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## **Research Article**

# A WEIGHT LOSS CASE STUDY WITH TRIPPLE DRIVER APPROACH (DIET, YOGA, AND DHAUTI)

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#### **ABSTRACT**

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A 40-year-old female (SK) reported complaint of obesity, acidity, and depression. She intended to reduce weight without any medicine intake or any crash diet. After going through the client's history, an integrated approach was developed, which includes Dietmodification, Yoga, and Dhauti (Tripple Driver Approach (TDA)) prescribed accordingly. Its impact on reducing weight was studied. KunjalKriya/Dhauti/ViV (Voluntarily Induced Vomiting) is a yogic cleansing technique given in 'GherandSamhita1/ 39,40 and Hathyogpradipika2/22,25, which involves voluntarily inducing vomiting after drinking sufficient amount of water in the early morning with empty stomach soon after leaving the bed. Interesting results were found, with a reduction of 36 kg of weight in around three years from 102 (BMI 44) to 66 kg (BMI 28). 'Dhauti' seems to have the lion's sharein reducing food cravingsalong with diet and yoga during this rejuvenation. Some psychological observationsfoundwere increased positivity, feeling light, and cleanlinessof the body along with rejuvenation, increased body energy and enthusiasm, and better skin color. It also reduces anger, acidity, and cough. This successful case study and its 'Triple Driver Approach' (TDA) approach might be referred to and adapted for other similar cases in the future.

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## **INTRODUCTION**

History of Health Aspirant. A health aspirant (SK; one of authors) approached RG (one of the authors)to reduce weight through the yogic approach without any medicine intake. She is a spinster and currently a professor of finance. Her weight was 102 kg, with a 44-inch waist and height of 5 ft. She complained about her acidity, over-craving, bloating, indigestion, kind of depressed feelings, challenges associated with obesity, and irregular monthly cycle. She also disclosed that the doctor advised her to reduce weight as early as possible. She hada short temper. She was concerned about that. She had allergic asthma from childhood, which used to erupt at times. Shebelievedthat the weight shoot-up was because of eating old frozen food, high cravings, sedentary lifestyle, but not because of outside junk food. She was eating a lot of rice food kept in the freezer previously, andher corresponding craving to eat it. We checked for her report. She was not suffering from any other diseases having no blood pressure, no ulcers, no hernia, and no surgery undergone in the last couple of years.

## **Prescription to Health Aspirant**

Considering her situation, this was a complex feature about weight, history, and corresponding aim to be achieved. So,the

triple driver approach (TDA) was based on a low-calorie fibrous diet, increasing metabolism using 'yogasan', cleaning the body,reducing cravings by *Dhauti* (ViV), and stabilizing thoughts. Accordingly, Diet, 'Yogasan', 'Dhyan', and 'Dhauti'kriyawere suggested, followed by regular monitoring. These include the following details.

## Diet Prescribed:

- Advised to consume Soup and Salad (as much as she can) before starting lunch and diner.
- Advised to take turmeric milk twice 1 cup around 50 ml daily(1,2). This is because tyrosine which is the precursor of melatonin will help to get better sleep. Turmeric will have a partial antibiotic/antiviral effect to safeguard from infections and also has an antiobesity effect(3).
- 1 Egg (to provide proteins, vitamins(fat-soluble), and cucumber per day (to reduce acidity and increase fiber).
- Decanted Dal Water (As much as she can and having auto limitation). *Dal* watercontains soluble proteins and fewer carbs(4).

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- Buttermilk with Ginger, Curry leaves, Jeera/Ajowan. Buttermilk was used as filler as well as a source of a precursor of melatonin(5). Ginger gives a partial antiseptic effect(6).
- Regarding cereals, it was suggested to reduce Wheat Chapatti, and Rice instead of that advised to consumeJowar/'Sorghum Bicolor'(millet,which is gluten-free(7) and also includes fibers. The restriction was kept for quantity because Sorghumis also a carb and can trigger lipogenesis from pyruvate/Acetyl COA(8). But it should not be more than 2 Jowar Bhakri, including lunch, dinner, and breakfast.
- Cooked *subjee*/vegetables are prescribed in unlimited (as per will) amounts because they contain very little carb and have a high amount of fiber. Fibers provide roughage and keep the gut clean and defecation easy way(9). About vegetables, the only restriction ispotato(10) to avoid high glycemic index carb consumption. This is to avoid further complications like BP, Diabetes etc.
- Two Fruits(source of antioxidants and fibers) are advised to be taken mandatorily except Sapota(11), Grapes(7), and Custard Apple(12). This is restricted to avoid extra fruit sugar consumption.
- Advised to consume lemon water(Vit C source) without sugar and salt twice a day 1 glass (13).
- To provide a source of good fat/unsaturated fat,2 to 3 walnut daily were advised(14).

Fibers Prescribed: Every evening for better lubrication of food to go through the gut, out of five following things, one of them was suggested (1 spoon Isabghul (Psyllium husk, 'Plantago ovata(15) flocculated in water/ Trifala(16)half spoon with water/castor oil(17) 1 spoon/2 dates(18) smashed in water/20 Raisins(19,20)smashed in water)

#### An advice 'Optimize diet but no need to over accurate.'

It is advised to the health aspirant that this diet may not be observed to a very strict extent. A practical approach was taken. It was experienced from practice that there is always 20% to 30% relaxation occurring in a diet because of festivals, travel, hosting a guest for meals, and different celebrating occasions. However, the health aspirant followed it with 10% to 20% relaxation, which was good optimization.

## Dhauti Prescribed

Dhauti(Waman Dhauti/Regurgitative cleansing)(21) is an ancient technique of cleaning the body(to clean the stomach). In the early morning, before consuming anything, plenty of water is consumed to the extent that there should be a nauseating feeling. Further, voluntary vomiting is induced with the help of two fingers touching the root of the tongue and throat (22-28).

It is done in a standing position, lean forward over a wash basin, bowl, or convenient place in the garden. The trunk was kept as horizontal as possible. The mouth is to be opened as wide as possible. Slowly and gently slide the fingers along the tongue's surface towards the throat while simultaneously pressing the root of the tongue. This induced the water to gush out from the stomach suddenly and effortlessly. Continue in this way until there is no more water in the stomach. This is indicated when tickling the back of the throat does not bring up more water.

*Dhauti* has been recommended every day initially. Further, its frequency has been changed based on the extent of the craving and the required stomach cleaning.

#### Yoga prescribed

- Dhyan: 10 Minutes of *Dhyan* (sitting quietly in *Sukhasan*, closing eyes and concentrating on the breath, trying to reduce energy expenditure and concentrate on increasing internalization) mostly in the evening.(29). This was aimed to increase the stabilization of the mind during this course of time.
- Sukshma Vyayam: prescribed for 10 to 15 minutes with separate video recorded and given.(30). This includes yoga with simple movements of joints, hands, and legs so that it should free up the joints and increase metabolism to ease Asan performance.(30,31)
- Asanas: Following Asanas were suggested every day, and advised to perform at least 10 Asanas along with Sukshma Vyayamout of recommended Asanas(32). These Asanas have more effect on the tummy/abdomen and trunk-associated muscles. Fact is kept in mind that the twist given to the trunk will impart better digestion(33). These Asanas were (Markatasan, Kandarasan, Pavanmuktasan, Namanmudra-3, Shalabhasan, Naukasan, Sarvangasan, Ardha Sarvangasan .Leg movement in Supine position, Planks, Army crawling, Merudandasan, Matsyasan, Side legs cycling, vertical legsup and down, crunches, cross crunches, jogging (2) min, Bharadwajasan, Gomukhasan, Cross jumping jacks, Natarajasan, Hanumanasan (30,33,34)
- Kriyas: At least one Kriya out of these was suggested daily (Agnisar, Uddiyan Bandha, Kapalbhati). This is to reduce hyperacidity(35)and to give movement to the tummy

#### ANALYSIS METHODS

Every month counseling meeting was scheduled with the Health Aspirant SK. Detailed discussion on Digestion problems, Cravings, Anger and weight, feelings, and challenges in any suggestions to follow was noted. Qualitative parameters were noted at the scale of 10, where 10 is considered as highest level. Further steps were decided so that weight loss and rejuvenation could occur further. Positive picture of future was painted in front of SK which gives enthusiasm and extra motive to continue. To continue the yoga, diet and *Dhauti*, continuous time-to-time counseling was very much found to be needed.

#### After Effects found

Initial Effect of Dhauti: Initially, there was a feeling of hate for Dhauti and highly uncomfortable feelings. For the first 6 to 8 days, performing Dhauti fully was impossible. As reported by SK, a small volume of water was coming out in voluntary vomiting. Sometimes there was a sour and bitter or acidic taste in the mouth after Dhauti. Sometimes foam kind of liquid comes out of the mouth. Sometimes there was little pain in the throat when the amount of water taken was less than the full stomach. Further, it worked well when SK learned that avoiding Dhauti for a long time/many days increases craving. Feeling after Dhauti was always like a cleaned and light stomach. Sometimes gases were passed out during Dhauti. This

indicates that there was pressure built in the stomach during *Dhauti*. This creates pressure in a lower direction resulting in

Taste: No difference in taste was found. It was the same as that of previous taste.

Time	Start	End	BMI	Anger	Black Skin	Digestion	Bloating	Waist
	Kg	kg		(10 scale)	Spots (10 scale)	problems (10 Scale)	(10 Scale)	(inch)
First Year	102	84	44.1 to 36.4	9 to 7	9 to 7	9 to 5	9 to 6	44
Second Year	84	76	36.4 to 32.9	7 to 5	7 to 5	5 to 2	6 to 3	40
Third Year	76	66	32.9 to 28.1	5 to 2	5 to 3	2 to 1	3 to 2	34

farting. Following is year on year analysis of SK given for some of the selected parameters.

Many times, there was an urge to go to the toilet immediately after Dhauti.

#### **Change in Weight:**

- First year the change was from 102 kg to 84 kg (Rate 18 kg/year)
- 2. Second year it was from 84 to 76 kg (12 kg/year)
- 3. Third year it changes from 76 to 66 kg (10 kg/year)

The average 14 kg /year weight was reduced.

The rate of change of reduction of weight was found to be reducing over the period of time.

#### Effect on mind (Mood)

- 1. Before this treatment, a wave of anger was always prevailing over balance and patience. However, anger was reduced to a great extent (From 9 to 3 on a scale of 10).
- 2. Overall Confidence, Positive thinking, happiness, and contentment increased (From 3 to 8 on a scale of 10).
- 3. Energy and enthusiasm increased from (3 to 8 on a scale of 10).
- 4. Feelings for Dhauti: Before Dhauti, initially, the mind was always trying to refrain from Dhauti. However, after performing Dhauti, she used to feel very good.

#### Effect on Craving/Hunger

Earlier, there was unstoppable hunger like fire. It was reduced from a scale of 9 to a scale of 3. Earlier, if the food was not consumed, then there was a headache, and no energy feeling was felt; however, afterward, there was no headache. Sometimes though food is not taken for a long time, there was a no craving for food throughout the day. This is an indication of over reduction of hunger. In such a situation, Dhauti is dropped for a day and again resumed next day. This was done to avoid over the killing of required craving.

### What if Dhauti is left/stopped for some days

If Dhauti was not done, a day or two did not feel any change. There was an increase in bloating and gases when Dhauti was not done. However, cravings shoot up when it is not done for 7 to 10 days when the health aspirant is away from home or traveling.

#### **Tongue Color and Taste**

Previously a Health Aspirant's tongue color was white and yellow where there was debris of dead, white-colored cells accumulated on the tongue. This was checked while cleaning the tongue in the morning and night. However, this becomes pinkish over a period of time. The bad breath. (36) (details about tongue color) in the morning was reduced

#### Dhauti after overeating last night

Whenever more food was consumed than the existing capacity of food, especially taken at the party last night and the following day, Dhautiis performed. The observation was that some remnants and pieces of food were expelled out in Dhauti. This is undigested food that came out in Dhauti for e.g., undigested onion pieces, tomato epicarp.

#### **Effect on Toilet**

The toilet became clean, easy, and single time after following this. Previously toilet was not complete, and had to visit multiple times a day.

Some key Achievements mentioned by Health Aspirant

- Previously there were frequent throat infections, coughs, and sneezing occurring. However, during corona, nothing happens, even if this person is with a corona patient of her family.
- Previously Health Aspirant was not able to walk for a long time. However, at the end of the third year, Health Aspirant climbed fort *Purandar*in one go having a height of 4472 ft.
- She (SK) started her Ph.D.enthusiastically and almost on the verge of completion.
- The effect on Childhood Asthma was found to be profound. Health Aspirant suffered from childhood Asthma, which used to get precipitated now and then. After reducing weight, now it has not precipitated any time till now.

## **Effect on Acidity**

There was previously hyperacidity precipitated in the stomach; at times, the family doctor prescribed Omeprazole / Pantoprazole. However, after reducing weight, hyperacidity was reduced to a very great extent, almost zeroized, and has no manifestations of hyperacidity.

#### **Changes in Skin**

Previously a health aspirant (SK) was suffering from Acanthosis nigricans, having black markings on the neck, hands, and side lumber portion of the body. However, after weight loss, the skin becomes fair, and Acanthosis nigricans reduced to a very great extent

Total Change in Personality: Major change has been found in the personality. You can view in the figure the changes which occurred in personality.

#### **CONCLUSION**

It was observed that Tripple Driver Approach (TDA) Dhauti, Yoga, and Diet be very good combinations for weight loss. *Dhauti* (*ShuddhiKriya*) cleans the Gut to a large extent. Dhauti imparts a reduction in craving. There should be an internal sense to develop when Dhautiis performed to control food

craving and acidity. There is an overall positive change in body as well as psychology, when a person loses weight naturally than with medicine.

## Discussion, Analysis, and Future Prospects, Cautions

During yoga learning days, we have been told by our teacher that for cleaning *Dhauti* (22,26) is used. Also, when we come across a Shlok

(Dhauti Basti tatha neti, Nauliki Tratakam Tatha, Kapalvatischa Etani Shatkarmani Samacharet) from Hathyogpradipika. (21)

While performing Dhauti,we observed that this cleans and stabilizes cravings throughout the day. Also, animals like Dog and Tiger do Dhauti when their stomach is upset and then further when Referred articles (22,23,26,26) gives kind of direction to use Dhauti for reduced craving and weight loss.

Generally, Diet, exercise, yoga, or workouts are considered a driver for weight loss. However, to keep control of adiet, need something which will reduce our cravings naturally. This will ease a health aspirant as he/she will not be possessed by food in the head. In this study, the reduced craving effect can be attributed to Dhauti. The possible explanation of this could be as follows. There must be high acid and Ghrelin (Craving hormone) concentration in the stomach in the morning. This may be an accumulation of Ghrelin and acid secretion throughoutthe night.

Further, if this secretion remains in the stomach, it will be responsible for cravings in the morning. Research is required to check ghrelin concentration in blood and stomach after Dhauti. Dhauti might be expelling out Ghrelin and acid in water thrown out(37). As a result of it, craving reduces. As a long-term effect, It is responsible for reduced Ghrelin concentration in the stomach automatically as the internal surface area of the stomach also reduces (37). Further, when weight reduces considerably, internal stomach size might be decreased. This needs further research to know about ghrelin concentration and stomach internal size while reducing weight.

Uneasiness and anger reduction may be attributed to a reduction in craving and acidity and further stabilization of the stomach.

The yellow color in Dhauti wateroozes out must be attributed to acid expulsion from the mouth with Dhauti.

Skin color became fair may be because of a reduction in fat and cellulite(38)

Many times, positive thinking and enthusiasm play a very important role. Nobody can follow a 100% diet, so you need patience. Many times, if yoga/exercise is not done correctly, then metabolism and absorption are not complete; hence it needs the support of multivitamins and multi-minerals. So, such time doctors should be referred.

## Caution should be kept in mind, such as

- Overdoing Dhauti may cause complete loss of appetite after some months, which is not recommended
- Drinking less water in Dhauti may not dilute acid. It may cause damage to the throat becausethe acid concentration in water oozes out in Dhauti.
- Dhauti has challenges of erosion of teeth if done a long time with less water intake. Hence, people with

- challenges with teeth should take the Family Doctor's opinion(39).
- People with a hernia, high blood pressure, ulcers, or any surgery should not perform Dhauti; they may drink water and hence can dilute their stomach acid.

#### References

- 1. Thorning TK, Raben A, Tholstrup T, Soedamah-Muthu SS, Givens I, Astrup A. Milk and dairy products: good or bad for human health? An assessment of the totality of scientific evidence. Food Nutr Res. 2016: 60:32527.
- Kasprzak-Drozd K, Oniszczuk T, Gancarz M, Kondracka A, Rusinek R, Oniszczuk A. Curcumin and Weight Loss: Does It Work? Int J Mol Sci. 2022 Jan 7; 23(2):639.
- 3. Hewlings SJ, Kalman DS. Curcumin: A Review of Its Effects on Human Health. Foods. 2017 Oct 22;6(10):92.
- 4. McCrory MA, Hamaker BR, Lovejoy JC, Eichelsdoerfer PE. Pulse consumption, satiety, and weight management. Adv Nutr. 2010 Nov;1(1):17-30.
- 5. De Freitas Mascarello A, Isabel Pinto G, Souza De Araújo I, Kuller Caragnato L, Luís Lopes Da Silva A, Freire Dos Santos L. Technological and Biological Properties of Buttermilk: A Minireview. In: Gigli I, editor. Whey Biological Properties and Alternative Uses [Internet]. IntechOpen; 2019 [cited 2023 Sep 19]. Available from: https://www.intechopen.com/books/whey-biological-properties-and-alternative-uses/technological-and-biological-properties-of-buttermilk-a-minireview
- 6. Mashhadi NS, Ghiasvand R, Askari G, Hariri M, Darvishi L, Mofid MR. Anti-oxidative and anti-inflammatory effects of ginger in health and physical activity: review of current evidence. Int J Prev Med. 2013 Apr;4(Suppl 1):S36-42.
- 7. Health Benefits of Gluten-Free Jowar | Times of India [Internet]. [Cited 2023 Sep 19]. Available from: https://timesofindia.indiatimes.com/life-style/foodnews/is-jowar-gluten-free/articleshow/66847765.cms
- 8. Lodhi IJ, Wei X, Semenkovich CF. Lipoexpediency: de novo lipogenesis as a metabolic signal transmitter. Trends Endocrinol Metab. 2011 Jan; 22(1):1-8.
- 9. Kelly RK, Calhoun J, Hanus A, Payne-Foster P, Stout R, Sherman BW. Increased dietary fiber is associated with weight loss among Full Plate Living program participants. Front Nutr. 2023; 10:1110748.
- Heidari-Beni M, Golshahi J, Esmaillzadeh A, Azadbakht L. Potato consumption as high glycemic index food, blood pressure, and body mass index among Iranian adolescent girls. ARYA Atheroscler. 2015 Feb; 11(Suppl 1):81-7.
- 11. Kulkarni AP, Policegoudra RS, Aradhya SM. Chemical Composition and Antioxidant Activity of Sapota (Achras Sapota Linn.) Fruit. J Food Biochemistry. 2007 Jun; 31(3):399-414.
- 12. Vijay Agrawal RN. A Review on the Nutritional Quality and Medicinal Value of Custard Apple-An Under Utilised Crop of Madhya Pradesh, India. IntJ Curr Microbiol App Sci. 2017 Sep 20; 6(9):1126-32.
- 13. Kim MJ, Hwang JH, Ko HJ, Na HB, Kim JH. Lemon detox diet reduced body fat, insulin resistance, and serum hs-CRP level without hematological changes in

- overweight Korean women. Nutrition Research. 2015 May; 35(5):409-20.
- 14. Rock CL, Flatt SW, Barkai HS, Pakiz B, Heath DD. Walnut consumption in a weight reduction intervention: effects on body weight, biological measures, blood pressure and satiety. Nutr J. 2017 Dec; 16(1):76.
- 15. Suresh H, Zhou J, Ho V. The Short-Term Effects and Tolerability of Low-Viscosity Soluble Fibre on Gastroparesis Patients: A Pilot Clinical Intervention Study. Nutrients. 2021 Nov 28; 13(12):4298.
- 16. Peterson CT, Denniston K, Chopra D. Therapeutic Uses of Triphala in Ayurvedic Medicine. J Altern Complement Med. 2017 Aug; 23(8):607-14.
- Azadmard-Damirchi S, Fathi-Achachlouei B, Alirezalu K, Alirezalu A, Hesari J, Emami S. Physiological and Medicinal Properties of Castor Oil. In 2011. p. 323-37.
- 18. Al-Farsi MA, Lee CY. Nutritional and functional properties of dates: a review. Crit Rev Food Sci Nutr. 2008 Nov;48(10):877-87.
- 19. Alnuwaiser MA. Content of Sugars In Fresh Grapes And Raisins, And Fresh And Dried Apricot: A Comparative Study. 2017 Nov 30 [cited 2023 Sep 19]; Available from: https://zenodo.org/record/1095050
- Olmo-Cunillera A, Escobar-Avello D, Pérez AJ, Marhuenda-Muñoz M, Lamuela-Raventós RM, Vallverdú-Queralt A. Is Eating Raisins Healthy? Nutrients. 2019 Dec 24;12(1):54.
- Dr Sarvesh Kumar Agrawal. Hatha yoga pradipika. Chaukhamba Orientalia, Varanasi; 2/21-22, page no. 34.
- 22. Vd. Gayatri K. Halmare and Vd. V. G. Patrikar. Effect of jal dhauti on sthaulya W.S.R. To obesity: a systemetic review. Wjr [Internet]. 2019 Dec 13; 9(1, 1571-1579.). Available from: chrome-extension://efaidnbmnnnibpcajpcglcle findmkaj/https://wjpr.s3.ap-south1. amazoznaws.com/article\_issue/1577844711.pdf
- 23. Bv R, Balvantbhai CK. Impact of Vamana dhauti in Amalapitta: A Critical Review. IJMEDPH. 2022 Jan 27; 12(1):08-11.
- 24. Rasool A, Verma S. Dhauti : A Physiological Healer in Human Physiological System. RRIJM. 2021 Sep 15;6(9):60-6.
- 25. Wenyi F, Gudapti2 P, Giri Kumar PV. Immediate Effect of Vaman Dhauti on Tridosa (As Measured by Nadi Tarangini)-A Pre-Post Control Study. indianyoga.org [Internet]. 2019 Apr;(2). Available from: http://indian.yoga.org/wp-content/uploads/2019/04/v8-issue2-article1.pdf
- 26. Chowdhury K, Datta N, Rao MV. Management of Sthaulya (Obesity) Through Kunjal KRIYA. Int J Res Ayurveda Pharm. 2013 Aug 26;4(4):599-604.

- 27. Dr. Gajendra Kumar Dubey. Kunjal Kriya: A magical procedure used in GIT disorders wsr to Amlapitta- A review study. JETIR Journal of Emerging Technologies and Innovative Research ([Internet]. 6(6). Available from: www.jetir.org (ISSN-2349-5162)
- 28. Yogeshwar G. Kunjara the yogic stomach wash. Anc Sci Life. 1992 Jul: 12(1-2):261-3.
- Sharma J, Vaidehi V, Nikhate S, Kumar D. A Conceptual Study on Dhyana (Meditation), Concentration & Smriti: A Review. 2019 Dec 21; 8:1641-57.
- 30. Original Sukshma Vyayama by Swami Dhirendra Brahmachari Ji and Balmukund Singh Ji [Internet]. 2014 [cited 2023 Sep 19]. Available from: https://www.youtube.com/watch?v=uwTiBmDe-8Q
- 31. Kanojia S, Sharma VK, Gandhi A, Kapoor R, Kukreja A, Subramanian SK. Effect of yoga on autonomic functions and psychological status during both phases of menstrual cycle in young healthy females. J Clin Diagn Res. 2013 Oct; 7(10):2133-9.
- 32. Warm up sukshmaYyog health in 14 min [Internet]. 2019 [cited 2023 Sep 19]. Available from: https://www.youtube.com/watch?v=7l1znI\_Btvc
- 33. Alagumariappan P, Jamal N, Emmanuel C, Bhaskar K, Jaisingh M, Kannan R. Analysis of Influence of Yoga-Asana on the Digestive Process Using Electrogastrograms. In 2021. p. 423-9.
- Dhananjai S, Sadashiv null, Tiwari S, Dutt K, Kumar R. Reducing psychological distress and obesity through Yoga practice. Int J Yoga. 2013 Jan; 6(1):66-70.
- 35. Kaswala D, Shah S, Mishra A, Patel H, Patel N, Sangwan P, et al. Can yoga be used to treat gastroesophageal reflux disease? Int J Yoga. 2013 Jul; 6(2):131-3.
- 36. Chen H, Li Q, Li M, Liu S, Yao C, Wang Z, et al. Microbial characteristics across different tongue coating types in a healthy population. J Oral Microbiol. 2021; 13(1):1946316.
- 37. Buss J, Havel PJ, Epel E, Lin J, Blackburn E, Daubenmier J. Associations of ghrelin with eating behaviors, stress, metabolic factors, and telomere length among overweight and obese women: preliminary evidence of attenuated ghrelin effects in obesity? Appetite. 2014 May; 76:84-94.
- 38. Smalls LK, Hicks M, Passeretti D, Gersin K, Kitzmiller WJ, Bakhsh A, et al. Effect of Weight Loss on Cellulite: Gynoid Lypodystrophy: Plastic and Reconstructive Surgery. 2006 Aug; 118(2):510-6.
- 39. Meshramkar R, Patil SB, Patil NP. A case report of patient practising yoga leading to dental erosion. International Dental Journal. 2007 Jun; 57(3):184-6.

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