

Diabetes Mellitus - Home Scientist's Perspective

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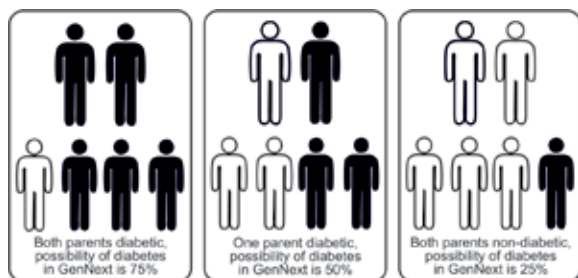
KEYWORDS :

Any crusade, to be effective, needs to have set objectives and right direction of efforts. Presently, crusade against diabetes mellitus is no longer an individual need, but a necessity of national level in India. WHO (World Health Organization), in its recent reports, has forewarned us regarding need to tackle diabetes; lest India will have the dubious distinction of having the most diabetics in the world.

Diabetes adversely affects productivity in a population & simultaneously enhances health related expenditure. A nation like India cannot afford such a situation. If, every pre-diabetic person makes efforts to postpone/prevent diabetes and if every diabetic person tries to keep diabetes under control, India's crusade against diabetes will become meaningful & successful. The main hurdle in such efforts is the changing 'lifestyle' associated with 'modernization'.

Modern lifestyle has become the 'in thing' in society; both urban and rural. Certain changes are being blindly followed, resulting in unwanted effects on health.

Inherited predisposition to diabetes cannot be changed; but other factors related to diabetes, like dietary habits, physical activity, stress, obesity and lifestyle changes are manageable factors. If managed properly, a pre-diabetic person can postpone onset of diabetes and diabetic can keep diabetes under control over a long period of time.

Hereditary factor in diabetes is easy to understand, as under-

It is clear that, having non-diabetic parents does not safeguard a person from diabetes. He/She may be the 'first diabetic' in that family. Such a possibility is likely to get triggered by improper diet, lack of physical activity, obesity, stress and/or improper life style.

Improper diet seems to have become synonymous with urbanization. Children, adolescents and adults are all falling prey to dietary habits which are out rightly unhealthy. They defy all logics of proper nutrition; because they are associated with consumption of excess calories and/or empty calories (e.g.-cake, biscuits, pastry, noodles, pizza khari, some chocolates, sugar candies, alcohol etc.) and protein deprivation. Prolong protein deficiency, especially in children, is one of the known contributory factor of diabetes. Even 'small for date' (under nourished) new born babies are more likely to become diabetics in later life. Disordered diet coupled with lack of physical activity is a 'cocktail; that hastens onset of diabetes. Lack of physical activity reduces the insulin receptors on cell membrane as well as decreases the active phase of the insulin receptors. Consequently, insulin is unable to act and cells are unable to utilize available glucose. Such a situation, over a period of time, can either hasten onset of diabetes or worsen existing one.. Consumption of excess/empty calories alongwith a lack of physical activity also contributes to obesity.

Obesity increases body's need for insulin. It also results in decreased ability of the body to utilize available insulin. Both these factors favour diabetes and are detrimental to diabetics.

Stress has unfortunately become part and parcel of modern-day life. Stress releases, stress associated hormones in the body. These hormones are known to elevate blood glucose and probably also contribute to insulin resistance.

Improper modern life-style is, in my opinion, a deadly combination of all the aforesaid factors. Traditional healthy Indian food is dumped for non-nutritious food in outdoor eateries. Malls are flooded with junk food which is lapped up by misguided people who give more weightage to taste than contents. Now a days, nobody wants to exert physically. Labour saving devices, unnecessary use of vehicle, life style associated stress and obesity have together significantly increased the incidence of diabetes.

Every problem has a solution. Proper medical and nutritional guidance can help a pre-diabetic and diabetic in their fight against diabetes.

We, as homescientists, should play our role in the battle against DM. As scientists, we can actively participate in prevention / control of DM in our capacity as experts in nutrition, human development, resource management and extension and communication skills.

Home Scientists working in tandem with health professional can workout scientifically designed modules targeted at susceptible stages in human life namely foetus with intrauterine growth retardation (IUGR), undernourished new born, protein deficient children and adolescents and adults genetically predisposed to diabetes because all the aforesaid 4 stages can result in actual DM in adult life of that individual. Needless to say an holistic module for adult persons with diabetes can be developed similarly.

I sincerely feel that such a coherent scientific approach is applicable in countering many of the other non communicable disorders (NCDs) like hypertension, acidity, lipid metabolism disturbances, sleep disturbances, etc. also.

Let us make home science more relevant and beneficial in the fight-back against Diabetes Mellitus.

