

NEWSLETTER

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Just what the doctor ordered: A shrinking waist, a shrinking demand for ultra-processed food - Brij Bhambi, MD



Obesity is an imposing problem in health care. A mere third of Americans have a body mass index of 25% or less. Nearly 10% of Americans exceed a BMI of 40%, an astounding doubling in the last decade.

Obesity adversely affects body image perception and, in the susceptible, leads to dysmorphic interpretations with a spectrum of psychosocial issues. Obesity can breed guilt, depression and stress. Stress generates hunger, looking for “comfort” food, putting in motion an amplifying cascade of guilt, food and worsening obesity. A dysmorphic interpretation of obesity is not a mere vanity-driven issue, as obesity spawns a plethora of modern chronic health problems that include heartburn, hypertension, enraged inflammation, arthritis, atherosclerosis, cancer, obstructive sleep apnea,

metabolic derangement, diabetes, bronchial asthma, heart attacks, diabetes, blindness, amputations and stroke that come together in a toxic dance of reduced health span and premature death.

The Bogalusa study, a longitudinal study to assess the effects of obesity and elevated LDL, was the first to demonstrate that obesity-related cardiovascular risks begin in childhood and continue into adulthood.

Cheap food has a cost burden of \$175 billion and counting in health care expenses.

The beginning

Obesity, you see, is a problem that a solution to hunger stumbled upon.

As the USA entered World War II, many potential recruits, number-

ing hundreds of thousands, failed to qualify for their dream of serving the motherland. Numerous patriots flunked physical eligibility, held back by malnutrition. Hunger needed a solution.

Concurrently, the technology that lent to giant bombs helped create better fertilizers. The company that produced Agent Orange made better pesticides. The agricultural output didn't increase in percentages; it increased by a factor of magnitudes. Big oil intersected at every level of expanding agrarian possibilities.

Coca-Cola was taken across the world by our military and became a sought-after American symbol of prosperity.

In 1972, the Nixon administration was concerned about the political fallout of food costs, and the president decided to get the food out of the kitchen conversation. Secretary of Agriculture Ed Rusty Butz was entrusted with the task. Farming in the U.S. was industrialized, and small farmers in rural communities were sacrificed in the pursuit of a loftier goal of satisfying hunger at a cheap price. To this day, corn and soya industrial farms sow more than half of the nation's cultivated land and avail the majority of the subsidies. Ethanol and fructose are byproducts of that pursuit.

The world's food giants buy subsidized grains to process corn, soy, etc., for edible conveniences. The prevailing science in the 1970s and '80s misinterpreted the data and blamed rising heart attacks on a high-fat diet, giving sugar a pass.

A perfect storm was born: Post-World War II technological ad-

vances, fertilizers, industrialized farming, an abundance of corn syrup, convenient foods with extended shelf-life, political complicity, erroneous medical advice and corporate profits coalesced into a solution to address chronic hunger. As the women were pulled to work, the household could use the convenience of packaged food, deceptively promoted as healthy. We have grocery stores over-stuffed with processed foods that crowd out healthy choices.

The undernourished recruits who failed to qualify for service in World War II now have great-grandkids who fail to qualify for reasons of obesity. Police, fire departments and security services are at risk.

Targeted and predatory advertising using childhood heroes, animals, celebrities and elite athletes prey upon the highly impressionable minds of the children, offering them addictions that would travel faithfully from the cradle to the grave.

The well-honed marketing skills, an undercurrent of misinformation, a lack of regulatory standards, and a failure of implementation have allowed Big Food a comfortable hiatus to thrive in the credulous populations of developing countries. The adoption of ultra-processed edibles has leapfrogged the timeline of the Western world. The recently prosperous are sleepwalking from undernourishment to toxic overdoses designed to kill.

Unfortunately, socioeconomic factors figure prominently in the obesity epidemic. The plentiful engineered and packaged edibles sold deceptively as nutritious food have convenience, accessibility,

affordability, shelf-life, portability, palatability, and, yes, addiction built into the packages.

Fructose in the omnipresent corn syrup contributes to insulin resistance, high blood sugar levels, and increased fat storage in the liver, with an increased risk of developing type 2 diabetes, obesity, liver disease, cirrhosis, cancer and cardiovascular disease.

Body positivity movement

In recent years, there has been a movement to accept a more generous body size as an acceptable reality. It seems to be a counter-cultural effort to negate the social media-based emphasis on unrealistic body image. Internal peace is imperative as long as we don't overdo an effort to normalize obesity.

Weight loss industry

A plethora of diets and gazillions of promoters have enriched themselves as the perpetually suffering bounce from one plan to another. Even a slight weight reduction can materially alter the trajectory of health.

It's time to aim for both satiety and health.

We must emphasize food and nutrition to school kids as a part of the health syllabus. Education and redirected economic incentives for a healthier diet can help build a healthier nation.

Exercise

Exercise is foundational to physical health, chronic disease prevention, mental health, immunity augmentation, musculoskeletal health, cognitive function, healthy sleep and an overall sense of well-being. Brisk walking for 30

minutes a day (or jogging for 15 to 20 minutes daily) five days a week can cut the overall risk of death by half. In other words, exercise is the most modifiable factor for disease prevention and death reduction.

Weight loss and Pharma

Beyond food fads that fail more than succeed, the pharmaceutical industry has had a similarly unenviable record until recently.

Only bariatric surgery has had a consistent and demonstrably successful track record.

Let us waltz into a new world where you can have your cake and eat it, too, if nausea won't hold you back.

Semaglutide (Ozempic and Wegovy) is a class of medicine that mimics the GLP-1 agonist (glucagon-like peptide) and helps release insulin and suppress glucagon release. It helps suppress appetite and delays gastric emptying. It's an effective medicine in treating diabetes and can help lower weight by almost 15%. Its side effects vary from a queasy stomach to pancreatitis and rarely cancer. Its most significant

handicap is the \$1,000 price tag a month that's necessary in perpetuity to sustain the weight loss. Then, there is an even more effective class of drugs (Mounjaro, Zepbound) that mimics the dual effect of GLP-1 agonists and GIP (glucose-dependent insulinotropic polypeptide) agonists.

Like any other new class of medicine, these drugs will have to stand the test of time in sustained efficacy and safety. Many medications lose effectiveness over time, and severe side effects can surface. Continued compliance is a perennial challenge for patient care. The notion of committing adolescents and young adults to a lifetime of treatment of newly approved medications seems excessive and should stir a healthy debate.

Weight loss, no matter how attained, is invariably associated with some muscle loss. Muscle loss in the geriatric creates a unique problem and is likely to enhance the risk of falls.

Ozempic face

Ozempic face is a term that ap-

pears to be a disparaging commentary on the facial transformation in some due to quick weight loss. Losing facial fat and loose skin can impart the impression of accelerated aging.

Knock-off drugs

The high prices of these new weight loss drugs have given an impetus to some compounding pharmacies to sell the generic version of the active ingredient. This improvisation lacks the rigors of precise dosing and is fraught with contamination hazards and, at times, outright scams.

Weight loss and Big Food

There is an exciting dynamic emerging on the Big Food side, as Eli Lilly's stock has rocketed some 60% in the last year, and Pepsi and Coke are down by 8% to 10%, highlighting the concern for decreasing product demand as the obese eat less and demand healthier options.

A shrinking waist with a shrinking demand for ultra-processed food is just the recipe your doctor may rejoice in.



Ozempic and Mounjaro – New strategy for diabetes and obesity

- William Baker, MD

Progression in the development of medications for Type II Diabetes Mellitus has led to the development of a wide variety of medications targeting the multiple physiologic abnormalities found in those with the disease. Ozempic (semaglutide) is in a class of drugs which are among the most effective at controlling blood sugar and promoting weight loss. The class of medications known as glucagon-like peptides-1 (GLP-1) cause the pancreas to make more insulin, decrease the amount of sugar made by the liver, and slow the [passage of food through the stomach and intestine, causing patients to feel full longer and eat less. Individuals treated with the GLP-1 agonist medications experience improved control of blood sugar as well as a reduced risk for major cardiovascular events such as stroke, heart attack and death. The class of medications is generally given as a once weekly injection, however there is an oral form known as Rybelsus which is administered as a daily tablet. Wegovy is the semaglutide GLP-1 agonist specifically approved for adults who are overweight and have weight-related medical problems as well as adults and teenagers with obesity. Overweight is defined as a body-mass-index (BMI, which is a number

derived from weight and height) over 25 and obesity as a BMI of over 30. Studies with Ozempic have demonstrated 5.7 lbs more weight loss in patients taking the medication than those taking placebo during the 30 week trial. To be effective the use of semaglutide must be combined with a calorie restricted diet and regular exercise.

GLP-1 medications are effective but, as all medications, not without the potential for side effects. Common side effects are low blood sugar, upset stomach, nausea, vomiting and stomach pain, diarrhea, constipation, headache, dizziness and tiredness. Less frequent but more serious side effects are changes in mood including thoughts of suicide, heart beating irregularly or pounding, lightheadedness or passing out, signs of a thyroid tumor with swelling in the neck, symptoms of pancreatitis with severe upper abdominal pain radiating through to the back, gallbladder problems with upper abdominal pain, fever and jaundice, stomach or intestinal paralysis associated with bloating, nausea and vomiting, constipation or diarrhea and severe abdominal pain. The class of drugs is not approved for use during pregnancy or breastfeeding.

Mounjaro (tirzepatide) is the first to market medication in a new class which combines the action of the GLP-1 effect observed with semaglutide as well as the effect of glucose-dependent insulinotropic polypeptide (GIP) which helps the pancreas make the insulin, lower the amount of glucose made by the liver and makes the patient feel full longer. Both drugs are effective at reducing the average blood glucose in diabetics and prompting weight loss. Just as Ozempic, Mounjaro is given by once weekly injection. Compared to Ozempic, in the phase 3 SURPASS study with over 1,870 participants, Mounjaro reduced the hemoglobin A1c (average blood sugar) by 2% to 2.3% and weight by 25 lbs compared with Ozempic at 1.9% and 13 lbs. Some of this difference may be dose related. The side effects and limitations for both drugs are the same. Mounjaro is FDA-approved for diabetes control and the drug Zepbound, which is exactly the same as Mounjaro is approved for weight loss.

The GLP-1 and combined GLP-1 with GIP drugs in combination with diet and exercise offer new hope for patient with difficult to control diabetes, overweight and obesity.

Exercise for Weight Loss - William Baker, MD



Every year about 50% of all Americans attempt to lose weight. Exercise is commonly employed in order to burn more calories than consumed. Other benefits include stronger bones, improved mood, better sleep and a reduced risk of cardiovascular disease, diabetes and many types of cancer. The key to sustaining a personal exercise program is to choose something which fits your schedule and an activity which you find enjoyable. Another aid to success is to either participate in an exercise class or recruit an exercise partner. As all new endeavors, the most important principle is persistence! Eight simple forms of exercise are discussed below. Pick one or a combination, with the goal of approximately 30 minutes of exercise 5 days per week or 150 minutes per week.

Walking

Walking is a great way to begin exercising. It is low impact and requires no special equipment. Get started by walking at a comfortable pace for 30 minutes 3-4 times per week. A 12-week study of 20 women with obesity found that walking for 50-70 minutes 3

times per week reduced body fat and waist circumference by an average of 1.5% and 1.1 inches respectively. A 180 lb person burns about 9.7 calories per minute.

Jogging or running

The key difference between walking, jogging and running is the pace.

Jogging pace is generally 4-6 miles per hour and running is 6 miles per hour or faster. The maximum calorie burn for walking is at a pace of 12 minutes per mile and for running is 10 minutes per mile, with jogging somewhere in between. The 4-mph speed is that of a brisk walk. Running a mile will burn 30 more calories for this person than walking briskly. The differences in the calories burned will be less for people who weigh less. Calories burned is calculated from a combination of body weight and pace. Jogging and running burn more belly fat than walking. For a person who weighs 160 pounds, walking at a pace of 3.5 miles per hour for 30 minutes burns about 156 calories. Running at 6 mph for the same time burns about 356 calories.

Burning calories. Running burns more than twice as many calories per minute as walking.

Cycling

Cycling has the advantage of being non-weight bearing. This is especially helpful for people with back, hip or knee problems. Cycling may be indoors or out. It is estimated that an average 180 lb person cycling at a pace of 10 mph burns about 8.3 calories per minute.

Weight training

Strength training can build strength, promote muscle growth, bone strength and raise the resting metabolic rate (the number of calories burned per hour at rest). An estimated 9.8 calories per minute are burned by a 180 lb person during a weight lifting session. A 6-month study of weight training for 11 minutes 3 times per week led to an average of 7.4% increase in resting metabolic rate equivalent to burning an additional 125 calories. In another study, 24 weeks of weight training resulted in a 9% increase in resting metabolic rate in men (equivalent to 140 calories per day) and 50 more

calories per day in women. Calories continue to burn many hours after the weight training workout compared to aerobic exercise.

Interval training

Interval training, more commonly known as high intensity training (HIT), is broadly defined as short burst of intense exercise alternating with recovery periods. In one study of active men, 25 to 30% more calories were burned with HIT than with standard aerobic exercise.

Swimming

A 180 lb person swimming at a moderate pace crawl burns about 11.6 calories per minute. Most calories were burned by the breaststroke followed by the but-

terfly, backstroke and freestyle. Swimming is non-weight bearing and recognized to improve flexibility and to reduce cardiovascular risk factors such as cholesterol and triglycerides.

Yoga

Not typically considered a weight loss exercise, yoga burns calories and provides both physical and mental benefits. A 12-week study of 60 obese women demonstrated that those who participated in two 90-minute yoga sessions per week achieved an average 1.5-inch reduction in waist circumference.

Pilates

An 8-week study of 37 middle-aged women demonstrated

that performing Pilates for 90 minutes 3 times per week significantly reduced waist, stomach and hip circumference compared to the control group who performed no exercise. A 30-minute beginner's class burns about 168 calories for a 140 lb person. An advantage of Pilates is that, while home programs are easily accessible, group exercise is readily available and encourages consistency.

A reduced calorie diet combined with any of these exercise programs can be effective in aiding weight loss and achieving the goals necessary to realize improved health and reduction in cardiovascular risk.

Reference – Healthline – “The 8 best exercises for weight loss”

Nutrition Nuggets



ZUCCHINI PRIMAVERA

Prep Time: 20 mins
Cook Time: 15 mins
Additional Time: 20 mins
Total Time: 55 mins
Servings: 2

Ingredients

1 large zucchini, or more to taste
1 teaspoon salt, or as needed
¼ cup olive oil
1 small onion, thinly sliced lengthwise
½ medium red bell pepper, cut

into matchstick-sized pieces
1 cup yellow grape tomatoes
½ teaspoon garlic powder
2 tablespoons milk, or more to taste
½ cup freshly grated Pecorino cheese
½ teaspoon ground black pepper
½ teaspoon dried oregano

Directions

Cut zucchini into noodle shapes with a spiralizer; toss with salt until combined. Drain on a paper towel until moisture is drawn out; about 20 minutes. Squeeze zuc-

chini noodles to remove remaining moisture.

Heat olive oil in a skillet over medium heat. Add onion and red bell pepper; cook and stir until onion is soft and translucent, about 5 minutes. Stir in tomatoes and cook until soft, 3 to 4 minutes. Stir zucchini into onion mixture; cook and stir until tender and mixture looks dry, about 5 minutes. Sprinkle with garlic powder. Stir in milk and cook, 1 to 2 minutes. Add Pecorino cheese, pepper, and oregano; stir until combined.

Tips

You can substitute red grape tomatoes and yellow pepper to create an appetizing color contrast. Cream or almond milk can be substituted for the milk if desired.

Nutrition Facts (per serving)

Calories -399 Fat – 34 grams
Carbs – 12 grams Protein – 11 grams

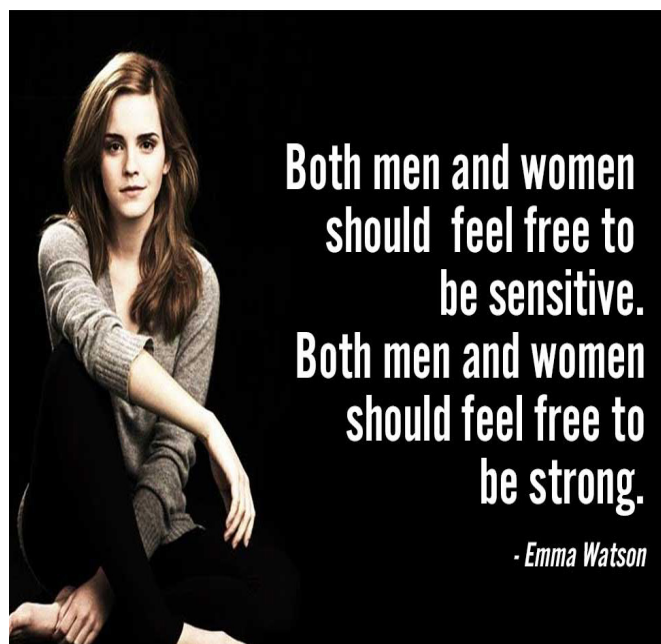
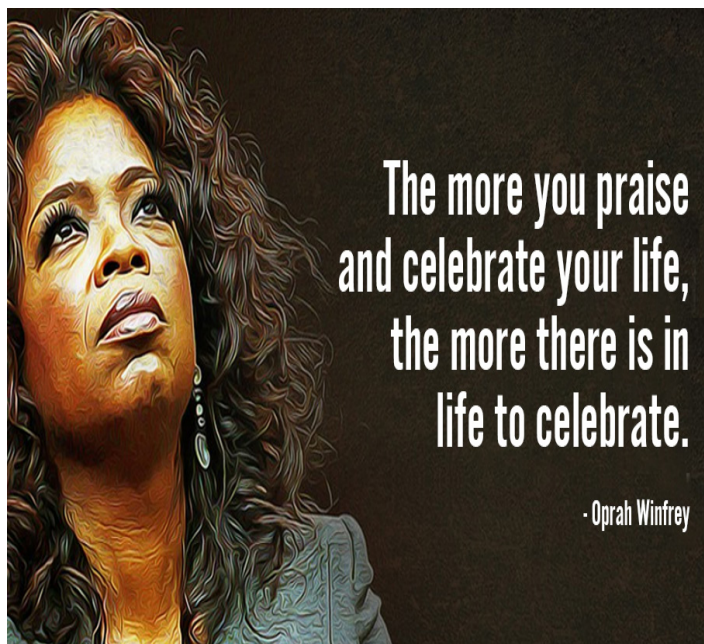
Centric Health

Centric Health is a multispecialty medical group comprised of many of the most outstanding medical professionals and medical groups in Bakersfield dedicated to providing the highest quality of medical care in a rapidly changing health care landscape. Centric Health was developed to enable physicians to do their best work and to assure access to high quality care for residents of our community. Centric Health includes a broad spectrum of medical specialties and services designed to meet the many needs of patients.

The Physicians and healthcare professionals at Centric Health Medical Offices offer an array of services ranging from Cardiology, Vascular, Primary Care, Endocrinology, Pulmonology and Diagnostic Imaging.

Centric Health wishes Happy National Women Physicians Day to all of our female providers!

- **Central Cardiology Medical Center**
- **Preferred Family Care**
- **Sillect Medical Centers**
- **Kern Endocrine Center**
- **WF Baker MD and Associates**
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