



CHALLENGE TO OBESITY; COVER WEIGHT LOSS BY CONSUMPTION OF INDIAN MILLETS.

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ABSTRACT

Obesity is a pathological condition in which excessive body fat accumulated leading adverse effect on health and life expectancy. [1]. Obesity is a chronic disorder with complex interaction between genetic and environmental factor. It characterized by high cholesterol, high fatty acid level, imbalance of metabolic energy, insulin desensitization, gallstone, high blood presser, shortness of breath, emotional and social problem and excessive adipose mass accumulation with hyperplasia and hypertrophy.[2]. In the present study method that had been used for preventing weight gain by meal, replacement and given some quantitative dose of millet, at one time dinner. So in this method level of compliance is better by giving the nutrient intake food, to controlled calories density of the body of patient, which enhances effect of weight loss.

KEYWORDS : Obesity, Weight loss, Consumption, Indian millets.

INTRODUCTION

Obesity is the seriousness problem in our society. Obesity is generally caused by eating too much and moving too little, so excessive fat accumulation on stomach and various part of body. [3].

Obesity in India has reached epidemic proportion in 21st century, with morbid obesity affecting 5 % of the country population. Obesity is a major risk factor for cardiovascular disease and NGO's, such as the Indian heart association has been raising awareness about this issue. Due to genetic tendency of Indian toward abdominal obesity, and its associated risk of related lifestyle, disease such as diabetes and anemia. [4,5]

Obesity is the body mass index is a calculation that takes a person weight and height in to account to measure body size. [6]

Obesity is most commonly caused by a combination of excessive dietary calories, lack of physical activity and genetic susceptibility. [7]

BIM, is closely related to both percentage body fats and total body fat, which varies with age and sex. Obesity in adolescents is defined not as an absolute number but in relation to a historical normal group, such that obesity is a BIM, is calculated by dividing the subjects mass by the square of his or her height. [8]

MATERIAL AND METHODS

For the above study, some millet was used as a material like, *Sorghum vulgare* – common name Jawar, Family – Poaceae. *Pennisetum glaucum* – common name Bajari (Peral Millate), Family – Poaceae.

Eleusine caracana – common name Nachani (Finger Millate), Family – Poaceae.

Black Salt – called Himalayan Namak also called Sandhya Namak.

Above sources is used for the making of healthy food, who suffer from obesity. As follow, 01. Kg. Jawar seeds, Half Kg. Bajari, 300, gm. Of Nachani.

These ingredient mixed together and grind giving to the grinding machine, to make a clean fine flour powder.

Thus make a flour stack, then apply for making luxurious and delicious bakari. [9]

1. Take about two cups of the flour powered for single dose

and mix one tea spooned Black salt. Now add sufficient water and knead to make a stiff pliable dough ball. Dough ball roll them by on hand.

2. Dust a working surface with some flour powdered. Take dough ball and flattened it in your palm, keep the rest covered with a kitchen towel.
3. Put the dough ball in to a circle on the work surface to about 6 – 7 inch round now you should get a thin circle.
4. Heat a heavy iron griddle, carefully lift the baker and placed on the hot griddle. Apply some water over the entire upper side of bakari.
5. Use a flat spatula and flip it. Cook till brown spot appear on the bottom side of the bakari about one minute on high flame.
6. Flip again and cook it directly on the flame till its balloons up or till it is well cooked.

Thus bhakari is ready to serve, those person suffer from obesity at morning dinner 9.30 O'clock as a first dose. Then up to two hour rest, give a music dance, as a slime exercise for 30 minute, later give them a one boiled egg as a diet. Further go to rest up to night dinner as a second dose at 9.00 O'clock, and then become to rest for slipping, good night. This rooting is to done for about one month.

RESULT AND DISCUSSION

This is one of the novel and innovative method apply on three person which suffer from obesity, whose weight about 112 kilogram and height about 5 feet 2 inch length. Author going to advice a millets diet for three person regularly up to one month. After one month later author notice that, about 10 kilogram weight loss by person suffer from obesity, and some fat relief from on the stomach.

So the weight loss overcomes by prescribing a sanitization in regularly intake of millets diet. Because of those person suffer from obesity is most commonly caused by a combination of excessive dietary calories, lack of physical activity and genetic susceptibility and from taking healthy food, content high carbohydrate. [7]

This is one of the method have been used a lot for preventing weight gain, is meal replacement. It is safe efficient and without any side effect. In this method the level of compliance is better, the receipt of nutrient intake is sufficient and the dropout rate is low. The calories density of these meal is controlled and they are also nutrient dense. Main meal and snacks can be replaced by these nutritionally balanced low fats meal. Because of the millets is a gluten free means, gluten content less amount of organic compound and having naturally enzymatic activity. Millets content higher concentration of fiber, vitamin A, B, vitamin E, vitamin B6;

Higher amount of amino acid, protein magnesium, potassium. Thus millets are many benefits for health which cure stomach and digestive problem.[10]

Sorghum vulgare (Jawar), contain much higher concentration of fiber. A single serving contain over 12 grams. A high fiber diet lower the rate of obesity, stroke, high blood pressure, cardiac disease, diabetes and digestive problem. This high fiber contain ensure higher satisfy level, lowering consumption by keeping hunger pangs at bay. Therefore the fiber content in jawar reduced your appetite, making it the ideal whole grain option for weight loss. 100 grams. of jawar provides 11 grams. of protein which supply the body with energy and aid in cell regeneration. Jawar content high amount of nicotinamide is integral in transforming food into energy usable by body. Jawar contain 8.45 mg in each cup paring with vitamin C, will give up maximum benefit. Jawar contain high magnesium level in the body, magnesium increases calcium absorption.[11]

Pennisetum glaucum(Bajari), it also called pearl millets grain have high potential as food which content high fiber, lipids, protein, vitamin E and B6, calcium, magnesium than maize and higher content amino acid than other traditional cereals.[12] Pearl millets bread is the best stay way from stomach disorder. Dietician advice to eat pearl millets bread if want to loose weight. Eating this bread make you feel full. So we tend to eat more.[13] Because of the pre-biotic in millets, omega 3 fatty acids are essential for the body these are polyunsaturated fat and they can only be obtained from food. Bajari bhakari help boost immunity, also millets help to flush out the accumulated toxins in your bodies, therefore it benefit to kidney and liver. [14]

Eleusine coracana (nachani), also called Finger millets. A cup of nachani flour contain 10.3 grams of protein is an important food nutrients that help in the regeneration of cell as well as transport blood throughout the body. Nachani rich in fiber which help in keeping your stomach full for a longer time helping you prevent binge eating and overeating. Also help in lowering the blood pressure all this lead to creation of more red blood cell giving us more energy. Antioxidant that help to fight, infection in our body. Also having less sugar and rich in magnesium which help in lowering insulin resistance also maintain body nerve function it remove bad cholesterol from our body and maintain good cholesterol.[15]

Black salt, also called Sandhya namak is a form of rock salt. Ayurveda medicine first used black salt for its holistic, medicinal power. It full of insoluble minerals, making it difficult for the body to absorb them.[16] It aid in weight loss, cure acidity and has antioxidant effect. It also has low salt content mineral like iron, calcium and magnesium that are necessary for good health. Black salt help to decrease heart burn and blotting, by stimulating bile production in the liver. It composed of sulphur, iron potassium chloride, an Ayurveda considered black salt to be a cooling spice that may be beneficial for digestive and fat burner, antidiabetic activity. It may show hematinic, stimulate blood cell formation. It may show anti flatulent properties also it may have anthelmintic, destroy parasitic worm. It may have demulcent, reliving inflammation.[17]

Black salt improve digestion by increasing the natural production of acid in the stomach and increasing the formation of bile juice in the liver. It may also help boost the absorption of nutrients in the small intestine. Due to its laxative properties black salt is beneficial for constipation. it soften hard stool and make moving bowels easier. Insulin is a hormone generated by the pancreas and is in charge of controlling blood sugar levels.[18] Low sodium levels have been linked to decrease in insulin release in the bodies. Black salt help to dissolve fat by increasing the solubility of digestive

enzyme. When compared to regular table salt, it may speed up digestion and provides more nutrition to the body's cell.[19,20]

It is a simplest losing weight mean burning more calorie than you consume, so it make sense do include exercise in our routine, since it help to burn more calories.[21]

CONCLUSION

Obesity occur due to imbalanced in energy expenditure and food intake. Assessment can be done using fat diet. Hence the evolution and search of new therapeutic strategies are demanded to prevent this worldwide comorbidity. So it is aware to our society to replace food diet and intake a natural food grain like millets in our daily life. It also aware to former, to get more production of such a useful grain.

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