Foods and lifestyle which lead to abnormal lipid profile –Dyslipidemia

- ***The foods made from refined sugars*** - - Sweets, candies, baked goods, and sugary drinks
- ***Sweet beverage rich in sucrose (sugarcane sugar), and fructose sugar (High Fructose corn syrup and fruit sugar)-*** -Fruit juices and cola beverages (containing high fructose corn syrup) are the most abundant source of fructose sugar. Human body handles glucose and fructose differently. While glucose is taken up by every cell of the body for making energy, the fructose gets only processed by the liver. The liver uses fructose to make fatty acids, so consumption of too much fruit sugar leads to fatty liver. Excess of fructose in the liver also elevates triglycerides. Drinking a 6-8 ounce glass of fruit juice or cola beverage daily for six months can lead to an excess fat collection in the liver and high triglyceride levels.
- ***Refined wheat flour*** - Milled wheat flour and maida are the commercially processed wheat products which do not have husk and endosperm (embryo). The husk is the rich source of fiber and endosperm a source of healthy omega3 oils. The process of milling is a high heat process which destroys these elements. The best way to make wheat flour is to have it stone ground, so both husk and endosperm get preserved. The stone-ground wheat flour, which is rich in husk and endosperm cannot be stored for more than a month at room temperature as the omega 3 oils in it get oxidized and make flour bitter(rancid). The best way to eat healthy wheat flour is to have the grain grinder in the kitchen and make small batches of flour to last a month — several affordable varieties of kitchen grain grinders are available in the Indian market.
- ***Saturated fats*** - The saturated fats come from animal sources such as meat and dairy. Saturated fat consumption should be less than 10% of total calories. In obese and diabetic individuals, the saturated fat amount should be even lower than this.
- ***Human-made fats*** – These include refined hydrogenated vegetable oils and Trans-fats such as Dalda and Margarine. Frying of the foods converts hydrogenated, refined vegetable oils into trans fats. So the fried and processed commercial foods, and pre-prepared foods from vendors are abundant in unhealthy trans-fats. Human-made fats increase the level of bad LDL- Cholesterol and are major contributors to dyslipidemia and associated diseases.
- ***Frequent meals*** – Diabetic and obese patients are typically advised to eat small meals multiple times a day (every 2-3 hours). Wishful thinking is that this practice will keep glucose and Insulin levels low with better control of blood sugars, and lower the caloric intake. Although practiced for decades, the practice of eating frequent 2-3 hourly meals has failed to control the epidemics of Type2 diabetes or obesity. On the contrary, the number of these cases has multiplied because frequent eating promotes overeating of the unhealthy snack type foods.

  For thousands of years, until 1970, humans around the globe lived with the cultural tradition of eating 2-3 meal/day. Both obesity and Type2 diabetes were rare. What the global health care systems have failed to recognize is that the human diet and lifestyle changed significantly since 1970 in parallel with the economic and digital revolution. The Suboptimal commercial diet eaten frequently is the leading cause of disease and disability in the world for the past 50 years. The solution, therefore, is to go back in time 50 years both concerning the quality of meals (natural versus

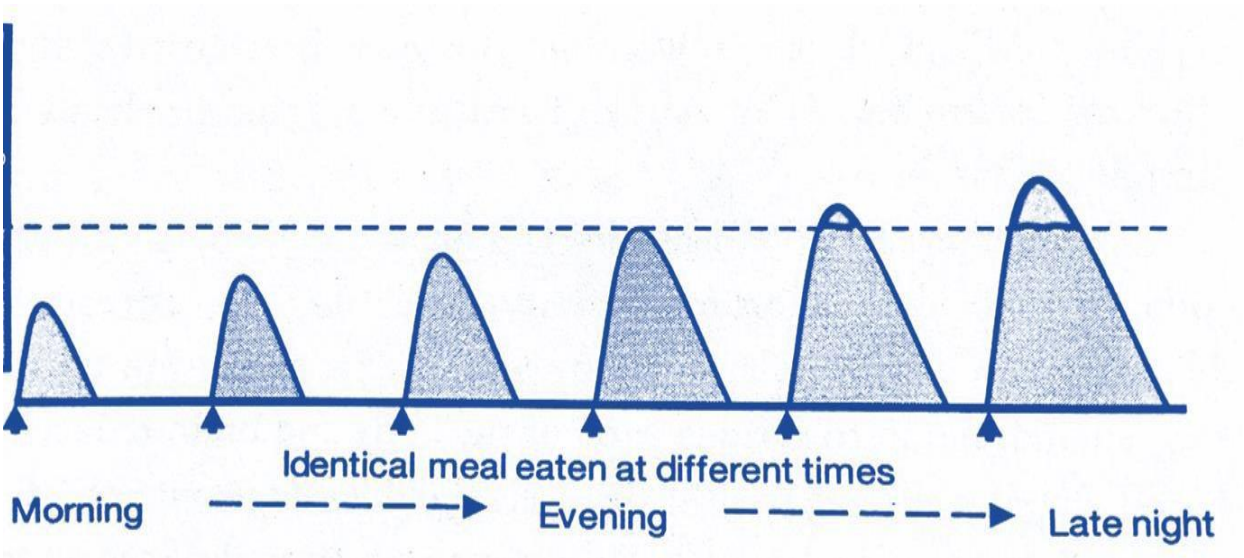
commercial) and frequency of meals (2-3 versus multiple meals).

Logistically, frequent meals compromise the food quality, because frequent eaters end up eating mostly unhealthy snack types meals such as energy bars, biscuits, sandwiches, and preprepared fried and baked items. These snack food are rich in refined wheat flour, fat, and sugars, the three food poisons which contribute to dyslipidemia, and the associated diseases- obesity, heart disease, metabolic syndrome, PCOS and Type2 diabetes.

- ***Late-night eating*** - Late night eating after 8 PM promotes obesity and dyslipidemia in two ways :

  a) By natural law, the body is in the physical activity mode during the daylight hours, and in the rest, repair, and rejuvenate mode during the night hours. The body's brain clock activated by the energy of the Sun has programmed digestion and the metabolism to be energy efficient during the daylight hours. Nature enables more efficient energy generation during the daylight hours by making the body Insulin hormone-sensitive during the day. At the night time, there is minimal physical activity, so energy needs are minimal, and the body becomes insulin resistant. Resistance to Insulin hormone means glucose cannot get into cells for making energy, and excess glucose gets converted to reserve energy fat. Late-night eating invariably leads to excess fat in the body, causing Dyslipidemia and all the associated diseases. That will occur even if one is consuming the most healthy holistic low-calorie plant-based foods late at night.

Blood sugar level versus meal timing—By Satchin Panda in the Book "The Circadian Code."



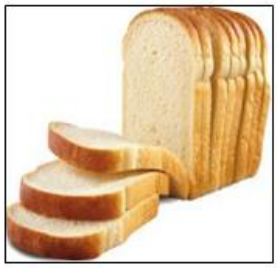
  b) By the natural law, the body temperature must go down by a degree to get deep rejuvenating sleep. Eating meal increases the core body temperature for 2-3 hours. Late eating, therefore, translates to poor sleep quality because of higher

core temperature. Suboptimal sleep increases the level of the stress hormone cortisol in the body. Excess of cortisol in the body causes high blood glucose levels, dyslipidemia, and Obesity.

Natural Vs Commercial

ROTI Vs DOUBLE ROTI

Low Glycemic/High Fiber



High Glycemic/Low Fiber

JAGGERY VERSUS REFINED SUGAR

HEALTH THREATENING FOODS