

Natural Methods of Dealing Diabetes among Urban Homemakers

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Abstract

Diabetes has come to be regarded as a major public health problem today which keeps affecting huge segments of the population groups, all over the country. Faulty dietary practices, sedentary lifestyle and increased urbanization have aggravated the problem further. Improper diets over the years contribute to type 2 diabetes mellitus. Today, there are 382 million people living with diabetes. This silent killer, ruin all the internal organs and makes one dependent on medicines for life long. But Mother Nature has kept numerous awesome, exclusive and fancy natural tools of healing diabetes in her personal treasury. The present study is an attempt to find out the natural methods adopted by selected sample to tackle diabetes. The method adopted for the study is survey cum interview with a specially formulated interview schedule. Fifty diabetic patients were selected randomly from urban area of Ernakulam City. The results of the study revealed that majority of the patients go for medicine to tackle diabetes along with natural food and life style modification. Thus, the study realises the fact that there is need for creating awareness among the diabetic patients to adopt the natural techniques for managing diabetes.

Keywords: *Diabetes mellitus, Natural methods, Life-style disease, Awareness and Consumption.*

1. Introduction

Diabetes has come to be regarded as a major public health problem today which keeps affecting huge segments of the population groups, all over the country. Faulty dietary practices, sedentary lifestyle and increased urbanization have aggravated the problem further. Improper diets over the years contribute to type 2 diabetes mellitus. Today, there are 382 million people living with diabetes. Diabetes mellitus is a nutritional disorder, characterised by an abnormally elevated level of blood glucose and by the excretion of the excess glucose in the urine [1]. India has a high prevalence of diabetes mellitus and the numbers are increasing at an alarming rate. In India alone, diabetes is expected to increase from 40.6 million to 79.4 million by 2030 [2]. Type 2 diabetes is 4-6 times higher in urban than in rural areas. The risk factors peculiar for developing diabetes among Indians include high familial aggregation, central obesity, insulin resistance and life style changes due to urbanization. Diabetes occurs in all age groups, from young infants to the elderly. The main task, while keeping an eye on diabetes is, to see that the level of blood sugar level does not exceed beyond the normal range. Regulating blood sugar is really a skill, which could be learnt by anybody who knows what to do and what not to do. Diabetes does not have to be a potentially fatal sickness. By making use of the natural remedies discretely, any patient could live a normal and healthy life [3]. All that needed is an earnest effort and personal determination to achieve the target.

Diabetes is a group of metabolic disorders that affects the body's ability to either produce insulin or to use insulin effectively. According to statistics, India is fast becoming the diabetic capital of the world, and with a large number of young people being diagnosed with the condition, doctors are looking at newer techniques to treat the disorder. Diabetes is the common term for several metabolic disorders in which the body no longer produces insulin or uses the insulin it produces ineffectively. Insulin is a hormone that is needed to convert sugar, starches and other food into energy needed for daily life. The cause of diabetes continues to be a mystery, although both genetics and environmental factors such as obesity and lack of exercise appear to play roles [4]. It is a common condition and is characterized by abnormally high blood sugar levels.

Diabetes is characterized by a partial or complete lack of insulin production by the body. The most common forms of diabetes are type 1 diabetes and type 2 diabetes. In both types of diabetes, people have little or no ability to move sugar out

of the blood stream and into the cells, where it is used as the body's primary fuel. People with type 2 Diabetes may have no symptoms for nearly 5-7 years after high glucose levels develop- even when there are no symptoms, they may experience vague symptoms like tiredness, muscle pain, headache, anxiety etc.

Globally, as of 2010, an estimated 285 million people had diabetes, with type 2 making up about 90% of the cases. In 2013, according to International Diabetes Federation, an estimated 381 million people had diabetes. Its prevalence is increasing rapidly, and by 2030, this number is estimated to almost double. Diabetes mellitus occurs throughout the world, but is more common (especially type 2) in the more developed countries. The greatest increase in prevalence is, however, expected to occur in Asia and Africa, where most patients will probably be found by 2030. The increase in incidence in developing countries follows the trend of urbanization and lifestyle changes, perhaps most importantly a "Western-style" diet.

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1.1 Relevance of the Study

Diabetes mellitus – the silent killer, ruin all the internal organs and makes one dependent on medicines for life long. But Mother Nature has kept numerous awesome, exclusive and fancy natural tools of healing diabetes in her personal treasury. Nature is bent upon providing us such natural ways of healing which do not burden you with undue side effects. The present study is an attempt to find out the natural methods adopted by selected sample to tackle diabetes.

1.2 Aim of the Study

- To study the awareness and consumption of natural food to manage diabetes

1.3 Objectives of the Study

- To check the knowledge among the sample about food that control diabetics naturally
- To understand the type of fruits, vegetables, spices and other food consumed by the diabetic patients
- To study other techniques adopted by the sample to control diabetics

2. Methodology

The method adopted for the study is survey cum interview method with a specially formulated interview schedule. The interview schedule was designed to check the awareness of the sample on natural method of dealing diabetes and to study their consumption pattern. Fifty diabetic patients were selected randomly from urban area of Ernakulam City as the sample of the study.

3. Results of the Study

Diabetes is a disease known to the medical world since time immemorial. Its incidence is, however, much at present than ever in the past. The results of the present study is discussed under socio economic background of the sample and knowledge and practice of consuming Hypoglycemic foods.

3.1. Socio economic background of the sample

Details pertaining to the basic family details includes age of the respondents, monthly family income, height, weight and BMI of the selected sample. Sixty two percent of the sample were in the age group of above 50 years, thirty percent of the sample were in the age group of 41 – 50 and only eight percent of the sample were in the age group of 31-40 years. When family income is studied, study reveals that 18% of the sample has income below Rs. 10,000/- 38% of the sample is between 10,000 – 20,000 and 44% of the sample belongs to income above Rs. 20,000/- There is a very close relation between body mass index (BMI) and prevalence of diabetes mellitus. Studies reveals that approximately 90% of people with Type 2 diabetes are obese. The study reveals that among the samples 46 percent of the sample is having normal BMI, 52 percent have BMI above normal and only two percent has BMI below normal.

3.2. Knowledge and Practice of Consuming Hypoglycemic Foods

The key to a successful hypoglycemia diet lies in its “individualization.” Each one of us is different and biochemically unique. Therefore, every diet must be tailor-made to meet our individual nutritional requirements. Knowledge and practice of consuming hypoglycemic food reduce type 2 diabetes in a natural way and will pave way to a healthy nation.

3.3. Awareness and Consumption of Fruits good for Diabetes

Consumption of fruits rich in chromium is good for reducing blood sugar level. Diabetes has been highly affiliated with a shortage of chromium, in the top layer of soil where our foods get ripened [6].

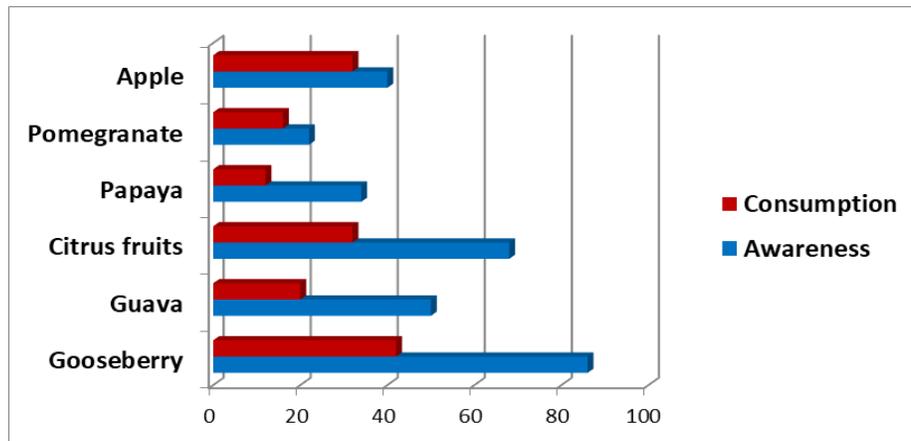


Figure 1: Awareness and Consumption of fruits good for diabetics

The study reveals that 86% of the sample were aware of the hypoglycemic quality of gooseberry but only 42% consume it regularly. 20% of the sample consume guava though 50% of them know it is good for diabetic. 32% consume citrus fruit 12% consume papaya, 16% consume pomegranate and 40% consume apple to manage diabetes.

3.4. Awareness and Consumption of vegetables good for diabetics

Vegetables are rich source of fiber which can control diabetes in a natural way. They contribute to roughage which can reduce blood glucose level [7].

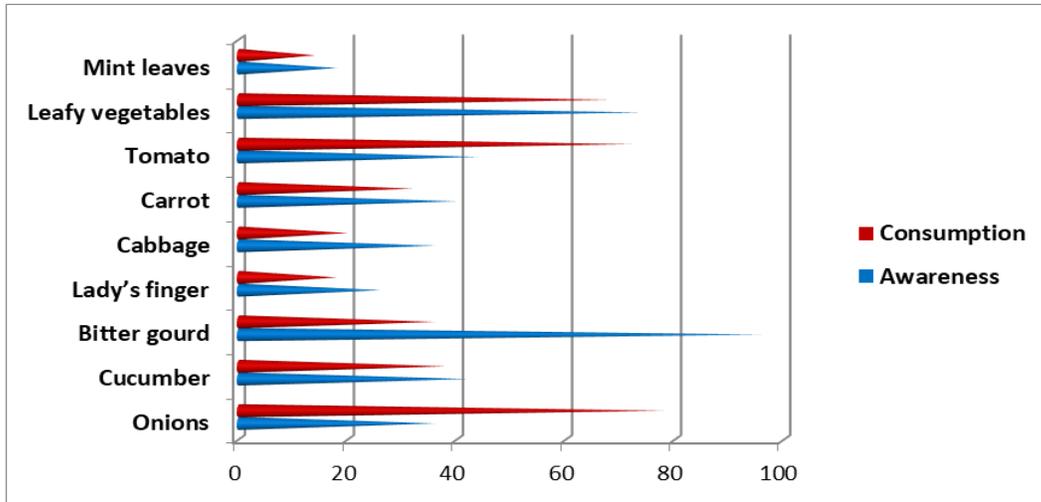


Figure 2: Awareness and Consumption of vegetables good for diabetes

Among the sample 78% consume onion, 38% cucumber, 36% bitter gourd, 18% lady's finger, 20% cabbage, 32% carrot, 72% tomato and 68% leafy vegetables for reducing their blood glucose level.

3.5. Awareness and Consumption of spices good for diabetics

Many of the spices such as fenugreek, garlic ginger, cinnamon, turmeric and white pepper are abundant in sugar-reducing features.

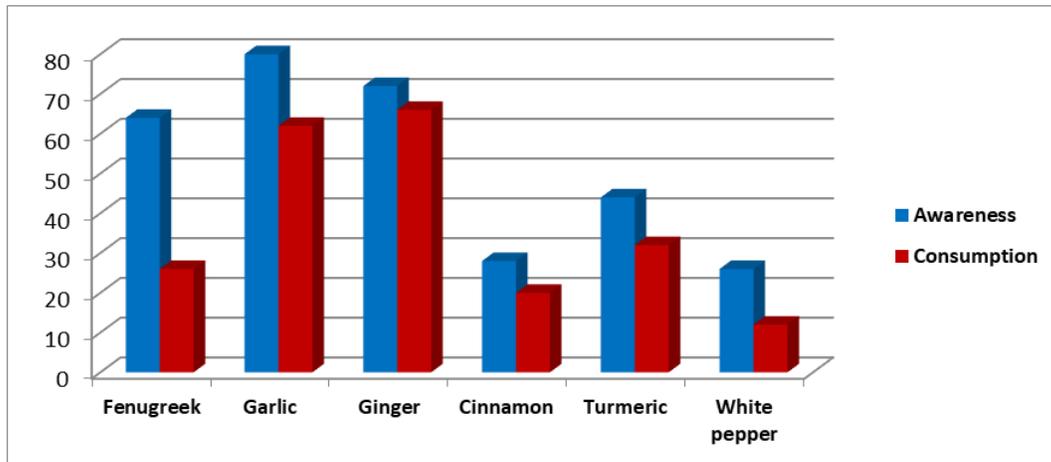


Figure 3: Awareness and Consumption of spices good for diabetes

The respondents consume spices such as fenugreek (26%), garlic (62%) ginger (66%), cinnamon (20%), turmeric (32%) and white pepper (12%) to reduce their blood glucose level naturally.

3.6. Awareness and Consumption of other foods good for diabetics

Skimmed milk is good for diabetes as it is fat free. Oats lowers the risk of Type 2 diabetes and improves bowel movement.

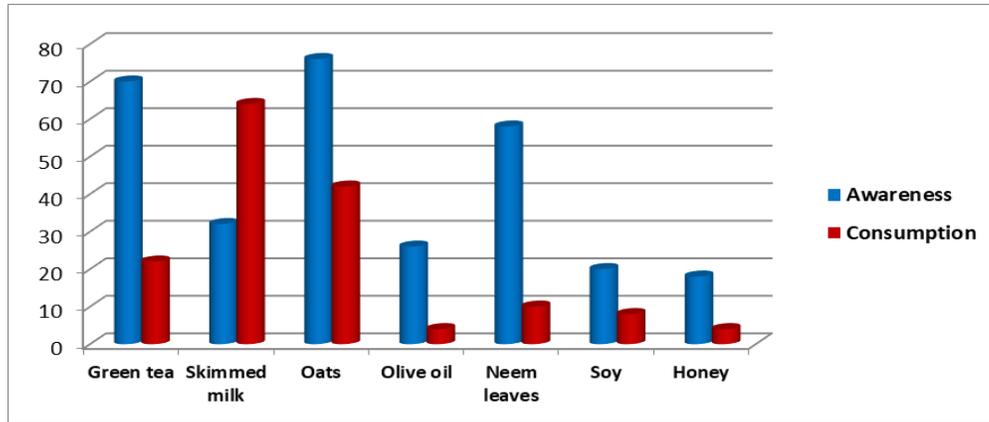


Figure 4: Awareness and Consumption of Other foods good for diabetics

The study reveals that the respondents are aware of the benefits of green tea (70%), skimmed milk (32%), Oats (76%), Olive oil(26%), Neem leaves(58%) Soy (20%) and honey (18%) for reducing blood sugar level.

3.7. Food that should be avoided from diet

Certain food that increase the blood sugar level should be completely avoided for controlling diabetes.

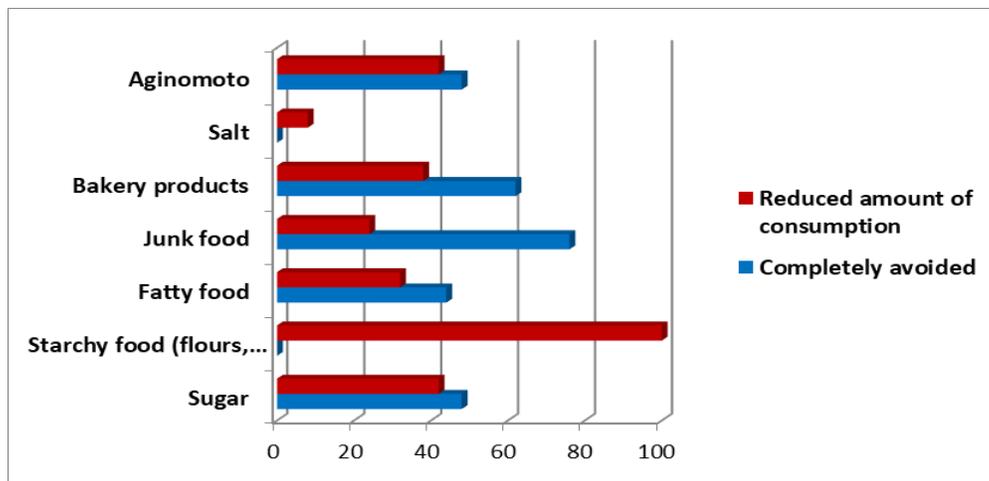


Figure 5: Food that should be avoided from the diet

The selected sample were avoiding certain food such as sugar, starchy food, fatty food, junk food, bakery products, salt and ajinomoto from their diet.

3.8. Amount of water consumed

Consuming plenty of water is essential for diabetes. Imperfect hydration is a common affair in diabetics, because elevated blood sugars can prompt the body to sweep water from the body in efforts to eliminate surplus glucose in the blood. This is the reason why persistent discharge of urine and uncontrolled thirst often takes place in coexistence with diabetics. The study reveals that 20% of the respondents were only consuming less than one litre of water.

3.9. Possession of Gluco-meter

Possession of Gluco-meter will help the diabetic patient for regular checkup of blood glucose level. Study reveals that only 38% of the sample possess gluco-meter for checking their blood glucose level regularly.

3.10. Life style changes adopted for reducing Blood Sugar Level

Diabetes and other blood sugar disorders are caused by what we eat and the way we live. One can cure themselves by making healthier food choices and living better by adopt better life style changes.

Table 1: Life style changes adopted for reducing Blood Sugar Level

Life style changes adopted	Percentage of respondents
Systematic (regular) intake of food	64
Intake of fiber rich foods	76
Proper sleep	64
Regular exercise/aerobics	56
Regular check up	52

Sixty four percent of the sample stick on to Systematic (regular) intake of food, 76% increased the intake of fibre rich food, 64% insists on proper sleep, 56% was doing regular exercise and 52 percent of the sample adopted regular checkup.

3.11. Alternative therapies used for reducing Blood Sugar Level

Table 2: Alternative therapies used for reducing Blood Sugar Level

Alternative therapies	Percentage of respondents
Acupuncture	16
Magneto therapy	04
Aroma therapy	02

Alternate therapies also will reduce the blood glucose level [8]. The study reveals that 16% of the sample adopt acupuncture, 4% magneto therapy and 2% aroma therapy for getting cured form diabetes.

4. Conclusions

Diabetes is not a condition that should drive us into distress as it can be managed quite effectively if handled in the appropriate way. If supervised carefully, one can indeed live a virtually normal life by bringing about simple modifications in lifestyle. Even though more than half of the sample has better awareness level, their practice level was very low. Thus, the study realizes the fact that there is need for creating awareness among the diabetic patients to adopt the natural techniques for managing diabetes.

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