



## Status of Metabolic Disorders and Excessive Watching TV, LCD, LED among Working Women in NER Divisional Manage Office at Lucknow, India

Kaur Bhagyapreet<sup>1</sup>, Verma R.K.<sup>2</sup> and Mishra Ravi<sup>2</sup>

<sup>1</sup>Lucknow University, U.P, INDIA

<sup>2</sup>K.G's.Medical University, U.P. Lucknow, INDIA

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### Abstract

*The status indicating that 64% of adult American population is overweight or obese. This is a primarily health concern since obesity is associated with an increased risk for a number of diseases including metabolic disorders such as diabetes II, hypertension, cardiovascular diseases and contribute to over 4,00,000 death annually in the United States. This epidemic can be attributed perhaps due to excessive food intake, poor and unhealthy nutrition, decreased activity, non-exercising life style and genetics. However, there is a strong correlation between excessive food intake and amount of time per day spent watching television LCD,LED etc. that should be need to assess the role of excessive watching TV,LCD, LED for health and nutritional consequences among working women in Northern-Eastern Railway Divisional Office at Lucknow Division of State Uttar Pradesh, India. There is relatively a higher ratio of overweight or obesity problem can be seen among working women. This paper is an effort to aim on aforementioned issue. The subjects were selected from NER divisional office of Lucknow region of State Uttar Pradesh of India. The validation cohort; n=100. The main finding of the paper; The intake of food in respect of RDA and RDI was found much more higher among 78% subjects. It was due to the higher time spent on watching TV, LCD, LED. The metabolic disorders such as overweight or obesity; 58% diabetes, 26% hypertension, 29%, Gout 3% and arthritis; 6% According to time spent on watching television, 28% two hours, 18%- 2-3 hours, 26%; 3-6 hours and rest 28% more than six hours. The most liking of the programmes 22% social programmes, 46% film show, 14% news, 14% educational programme and rest 6% other. It was found that the higher the time of watching television, LCD or LED, higher the intake of fried food as well as fast and junk foods and having higher risk for metabolic disorders such as obesity, diabetes, hypertension etc. It was also justified that the calculated value of chi-square was much higher (22.0) as compared to table value (3.841) at one degree of freedom and five-percent significant level. Therefore null hypothesis rejected and alternate hypothesis accepted that is higher watching TV, LCD and LED bringing the higher risk for health and nutritional consequences among NER working women at Lucknow India.*

**Keywords:** Nutritional and health consequences, metabolic disorder, dietary intake (RDI), diabetes, hypertension, overweight, obesity, gout, arthritis, metabolic disorders.

### Introduction

From a slow beginning, the Indian television industry has achieved significant growth. In 2001, the size of television industry was estimated just about US \$2.0 billion. In the same year, the industry grew by 38 percent, but this growth was not evenly spread across all segments. Television broadcasting, cable television and television software grew by 19 percent, 68 percent and 27 percent respectively<sup>1</sup>. This has also led to the growth in allied sectors such as television programming and cable television. Presently, with more than 116 million television homes and over 100 cable TV channels. India has become one of the largest television markets in the world<sup>2</sup>.

The modes of operation and funding structure of public service broadcasting- Doordarshan and private television companies are widely different. Doordarshan is partly funded through a

budgetary government grant; on the other hand private broadcasters do not receive any direct financial support from the government. Another difference is that, unlike private television companies, Doordarshan has a three-tier programming service: national, regional and local. Private television channels like Zee and ETV are also trying to emulate such telecast model.

In 2000, the National Task Force on Prevention and Treatment of Obesity reported that 64% of adult American Population is overweight or obese<sup>1</sup>. This is a primary health concern since obesity is associated with an increased risk for a number of diseases, such as type 2 diabetes, certain cancers, and cardiovascular diseases, and contributes to over 400,000 deaths annually in the United States<sup>2</sup>. This epidemic can be attributed to many factors including excessive food intake, poor nutrition, decreased activity and exercise and genetics. However, there is a strong correlation between excessive food and the amount of

time per day spent watching television<sup>1</sup>. Obesity is fundamentally viewed as an energy imbalance, whereby caloric consumption exceeds expenditure, the sedentary nature of television viewing may decrease energy expenditure and potentially increase caloric intake if food is eaten at the same time. Longitudinal Studies indicate that television viewing is associated with increased body mass in adults and adolescents which suggests that television viewing affects energy intake, energy expenditure (activity levels), or both. Most laboratory-based studies indicate that television viewing increases energy intake during test meals, although participant characteristics, study sample size, and effect sizes vary considerably<sup>3,4</sup>.

Television viewing might increase energy intake through a number of mechanism, including the effect of advertisements on behaviour, mood alteration, or by fostering passive over consumption and dishabituation to food cues. Exposure to food advertisement increased, the energy intake and induction of positive and negative emotional arousal with films increased women's energy intake with increasing levels of dietary restraints might also increased food intake by decreasing awareness of the amount of food that is being ingested or by disrupting habituation to food cues<sup>5</sup>.

It may be noted that individual characteristics are associated with energy intake and body weight that may play a significant role in the effect that environmental stimuli have on energy intake such as television viewing etc. Television viewing has the potential to generate both positive and negative effects, and many studies have looked at the impact of watching television on society. Not all television programmes are bad, but data showing the negative effects of exposure to violence, inappropriate sexuality and offensive language are convincing.

It was generally observed that adolescents girls and women those were watching excessive television programmes were less physically fit in spite of intake of high fat and high caloric diet and high energy snack foods. Television watching makes substantial contributions to obesity because prime time commercials promote unhealthy dietary practices. The fat content of advertised food products exceeds from the requirement diet and nutritional recommendations, and most food advertising is for caloric foods such as fast foods, candy, beverages etc. The number of hours of television watching also corresponds with an increased relative risk of higher cholesterol levels. Television watching can also contribute to eating disorders. Eating meals while viewing television should to discouraged because it may lead to less meaningful communication and, arguably, poorer eating habits. The major factors that contribute to nutritional impact on watching television: Increased exposure to advertisements for high fat and sugar containing foods leading to poor food choices; The average per head viewing about 15,000 commercials in every year; Sugary cereals are strongly marketed; Increasing television viewing during meals is associated with an increased consumption of foods high in fat and sugar and a decreased

consumption of fruits, vegetables and milk; Television viewing is associated with increased consumption of snacks ; The more time a watching television have a more chances for overweight. Overweight or obese have a higher risk of developing metabolic disorders such as diabetes, hypertension etc<sup>6</sup>.

A number of studies have found a positive relationship between the prolonged time of television watching and overweight or obesity status<sup>4</sup>. The more than 2 hours of television watching per day was associated with high mean BMI and was also associated with high mean BMI and was also associated with significantly higher energy intake at dinner and from snacks. Then one hour of television viewing<sup>7</sup>. The adult males who watched television more than three hours per day had twice the probability of being obese as those who watched less than one hour per day<sup>8</sup>.

**Aims and Objectives:** The objective of the paper to assess the role of excessive watching TV, LCD, LED divisional for health and nutritional consequences among working women in working NER divisional office Lucknow of State UP of India.

**Hypothesis: Null Hypothesis:** Higher watching television not bringing health and nutritional consequences among working women working in NER divisional office, Lucknow (India).

**Alternative Hypothesis:** Higher watching television bringing health and nutritional consequences among working women in NER divisional office, Lucknow (India).

## Methodology

**Study Area:** Women working in NER divisional office at Lucknow, UP (INDIA).

**Sample Size:** A hundred subjects were purposively selected for the purpose of study.

**Tools:** An interview schedule method was used to record opinion and information from respondents in face to face situation.

**Parameters:** BMI, RDA, RDI, etc.

**Research Design:** Exploratory cum explanatory research design.

**Analysis of Data:** The collected data was tabulated and analysed in accordance with statistical and scientific method.

Chi square test was used to test the hypothesis.

## Results and Discussion

**Findings:** The study was confined to government NER women employees; those were working in different NER offices at

Lucknow (India). The ages of subject; 31% upto 30 years of age, 28%; 30-40 years of age, 26%; 40-50 years of age and 15%; 50-60 years of age. According to religion and caste; 86% hindus and 14% muslims and castes 32% upper caste, 26% middle caste i.e. backward castes and rest 40% lower i.e. schedule castes respondents. According to work, 20% in managerial or officers work, 35% technical, 7% teacher, 31% ministerial and rest 7% fourth class employees. According to Body mass index, the obesity status; 22% under weight, 32% healthy and rest 46% overweight or obese. The nutritional practices as vegetarians 58% and 42% non-vegetarians. The intake of cereals 20% taking upto 100 gm, 25% taking 150-200 gms, 35% taking 200 to 250 gms and rest 20% taking cereals above 250 gms. The intake of pulses 15% taking upto 50 gms, 20% 50-75 gms, 40% taking 75-100 gms and rest 25% taking more than 100 gms pulses. All the subjects were found to take highly fried food and taking oils and fats; 37% upto 50 gm and rest 63% more than 50 gms. The intake of fruits and vegetables were as they desired preferably seasonal fruits and vegetables. The intake of meat and poultry were taking as desired.

On the other hand, the milk and dairy products not satisfactory. The 16% subjects were taking a glass of milk and rest taking milk only in tea. Other dairy products intake was occasional. The intake of fast and junk food was very much preferably chowmeen, noodles, pizza, hot dogs, burger etc. The frequency of dietary intake was 4 to 5 times per day. Whereas the tea and samosa taking twice or thrice or more per day due to socializing and easily available nearby office. The intake of food in respect of RDA and RDI was found much higher among 78% subjects it was perhaps due to higher time spent in watching television. The metabolic disorders such as overweight or obesity; 58%; diabetes; 26% hypertension 29%; Gout 3% and arthritis; 6%. According to time spent on watching television, 28%- two hours, 18% - 2-3 hours; 20% 3-6 hours and rest 28% more than 6 hours. The most liking of the programmes: 22% social programme, 46% film show, 14% news, 14% educational programmes and rest 4% watching other programmes. It was found that the higher the time watching television, higher the intake of fried food as well as fast and junk food and having higher risk for metabolic disorders such as obesity, diabetes and hypertension etc. diseases. It was also justified that the calculated value of chi square was much higher (22.0) as compared to table value (3.841) at one degree of freedom and five percent significant level.

## Conclusion

This study concluded that null hypothesis rejected and alternate hypothesis accepted that is higher watching television bringing the risk health and nutritional consequences among working women in urban areas.

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