

What is driving the epidemic of obesity?

There are four primary reasons for a growing epidemic of obesity in the world:

1. **Loss of traditional food culture from natural to synthetic foods**- Traditional societies eating traditional foods at traditional meal times do not typically become obese. That is despite being surrounded by an abundance of traditional foods. Few good examples of traditional healthy foods exchanged for modern unhealthy products in Indian foods are:

- Jaggery as sweetener versus unhealthy refined sugar.
- Rock and natural unrefined salt versus refined packaged salt. Obesity ↓
Diabetes (Mother of all Illness) Heart Disease High Blood Pressure Stroke Neuropathy Retinopathy Kidney Failure Amputation Dementia.
- Cold compressed cooking oils (mustard, sesame, coconut, peanut) versus refined, hydrogenated vegetable oils.
- Traditional low – fat Indian cow milk versus commercial dairy milk from imported cow breeds, which is rich in saturated fat, hormones, and antibiotics.
- Fresh stone ground whole wheat and multigrain flour rich in fiber, healthy oils, and vitamin B complex versus highly refined packaged milled wheat flour rich in gluten, protein, deficient in fiber, healthy oils, and vitamin B complex.
- Natural home cooked foods versus precooked fast and packaged junk foods rich in sugar, salt, toxic chemicals, and preservatives.
- Traditional natural Indian foods versus western foods made from refined sugars and refined wheat flour- bread, cakes, muffins, pasta, pizza, etc.
- Water versus sugary cola beverages and sports drinks.
- Whole fruits versus fruit juices. Japanese, Korean and Vietnamese populations who stay lean in their countries, become obese when they migrate to the west. That is likely from adopting western ways of food choices, multiple eating opportunities, and sedentary living.

2. **Consumption of sugar-rich foods and frequent meals, which lead to an excess of hormone Insulin in the body**- Recent scientific work has shown that obesity starts as a disease of Insulin excess in the body. The insulin is the glucose utilization hormone without which body cannot survive. The reasons why insulin excess occurs and how it has contributed to a growing epidemic of obesity in the urban Indian population are:

- a) Affluence and affordability of nontraditional synthetic foods – City dwellers are increasingly relying on pre-prepared, synthetic, packaged and nutrient deficient fast

foods to save on time and effort in cooking. Synthetic pre-prepared foods are rich in two slow food poisons- refined sugars and refined wheat flour. These foods raise the demand for insulin. Excess of glucose and insulin increases the storage of too much fat energy, leading to obesity.

b) Frequent meals with more time of the day spent in eating than in fasting. Up until the 1970's, the traditional eating culture was three meals a day – breakfast, lunch, and dinner. There was a fair and equal balance between fasting and feeding periods in 24-hour day cycle. The typical night time fasting cycle was 12 hours or longer with dinner ending early. Eating frequency of the population currently is three major meals a day with several snacks in between. More time of the day is focused on the feeding than the fasting. The dinner and snacks are extended late into night hours, cutting into the night time fasting cycle.

Unfortunately, the commercial weight loss industry has done serious harm by promoting multiple small meals a day. These small meals, typically, end up being unhealthy, synthetic snack type meals, rich in refined sugars and flours such as biscuits, bread, sandwiches, sugary energy bars, fried treats, etc. The prolonged feeding cycle of these unhealthy, snack meals, extending late into the night, places a higher demand for Insulin hormone. More insulin in the body means more fat storage and obesity.

3. Incorrect fat theory of 1970 – All the fats are bad!! After the second world war, major contagious disease epidemics such as cholera, polio, smallpox, plague, etc. were eliminated by vaccination and sanitation. The people started living longer. The long living more affluent western populations began suffering from a new epidemic of disease—the heart disease. The medical community recognized that patients with heart disease had higher levels of fats (cholesterol) in the blood. The dietary fat, therefore, was declared the major culprit in heart disease. The FDA (the federal department of agriculture, USA), laid out low fat dietary guidelines in the 1970's.

These low-fat dietary guidelines got adopted around the globe. Unfortunately, the low-fat diets became cheaper high carbohydrate diets. Within ten years of adoption of low-fat theory, two new epidemics emerged globally, and these were obesity and Type2 diabetes. Many more food and lifestyle diseases followed these two diseases, such as high blood pressure, heart disease, stroke, arthritis, cancer, etc.

The theory of “All fats are bad” does not take into consideration that there are many healthy fats which are essential for good health. All the plant-based fats are all healthy, provided these are not refined, by the chemical process or subjected to high heat frying. The animalbased fats such as meat and dairy are the unhealthy saturated fats.

“Plant-based fats such as non-hydrogenated oils like mustard, coconut, sesame, grapeseed and olive oils, and ghee are good for health. The unhealthy fats to avoid or

minimize are hydrogenated refined vegetable oils, fried foods (transfats), and animal-based fats such as meat and dairy products (especially cheeses, paneer, and milk based sweets).”



Why eating healthy fat is essential

Fat keeps the stomach full for long hours by delaying the emptying of the stomach. Low-fat, high carbohydrate diets, increase hunger and frequency of eating. The obesity epidemic of the world can be traced back to the “All fats are a bad theory of the 1970’s”. This theory was discredited entirely almost ten years ago by the scientific community. The general population around the world, however, continues to believe in low-fat diets. This thinking must change, and the adoption of plant-based healthy fats must become an essential food in our diet. That simple change in nutrition philosophy will help the world conquer the twin epidemic of diabetes.

4. Incorrect knowledge on treating obesity- Most people do not know that obesity was not labeled a disease up until recently. That is because of a simple reason that obesity was an uncommon medical problem until 1970. Since obesity did not get the label of a disease, medical schools did not teach obesity. There is no surprise, therefore, that when the obesity became a global epidemic in the 1980’s, the doctors did not take responsibility for its prevention and cure. By default, non-physicians such as dieticians, personal trainers, bodybuilders, and commercial diet industries took over over the management of this severe disease. Their treatment methodology for obesity cure follows the simple equation:

Fewer calories in, More calories out Or Eat less, Move more

Several billion in money are spent each year, on an entirely failed calorie in/calorie out treatment methodology. The epidemic of obesity and its twin epidemic of Type2 diabetes has kept growing with each passing year. The reason behind the failed low-calorie diet plans is the simple scientific truth, that obesity is not a disease of caloric imbalance.

The recent medical research over the past decade has clearly shown that the cause of obesity is not the caloric imbalance, but a hormonal imbalance. The hormone which is the primary culprit in obesity is insulin, which is the essential glucose utilization hormone. Excessive sugar intake increases the demand for insulin. Excess of hormone insulin causes insulin resistance or imbalance. The insulin resistance is at the root of both obesity and Type2 diabetes. To prevent and cure the epidemic of obesity and Type2 diabetes (diabetes), therefore, a significant shift is required in the treatment approach.

The current concept on the cause of obesity which is supported by medical research is:
“Insulin excess in the body is the root cause of obesity. So the calorie balance equation of eating less and moving more must be discarded. Instead, the practitioners treating obesity must adopt the science of fixing hormonal imbalance of insulin excess via a rigorous food and lifestyle modifications”.