

Yogic Intervention and the Weight Loss

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Abstract:

Obesity is becoming a serious Global Public Health issue especially in developed countries. Evidence indicates that obesity is associated with wide range of health conditions including respiratory diseases can result in altered respiratory function. Yoga is a form of physical activity which may assist in achieving recommended levels of physical fitness. Yoga may be attractive as an aerobic training program because it requires little space and no equipment. Some yoga postures help to reduce weight with significant health benefits.

Although yoga may help manage conditions co morbid with overweight and obesity, such as low back pain, whether yoga helps with weight loss or maintenance beyond that which can be achieved with diet and exercise remains unclear. A search of multiple databases through September 2012 was undertaken identifying peer-reviewed studies on yoga, meditation, mindfulness, obesity, and overweight. Studies on yoga and weight loss are challenged by small sample sizes, short durations, and lack of control groups. In addition, there is little consistency in terms of duration of formal group yoga practice sessions, duration of informal practices at home, and frequency of both. Studies do however suggest that yoga may be associated with weight loss or maintenance. Mechanisms by which yoga may assist with weight loss or maintenance include the following: (a) energy expenditure during yoga sessions; (b) allowing for additional exercise outside yoga sessions by reducing back and joint pain; (c) heightening mindfulness, improving mood, and reducing stress, which may help reduce food intake; and (d) allowing individuals to feel more connected to their bodies, leading to enhanced awareness of satiety and the discomfort of overeating. Thus, yoga appears promising as a way to assist with behavioral change, weight loss, and maintenance.

Key Words: obesity, overweight, yoga, weight loss, weight maintenance

Introduction:

Obesity represents a strong risk factor for developing chronic diseases. Strategies for disease prevention often promote lifestyle changes encouraging participation in physical activity. However, determining what amount of physical activity is necessary for achieving specific health benefits has been hampered by the lack of accurate instruments for monitoring physical activity and the related physiological outcomes. This review aims at presenting recent advances in activity-monitoring technology and their application to support interventions for

health promotion. Activity monitors have evolved from step counters and measuring devices of physical activity duration and intensity to more advanced systems providing quantitative and qualitative information on the individuals' activity behaviour. Correspondingly, methods to predict activity-related energy expenditure using bodily acceleration and subjects characteristics have advanced from linear regression to innovative algorithms capable of determining physical activity types and the related metabolic costs. These novel techniques can monitor modes of sedentary behaviour as well as the

engagement in specific activity types that helps to evaluate the effectiveness of lifestyle interventions. In conclusion, advances in activity monitoring have the potential to support the design of response-dependent physical activity recommendations that are needed to generate effective and personalized lifestyle interventions for health promotion¹.

Strong evidence linking poor diet and lack of physical activity to risk of obesity and related chronic disease has supported the development and promotion of guidelines to improve population health. Still, obesity continues to escalate as a major health concern, and so the impact of weight-related guidelines on behaviour is unclear. The aim of this review was to examine consumer response to weight-related guidelines. A systematic literature search was performed using Medline, PsycInfo, ProQuest Central and additional searches using Google and reference lists. Of the 1,765 articles identified, 46 relevant titles were included. Most studies examined attitudes towards content, source, tailoring and comprehension of dietary guidelines. Many respondents reported that guidelines were confusing, and that simple, clear, specific, realistic, and in some cases, tailored guidelines are required. Recognition of guidelines did not signify understanding nor did perceived credibility of a source guarantee utilization of guidelines. There was a lack of studies assessing: the impact of guidelines on behaviour; responses to physical activity guidelines; responses among males and studies undertaken in developing countries. Further research is needed, in particular regarding responses to physical activity guidelines and guidelines in different populations. Communication professionals should assist health professionals in the development of accurate and effective weight-related guidelines².

Lifestyle intervention is fundamental for obesity treatment. The aim of this study was to evaluate the effects of a program focused on diet, exercise and psychological support on Lifestyle Modification in overweight and obese patients treated in Primary Health Care setting. 60 patients with grade II overweight and non-morbid grade I-II obesity were included in this pilot clinical trial. Ages ranged from 18 to 50 years. They were provided with a program combining nutritional education, physical activity and psychological support. Subjects attended group sessions every 2 weeks. The main outcome measures at baseline and 6 months were body composition parameters (BMI, body fat percentage, waist circumference) and lifestyle intervention using the Questionnaire for the assessment of overweight and obesity related lifestyles at baseline and six months. This questionnaire yields five dimensions: diet caloric intake (CC), healthy eating (AS), physical activity (EF), searching for psychological well-being eating (BP) and alcohol intake (CA). The higher score indicates better lifestyles for CC, AS, EF and worse for BP y CA. At the end of the intervention the program achieved improvements in Questionnaire related lifestyles subscales: CC ($2,60 \pm 0,5$ vs. $3,49 \pm 0,7$, $p < 0,001$), EF ($2,19 \pm 0,9$ vs. $3,17 \pm 1,0$, $p < 0,001$) and AS ($3,04 \pm 0,4$ vs. $3,43 \pm 0,4$, $p < 0,05$); CA ($3,98 \pm 0,7$ vs. $4,25 \pm 0,7$, $p < 0,05$) and BP ($2,82 \pm 1,0$ vs. $3,34 \pm 0,7$, $p < 0,001$) has got worse. The Program focused on balanced and moderate energy-restricted diets, increased physical activity and psychological support may improve the anthropometric parameters and the Lifestyle intervention in obese patients treated in a primary healthcare centre³.

History of Yoga:

Yoga as an ancient science has always been about the benefit that it brings to the practitioner. It would only be a dogmatic

position that states it is only for spiritual elevation and nothing more. Yoga is a tool that helps the body, mind and spirit. It can be used as needed according to each individual's requirements. In today's day and age western society is suffering from an epidemic of obesity. It needs as many healthy long-term approaches to weight loss as possible. The first and most obvious approach that addresses underlying causes is to eat healthy nutrient dense organic foods. Another way is to use the ancient science of yoga.

Yoga has long been thought of as a great way to increase flexibility and relieve stress. Moreover, many people have seen the wonderful benefits Yoga has in weight loss in recent years. Specific positions or asanas can target areas such as the abdomen, waist, and thighs. Those asanas that target the abdomen are the abdominal lift, the child pose, and the cobra pose. On the other hand, the downward and upward-facing dog poses, the hero pose, and the angle pose help tone the hips and thighs.

Importance of Yoga:

Any physical activity burns calories. As you sit and read this, you are already burning calories. When performing Yoga, you can burn up to 345 calories per hour. Though it significantly burns fewer calories than more strenuous exercises, it works all the muscles in the body and tones them more evenly. Often seen as a low-impact form of exercise at the beginner level, Yoga can be performed by almost anyone!

Dieting can certainly help with short term weight loss but a sustained program of Yoga can help with long-term weight loss. Specific asanas can help increase your metabolism. The Salutation to the Sun, Pose of the Moon, Cobra pose, Bow Stretch, and Spinal twist all work to increase your metabolic rate and stimulate the endocrine system.

The best types of Yoga for weight loss are

considered to be the most physical. Ashtanga Yoga, Bikram Yoga, and Power Yoga are considered to be the most physical types. If you've never done Yoga before, it is not advisable to start with the most physical types. Instead, try other types which are fit for beginners. You can try the most common form which is Hatha Yoga. After you are comfortable with this style, you may already start to notice changes in your body.

Exercise alone will not get you from a size 14 to a size 10. Regulating and changing your diet is also an essential part of any weight loss program. Common sense dictates that the fewer calories you take in and the more calories you burn will result in weight loss. While Yoga will help tone your body and change its physiology, you will not see the true benefits of it if you eat an entire chocolate cake after your workout.

To fight off cravings, increase your will power by trying this simple exercise. First, clear your mind. Breathe deeply then repeat to yourself: "I will be thinner. I will be healthier. I will be happier." Positive reinforcement will surely help you lose weight with Yoga.

Dietary Habits:

Diet is an important component while practicing asanas & pranayama for weight loss. One of the best aspects of yoga is that diet is a main part of it. After you have lunch, you can practice yoga after a gap of 4 hours. You have to control your food intake. You also have to follow a specific diet plan which will help in reducing unnecessary calories. Yoga and breathing exercises should always be performed on empty stomach.

After you finish with the weight loss yoga session, always chant 'Aum' or 'OM' 11 times loudly. The vibration that it creates gives you a pleasant feeling & keeps your body rejuvenated throughout the day.

Also, this chanting can be done in the beginning of a yoga class along with prayers & mantras.

The purpose of this study was to determine the association between healthy lifestyle habits (eating 5 or more fruits and vegetables daily, exercising regularly, consuming alcohol in moderation, and not smoking) and mortality in a large, population-based sample stratified by body mass index (BMI). They examined the association between healthy lifestyle habits and mortality in a sample of 11,761 men and women from the National Health and Nutrition Examination Survey III; subjects were ages 21 and older and fell at various points along the BMI scale, from normal weight to obese. Subjects were enrolled between October 1988 and October 1994 and were followed for an average of 170 months. After multivariable adjustment for age, sex, race, education, and marital status, the hazard ratios (95% CIs) for all-cause mortality for individuals who adhered to 0, 1, 2, or 3 healthy habits were 3.27 (2.36–4.54), 2.59 (2.06–3.25), 1.74 (1.51–2.02), and 1.29 (1.09–1.53), respectively, relative to individuals who adhered to all 4 healthy habits. When stratified into normal weight, overweight, and obese groups, all groups benefited from the adoption of healthy habits, with the greatest benefit seen within the obese group. Healthy lifestyle habits are associated with a significant decrease in mortality regardless of baseline body mass index⁴.

The effect of Pranayama and certain yogic asanas on parameters of obesity viz. weight reduction (BMI and waist hip ratio), Blood pressure and lipid profile were studied. Study Included 150 patients after screening inclusion and exclusion criteria for obesity, hypertension and dyslipidemia. The duration of the study was 3 months. Various parameters on demographic and clinical data for these diseases were recorded at the start of the

study.⁷⁵ study group Patients were attended Yoga camp daily for 3 months. The clinical data was again recorded at the end of the study period of 3 months for comparison. There were significant decrease in the parameters of obesity viz. BMI and WHR, significant improvement in hypertension both systolic and diastolic blood pressure and significant improvement in various lipid profile parameters viz. decrease in total cholesterol, LDL, triglycerides, VLDL and increase in HDL in study group as compared to control group⁵.

The Benefits of Yoga:

1. It reduces stress
2. It builds muscle
3. It teaches discipline
4. It encourages sound sleep
5. Stimulate the vital force of the liver
6. Activate the thyroid gland
7. Create the right pH balance – Alkalize!
8. Find the right balance between the sympathetic and parasympathetic nervous system.
9. Activate the internal heat in the nervous system.
10. Move the body with strength.
11. Get your heart rate up.
12. Cleansing the colon

Use of Yoga for Weight Loss:

Yoga can be an intense workout that tones all portions of the body, builds stamina, and burns calories, making it ideal for weight loss. Practice yoga for an hour, three times a week for maximum weight loss benefit. An hour of yoga can burn as much as 150 calories. The weight bearing nature of many yoga postures will also tone the muscles, increasing your metabolism even when resting.

Yoga also relieves stress. It's well known that stress hinders weight loss efforts. So not only will power yoga and sweat-producing yoga poses help the metabolism burn fat, but gentle yoga will help people relax. When people reduce stress and worry less, the body balances its

functioning and is in a better state to shed that excess weight.

In addition to sweating off the pounds, yoga puts the mind, body, and spirit in harmony. A peaceful frame of mind and healthy mind/body relationship offers other benefits: people stick to diets more easily, eat foods that are better for them, have a more positive body image, and maintain rigorous exercise programs. All these contribute to a successful weight loss regimen.

Important Asanas to Reduce Weight:

Dhanurasana, shalbasana, Pavanmuktasana (Wind-releasing Pose), Ardha Matsyendrasana, Vakrasana, Bhujangasana (Cobra Pose), Padahastasana, Trikonasana, Paschimottanasana, Sarvangasana, Hal

asana, Tad asana (Mountain Pose), Pranayama.

Conclusion:

“All of the current recommendations essentially look at obesity as a homogeneous condition that is amenable to treatment either simply by caloric reduction and/or increasing activity. No attempt is made to distinguish between different causes of obesity or even stages of obesity. The importance of identifying and thereby addressing the etiological determinants of positive energy balance is therefore critical to improving obesity management. Health professionals need to be aware of, and supportive to, these issues if individual behaviour change is to be successful, and this is an area worthy of further consideration and review⁶.

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