

Effects of Melatonin in Mild diabetics with Dyslipidaemia

Analava Mitra¹ and D. Bhattacharya²

¹*B. C. Roy Technology Hospital, ¹School of Medical Science and Technology, ²Chemical Engineering Department, Indian Institute of Technology, Kharagpur 721 302, West Bengal, India*

¹*E-mail: amitra@adm.iitkgp.ernet.in*

KEYWORDS Type 2 Diabetes. Dyslipidaemia. Melatonin Herbal Medicine

ABSTRACT Diabetes is spreading at an exponential rate in Indian sub-continent. Existing infrastructure of health in India is poor, particularly in its rural sectors. Of all varieties of diabetes, Type 2 diabetes is commoner and is about 80%. Different drugs, herbal medicines and nutraceuticals are used to control diabetes. Melatonin, the hormone of pineal gland is being considered as a nutraceutical by FDA. Many workers thought melatonin might have a role in diabetes control through central mechanisms. The studies lead to many controversies and counterclaims. Present study is intended to observe the effects of melatonin at a higher dosage per day. The effects in rural Indian diabetic population at that melatonin dosage in different blood parameters were observed and also change in endocrine secretions observed. Melatonin caused reduction in Serum Insulin, Serum Cortisol, Serum ACTH and Serum TSH levels while increase in Serum Gastrin level. Of the biochemical parameters, melatonin caused reductions in TLC, LDLC and FBS while increase in HDLC. It also caused reduction in neutrophil and increase in lymphocyte count in a diabetic with increase in faecal fat excretion.