

FROM THE PRESIDENT'S DESK

THE WAY I SEE HEALTH: SUGAR, OBESITY & METABOLIC DYSFUNCTION

We have gone through and apparently came out victorious from an era of Infectious Diseases, at least in developed countries. However, now we face the threat of NONCOMMUNICABLE DISEASE, so huge that we should call it an Epidemic or even a Pandemic. The situation is so critical that the WHO in 2011 commented that this could be the biggest threat to human, including those in the underdeveloped or developing countries. The people in these countries use to face starvation as their main day to day issue.

What has gone wrong? Our genes have not changed, but our food and the environment have changed drastically for the worst. People are not eating REAL FOOD, grown organically in nutrient rich soil. Pesticides and herbicides, further deplete the soil by killing the beneficial soil bacteria which convert the inorganic minerals to organic minerals, which the plants absorb and pass on to us. Furthermore, the real foods have been replaced by Fast Foods (which should be aptly called as Fiberless Foods) which are almost completely devoid of all the beneficial nutrients besides adding to the sugar and Chronic Inflammation in our body. One striking change in human physiology now is Obesity. The latest WHO puts the incidence of Obesity in the world population at 32%! We in Malaysia can be proud as we have become the fattest nation among the Asian countries. What is heartbreaking is the number of obese children, yet when you really scrutinize, nothing much is being done for lack of courage to make right decisions. Food manufacturers will keep saying that Obesity has many causes. Governments are not doing what is ethically and morally right for its people. You walk into any school canteen and it will be a pot luck to see any healthy foods or snacks. On the other hand, there will be plenty of soft drinks, sugar beverages, sports drinks, high carb foods etc. We make emotional pleas for the public to change food habits and about the incidence of obesity, its implications to the public and to the media but we do little to reduce or prevent the exposure of unhealthy foods to our children. We even knowingly or otherwise pass on this risk to the next generation. Pregnant mothers who consume a high carb diet esp. sugar expose their fetuses to high levels of blood sugar and Insulin creating Intrauterine Insulin Resistance which forms the perfect storm for the next generation obesity and all its associated complications. Stress is another well-known factor in Obesity. Stress increases hunger and carbohydrate cravings. The excess stress hormone, Cortisol increases visceral fat adding to the woes of a stressed out, rushing society eating on the run. This then becomes a perfect reason to reach out for fast foods (fast service, fast

eating and then the fast onset of diseases). Meditation has been shown to reduce visceral fat by helping to control stress and Cortisol. Hormone deficiencies can be a major contributor to obesity as well. Hypothyroidism (generalized weight gain), Low Testosterone and Growth Hormone levels (Visceral fat deposition) are well-known factors in obesity. Recent evidence shows that absolute or relative hormone deficiencies can be due to Hyperinsulinemia. This seems to be happening through the Insulin/ Leptin connection. Leptin is the Satiety Hormone as well as a hormone that promotes the Fat burning. High Insulin levels lead to Leptin Resistance creating a relative Leptin deficiency in the brain creating other hormone deficiencies. This recent evidence cements all the proof in the last 30 years that we need to clearly understand if we want to win this war against the new Epidemic / Pandemic:

1. CALORIES :

Not all calories are the same. An equivalent number of calories from a carrot and sugar are metabolized almost entirely different. Their metabolic effects including the Lipogenesis are very different. Food manufacturers want you to believe they are all the same. Even among the sugars, Glucose and Fructose have very different metabolisms and their propensity for turning sugar into fat. Glucose can be used by every cell and is the main fuel for all living cells including the liver. 80% of the ingested Glucose is used by tissues other than the liver and only 20% is used by the liver to generate energy and to convert excess Glucose into Glycogen. Glucose is also a nontoxic, noninflammatory sugar (but it still increases Insulin levels which in high levels is not healthy), unlike Fructose, which is toxic like Alcohol and is Inflammatory leading to Cirrhosis in the long run. Fructose is also the culprit behind Non Alcoholic Fatty Liver Disease (NAFLD). Unlike Glucose, Fructose contributes to Hyperlipidemia (VLDL& TGL) much more than Glucose thus being a potent Atherogenic sugar. Excess fat deposition in organs including the Liver causes Insulin Resistance, Hyperglycemia, and Type 2 Diabetes. We often miss the diagnosis since it is still not a routine practice to check fasting Insulin levels. I have proven many times that Hyperinsulinemia (Prediabetes & Diabetes) is a common finding even among children. Be informed that Hyperinsulinemia is not a restricted finding only among the obese people. 80 % of the obese and 40 % of the normal weight people have been shown to have Hyperinsulinemia and Metabolic Dysfunction or Metabolic Syndrome which traditionally included Obesity, Hyperlipidemia etc. caused by high Insulin levels.

Let's remind ourselves the basics. Glucose is found almost exclusively as complex carbohydrate in Vegetables and whole grains. I am not a proponent of grains except small amounts of unrefined (Brown Rice), Quinoa and Amaranth. Simple Sugar to the Table Sugar is a mixture of 50% Glucose and 50% Fructose. Table sugar is not the

natural form since it has been refined and bleached (many of the chemicals remaining in the sugar). Other sugars are also mostly a mixture of Glucose and Fructose. Honey, for example, contains about 38% Fructose, but this is a healthy Fructose but in small. Table sugar is the TOXIC FORM OF SUGAR (CARBOHYDRATE). Then comes the High Fructose Corn Syrup, which can contain anywhere between 42 to 90% Fructose and is THE MOST TOXIC FORM OF SUGAR FOUND IN ALMOST 80% OF FOODS ON THE SHELF! As I have explained above this is the Inflammatory, Insulin Resistant causing sugar EVEN IN SMALL AMOUNTS LEADING TO METABOLIC DYSFUNCTION, CIRRHOSIS etc.

2. INSULIN RESISTANCE:

Any carbohydrate can elicit an insulin response. Complex carbohydrates cause the least insulin search while fruits elicit a higher response. Table sugar and HFCS elicit a very high insulin response. Chronic consumption of these sugars will lead to insulin resistance. Insulin is a hormone that promotes fat storage (Lipogenesis) and inhibits fat breakdown (Lipolysis). Insulin also blocks Leptin's action on Hypothalamus resulting in a starvation response and fat storage. THIS ELICITS A HUNGER RESPONSE and A SIGNAL FOR STOPPING FAT BURNING FOR ENERGY Insulin is also a potent inflammatory hormone. Chronic inflammation underlies most of the common non-communicable diseases such as Diabetes, Hypertension, Hyperlipidemia, Cardiovascular diseases, Obesity, Arthritis and even Cancers. Now can you see the connection between Insulin Resistance and Metabolic Dysfunction or Metabolic Syndrome. Metabolic Syndrome cluster has been expanded to include NAFLD, PCOS, Cancers, and Dementia. This clearly explains why giving insulin to Type 2 diabetic patients is not the correct choice of treatment since it creates more Insulin Resistance! This also explains the need to check Fasting Insulin levels, preferably in all your patients irrespective of age. This testing is also a very useful screening test to identify those Prediabetics among the apparently healthy people even if they are not obese. Diabetic patients should be managed by reducing their insulin resistance (Diet, Exercise, Bio Identical Hormones especially Testosterone and DHEA, Supplements etc).

It should leave no doubt that we are heading in the direction of health crisis not far from now and a collapse of the health care system even in the U.S. by 2026. The truth has to be spoken and it becomes a moral obligation if you are aware of such. I know this article and my previous articles to help create awareness and educate doctors and the public may possibly see reprimands. But then someone has to do the job for the sake of our own health and that of the next generation and our environment

Gaining knowledge needs effort, but I am happy to share and this has helped many who seek my opinion and through the activities of SAHMM.

DOCTORS NEED TO BECOME HEALERS ONCE AGAIN!

MASTER USEFUL KNOWLEDGE & YOUR LIFE WILL BECOME A MASTERPIECE.

BE WELL.

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