



EFFECT OF EATING FREQUENCY WITH WFPD AND WEIGHT LOSS: RESULTS OF 6 MONTHS FOLLOW UP OF A PUBLIC HEALTH CAMPAIGN AT GANJAM.

Community Medicine

| | |
|----------------------|--|
| M.Nayak | PG Student, Department of Community Medicine, MKCG Medical college, Berhampur, Odisha, India. |
| R.M.Tripathy* | Professor, Department Of Community Medicine, MKCG Medical College, Berhampur, Odisha, India.* Corresponding Author |
| Dr.D.Jena | Associate Professor, Department of Community medicine, MKCG Medical College, Berhampur, Odisha, India. |

ABSTRACT

Background: Obesity is a major health problem in developed as well as developing countries. The "carbo-insulin connection" theory was popularized to reduce burden of obesity. As per this theory, idea of eating only twice a day to lose weight and prevent obesity is well proved. After knowing it, the author is conducting lectures for lay people educating them about eating twice a day with WFPD (whole food plant based diet) and losing weight. Author has addressed audiences in many places of Berhampur. The present study provides the encouraging results of this public health campaign.

Methods: This study was a self-controlled community trial. The tenure of the study was from 1st February 2016 to 30th Jan 2017. The subjects were enrolled in the study after taking their informed consent during the author's lectures on weight loss arranged in various cities and towns of Ganjam District Odisha. The author got pretested questionnaires filled from the audience who attended his lectures on weight loss. The follow up was done on phone every fortnightly. Total 152 individuals participated in this campaign.

Results: The weight loss and decrease in waist circumference in participants was as below: Weight loss: Average 1.5 kg in first month, 4.2 kg in 3 months and 6.8 kg in 6 months. Inches loss: Average 0.5 cm in 1st month, 1.5 cm in 3 months and 3.5 cm in 6 months. No side effects were observed.

Conclusions: The weight loss activities have taken a form of exploitative business for many. Poor and ignorant people are being lured. This simple method of weight loss costs nothing, there is no requirement of a doctor and contrary to many other successful methods of weight loss, can be followed for a life time. Hence such a simple method should be advocated for all. There is a need to spread this message in the form of a public health campaign.

KEYWORDS

Eating Frequency, Wfpd (whole Foods Plant Based Diet), Weight Loss, Public Health Campaign.

INTRODUCTION

Obesity is a major health problem in developed as well as developing countries.¹ Obesity is recognized as a major preventable risk factor that contributes to a broad range of common chronic diseases in the United States, including hypertension, cardiovascular disease, and diabetes mellitus. Increased risk of insulin-resistant states, including glucose intolerance and Non-Insulin-Dependent Diabetes Mellitus (NIDDM) in obese subjects, has also been well documented.² Insulin is the Hormone mainly responsible for obesity by storing fat in the body. In its absence or when its levels are low, the body switches over to fats as a source of energy. Insulin is secreted in large quantities if one consumes food item that contains refined carbohydrate. Proteins and fats have less effect on insulin secretion. The "Diet-insulin connection" theory was popularized by late Dr. Shrikant Jichkar from 1997 to 2004. He advocated the idea of eating only twice a day to lose weight and prevent obesity.³

I tried this theory on myself from January to March 2016 and lost 10 kg of weight and 2 inches from my belly! Impressed by the success of this simple method of losing weight and preventing obesity, I conduct several lectures for lay people educating them about eating twice with WFPD and losing weight.

I had addressed audiences in many places of Berhampur. The present study provides the encouraging results of this public health campaign. The results are from 6 months follow up of this campaign which involves 152 individuals.

Objective of the study:-

- To find out

The Effect of Eating frequency with WFPD and weight loss in the study population.

METHODS

- Type of study:** Self controlled Community trial
- Place of study:** Various places of Ganjam District.
- Study subjects:** More than 18 yrs of age who are overweight & obese.
- Time period:** 1st February 2016 to 30th Jan 2017.

- Study instrument:** A pre-designed and pre-tested questionnaire.

This study was a self-controlled community trial. The tenure of the study was from 1st February 2016 to 30th Jan 2017. The enrollment was done from 1st Feb. 2016 to 30th July 2016. The subjects were enrolled in the study after taking their informed consent during the author's lectures on weight loss arranged. The author got pretested questionnaires filled from the audience who attended his lectures on weight loss. The questionnaires included demographic information and detailed diet history with special emphasis on frequency of eating, the quantity and types of food items consumed. During lecture, the author used to guide the participants to find out how many times they are secreting insulin and then deciding upon the timings of lunch and dinner. He used to collect the questionnaires from the willing participants. The follow up was done on phone every fortnightly. Total 152 individuals participated in this campaign.

The theory in nutshell

This weight loss theory is based on a very simple principle. Every time we consume any food item we secrete insulin. The amount of insulin secretion depends on kind of food

Refined food > whole food
Carbohydrate > protein > fat

More times of meals multiple times Insulin secreted
Leads to increase insulin level in blood. as its a lipogenesis lipid storing hormone more insulin l/t more obesity. Prolonged duration of More insulin l/t INSULIN RESISTANCE.....which l/t T2DM, HTN, cancer etc.

Hence Insulin Resistance is the Cuprit.

If we eat breakfast or complete lunch or dinner, the quantity of insulin secreted is almost the same.⁴

Insulin secretion is of two types. There is a baseline secretion 18 to 32 unit per 24 hours which is beyond our control.⁵ Secondly with each episode of eating, we secrete insulin. As our blood always has high level of insulin, the body uses carbohydrates as a source of energy and fats remain untouched. Insulin being the saving hormone, tries to store energy in the form of fats by converting unused Carbohydrate

When we treat a diabetic patient with injectable insulin, one of the side effects is weight gain. When we are fasting say 3 to 4 hours after lunch or dinner, our insulin level goes down.

The lowered level of insulin stimulates the body to use firstly liver glycogen and then fats for the purpose of energy. Hence when a person eats only twice in the day, s/he loses weight.

Diet advice in the campaign

- Identify the time of the day when you are really hungry; usually a person is truly hungry twice in the day. Some people have a pattern of 9 am, 6 pm and others have a pattern of 1 pm and 9 pm.
- Eat WFPD (Whole food plant based diet) as much as you can at these two times; you have to just divide the quantity in two. i.e. avoid all Animal food and Refined food.
- More quantity (say 60 to 70%) should be at the time of 1st meal (Breakfast/lunch) and remaining at 2nd meal (dinner).
- You should not take tea/coffee with sugar, or any other snacks eatables in between the two meals.
- You should also not use sugar substitutes as the sweet taste stimulates the secretion of insulin.
- If at all you feel hungry in between two meals, you can take plain water.
- Check your weight every 15 days on the same weighing machine. Check your waist circumference every month.

RESULTS

Out of the total 165 participants, 13 were lost to follow up. The reasons were: inability to control the hunger (7) & could not follow the diet plan due to tour and festivals (6). Finally 152 participated in study and their results as follows.

Table 1 shows the distribution of participants as per age and sex.

Table 1: Distribution of participants as per age and sex.

| AgeTgroup | MalesT(%) | FemalesT(%) | Total |
|--------------|------------------|-----------------|-----------------|
| 20-29 | 14(13.7) | 8(16) | 22(14.5) |
| 30-39 | 20(19.6) | 8(16) | 28(18.5) |
| 40-49 | 27(26.5) | 25(50) | 52(34) |
| 50-59 | 26(25.5) | 4(8) | 30(19.7.7.7) |
| 60Tonwards | 15(14.7) | 5(10) | 20(13.1) |
| Total | 102T(100) | T50(100) | 152(100) |

Most of the participants were in the age group of 40 and above. Females were more than the males.

For most of the participants the first 4 to 5 days was a testing time when they switched over to tea or coffee without sugar. After first week most of them had a feeling of lightness in the body and they also reported increased work efficiency.

The weight loss and decrease in waist circumference in participants was as below:

Weight loss: Average 1.5 kg in first month, 4.2 kg in 3 months and 6.8 kg in 6 months

Inches loss: Average 0.5 cm in 1st month, 1.5 cm in 3 months and 3.5 cm in 6 months

No side effects were observed.

DISCUSSION

It is evident from the results that eating twice a day can effectively reduce the weight as well as tummy. Moreover it is a method with special features that one doesn't have to spend money, there is no need of a doctor and one can follow this diet plan throughout the life without any problem. The simple theory of losing weight is highly effective and it has no side effects too. Some people could not control their hunger and one got exacerbation of his migraine so could not complete the trial.

Limitations

The data was obtained with the method of self-reporting and hence there was no cross check on the information provided by the participants. As the participants were from many cities in Ganjam it was not possible to verify all the information provided by the

respondents. It is possible that due to eating twice a day, some people might be consuming lesser calories than their usual intake and some part of the favourable outcome may be due to this aspect.

CONCLUSIONS

Weight loss has become a fad in today's world. Most of the people spend lots and lots of money on diet formulae and exercise plans with little or sometimes no advantage.

The weight loss activities have taken a form of exploitative business for many. Poor and ignorant people are being looted. This simple method of weight loss costs nothing, there is no requirement of a doctor and contrary to many other successful methods of weight loss, can be followed for a life time. Hence such a simple method should be advocated for all. There is a need to spread this message in the form of a public health campaign.

ACKNOWLEDGEMENTS

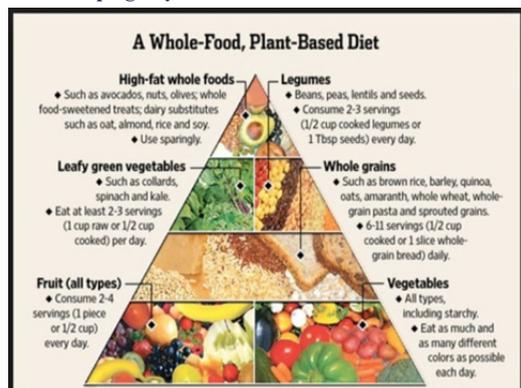
The author wishes to acknowledge the participants for their active participation in this research work.

Funding: No funding sources

Conflict of interest: None declared



1. Health campaign By Authour



2. Diet type of Whole food plabt based diet.



References

1. K. Park. Obesity. In: K. Park, eds. Park's Textbook of Preventive and Social Medicine. 22nd ed. Jabalpur: Banarsidas Bhanot Publishers; 2013: 364.
2. Reaven G, Lithell H, Landsberg L. Hypertension and associated metabolic

- abnormalities: the role of insulin resistance and the sympathoadrenal system. *N Engl J Med*. 1995;334:374-81.
3. Dixit JV. Obesity. In: Dixit JV, eds. *Effortless Weight Loss*, 2nd ed. Mumbai, India: Manovikas Publication; 2013: 8-9.
 4. John B. Buse, Kenneth S. Polonsky, Charles F. Burant. Type 2 diabetes mellitus. In: Kronenberg HM, Melmed S, Polonsky KS, Larsen PR, eds. *William's Textbook of Endocrinology*. 11th ed. Philadelphia, PA: Saunders Elsevier Publishers; 2008: 1350.
 5. John B. Buse, Kenneth S. Polonsky, Charles F. Burant. Type 2 diabetes mellitus. In: Kronenberg HM, Melmed S, Polonsky KS, Larsen PR, eds. *William's Textbook of Endocrinology*. 11th ed. Philadelphia, PA: Saunders Elsevier Publishers; 2008: 1342.
 6. Dixit JV. Eating frequency and weight loss: results of 6 months follow up of a public health campaign at Aurangabad. *Int J Clin Trials* 2014;1:67-9.