health									
Disease	B.P.		Diabetes		Heart problems		Arthritis		
	Yes	No	Yes	No	Yes	No	Yes	No	
Working women	24	06	20	10	03	27	15	15	
Non-working women	19	11	10	20	04	26	21	09	
	Depression				Negative thoughts				
	Yes		No		Yes		No		
Working women	05		25		02		28		
Non -working women	12		18		16		14		

Table 5 : Information about activities				
Activities	1 to2 hours/day	4 to 5 Hours/day	6 to 7 Hours/day	Above 7 Hours/day
	T.V.			
Working women	25	05	00	00
Non-working women	10	08	09	03
	Computer			
Working women	04	10	12	04
Non-working women	12	08	09	01
	Siesta			
Working women	28	02	00	00
Non-working women	08	04	10	06

Table 6 : Information about general awareness				
Awareness	Working women		Non-working women	
	Yes	No	Yes	No
Do you know about diet plan?	10	20	02	28
Do you know about calories?	19	11	03	27
Go to Jogging regularly?	15	15	17	13
Go to gymnasium regularly?	03	27	06	24
Go to swimming regularly?	01	29	02	28
Go to health centre regularly?	22	08	04	26
Do Yoga regularly?	02	28	04	26
Feel Fatigue?	22	08	12	18
Have you any gynaecol problem?	24	06	22	08
Do you take any medicine to reduce the weight?	03	27	07	23

the duration was 1 to 2 hours in non-working women.

Twenty eight working women took rest only for 1 to 2 hours while 6 non-working women took rest for above 7 hours. Low levels of physical activity, either in the form of exercise or day to day activities may also lead to obesity (Table 5).

The following observation were drawn from the results presented in Table 6.

Awareness about diet plan and calories was more in working women. Very less number of working and non-working women go to gymnasium, swimming and do Yoga. Number of working women going to health care centre was more than that of non-working women. Working women feel more fatigue than non-working women. Majority of women suffered from gynaec. problem. Very few women took some medicine to reduce the weight.

### Conclusion :

Age of onset of obesity was between 30 and 40 years, which could be due to hormonal changes. Other important causes of obesity seen in the study were irregular menstruation and caesarian. Consumption of junk food and high calori ed bakery items are also responsible for obesity. Obesity invites several physical and mental health problems. Awareness about preventive and curative measures for obesity is less. Sedentary life style and use of television as a means of entertainment has major role to play in causing obesity.

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