

### **Foods and lifestyle which improve Lipid profile (Correct Dyslipidemia) :**

Before considering Statin therapy to control Dyslipidemia, one should focus on correcting this abnormality naturally via food and lifestyle changes. Furthermore, taking maximum doses of statins will not correct dyslipidemia, if one does not modify food and lifestyle. The statin drugs have significant side effects, especially in Asians, who have lower levels of certain enzymes in the body.

Food and Lifestyle strategies for reversing dyslipidemia and associated diseases include:

1. Consume predominately plant-Based foods- These foods have an ideal balance of healthy complex carbohydrates, Healthy monounsaturated fats, and are free of saturated fats.
2. Plan on body weight reduction of 10% or more over six month period.
3. Plan on regular moderate exercise and an active lifestyle.
4. Balance Fasting/ Feeding Cycle- keep the fasting duration longer than feeding duration in 24- hour day cycle.
5. Stay away from alcohol or minimize alcohol consumption.

**Plant-based Diet**--Plant-based foods include vegetables, fruits, Lentils, Legumes, whole grains, seeds, and nuts. The major advantage of the plant-based foods are:

- a) **Very low in calories** - The green vegetables and all non-starchy vegetables are low in calories and filling because these are rich in fiber.
- b) **Low glycemic** - Most carbohydrates in plant foods are complex starches which are broken down in the digestive tract slowly. The slow breakdown means sustained lower levels of blood glucose. That minimizes food cravings and desire for frequent eating.
- c) **Free of saturated fats** - Plant fats are healthy mono and polyunsaturated fats, which help in reversing dyslipidemia. In contrast, animal foods such as meat and dairy are rich in saturated fats. Although coconut oil is considered saturated fat, it has a different chemical composition called medium-chain triglycerides, which is a healthy variety of fat.
- d) **Rich in fiber** - The plant foods is the most important source of dietary fiber. The fiber in the food minimizes absorption of both fats and sugar. Excess of fat and sugar in the diet is the most common cause of Dyslipidemia.
- e) **Rich in Micronutrients such as vitamins, Minerals, and Cleansing antioxidants** - The animal- based foods such as meat and dairy lack life-sustaining antioxidants entirely. The antioxidants are present only in colored fruits and vegetables. The antioxidants perform the vital function of removing toxic waste products from the cells. A lack of life-sustaining Micronutrients puts the body in food-seeking behavior of overeating called "Nutrient Deficiency Hunger."

*“We are what we Eat*



### How to get the best nutritional value from plant-based Diet?

Plant-based foods provide every macronutrient (Carbohydrates, Proteins, and Fat), and also the Micronutrient (Vitamins, Minerals, and Antioxidants) the physical body needs to survive. Compared to animal-based food, the macronutrients in the plant-based foods are healthy. For years plant proteins were considered second class when compared to animal proteins. However, one can get all the essential amino acids from plant foods to meet the body's need for protein synthesis if one consumes a balanced meal. A good example is Chapati and rice with lentils and legumes (refer to the section on Protein in the Practical Nutrition). The guidelines on how to get the best out of plant foods are as follows:

- a) ***Eat whole fruits and vegetables and not the juices*** - Juicing removes all the healthy fibers. Juicing should be reserved only for babies, old and infirm who cannot chew the food properly. Chewing the food makes the teeth, gums, and jaw strong. Modern children eat mostly soft, processed foods, sugary beverages, and juices. That prevents jaw and gums from developing normally, so they get crooked teeth. Instead of wasting money on expensive orthodontal treatments, have children chew on firm fiber-rich food to grow into normal beautiful teeth. Give them the additional benefit of eating healthy nutrients and fiber.

Eating whole fruit with its fiber slows the absorption of the fruit sugar fructose. The fruit juices, on the other hand, are concentrated form of fructose sugar, which gets rapidly absorbed from the digestive tract creating unhealthy high levels of fructose in the liver. Glucose and Fructose are different kinds of sugars in the way body processes these. Glucose is absorbed from the digestive tract into the bloodstream and gets distributed to the entire body. Insulin is the glucose utilization hormone, which ensures that glucose gets used up by the cells to make energy, both for immediate use and also for the later use as reserve energy. The fructose sugar, on the other hand, bypasses the bloodstream and

goes straight to the liver where it gets converted to fatty acids. Excessive fructose sugar as from cola beverages (sweetener used is high fructose corn syrup) or fruit juices will lead to fatty liver. Fatty liver currently is a global epidemic affecting 25-30% of the world population.

- b) **Eat only plant-based cold compressed unrefined seed oils** – The cold compressed plant oils such as Mustard oil, Sesame oil, extra virgin olive contain healthy monosaturated fats. These oils consumed in the right amount will improve lipid profile, reducing the level of bad LDL-cholesterol. In contrast, human-made refined oils and trans fats cause Dyslipidemia. Frying foods at high temperature convert refined seed oils into trans fats. Most commercial ready to eat foods are rich in the trans fats. While the trans fats remain banned in the western world, in India, the human-made transfat market continues to thrive (Dalda, Margarine, refined Palm kernel oil).