

## DECREASED LEVEL OF MELATONIN IN TYPE-2 DIABETIC PATIENTS AND INFLUENCE OF ADIPOSITY AND SMOKING

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The Purpose of the present study was to evaluate the serum levels of melatonin in type-2 diabetic patients and to clarify whether there is an influence of adiposity and smoking.

**Patients & Methods:** 26 type-2 diabetic (T2D) patients were recruited in the pilot study and 12 healthy subjects (non-smokers) were selected as controls (C). The study groups were matched for age and sex. Melatonin was measured in saliva by ELISA. Statistical analyses were

performed using SPSS Statistic software.

**Results:** Patients with T2D had significantly lower melatonin level than healthy control subjects ( $p < 0.003$ ), besides T2D patients with adiposity (BMI  $> 30$  kg/m<sup>2</sup>) had significantly lower melatonin level than patients without adiposity ( $p < 0.035$ ), as well as T2D smokers had significantly lower melatonin level than T2D non-smokers.

**Conclusion:** T2D patients are associated with decreased melatonin level in saliva. Adiposity and smoking have influence on the decrease of melatonin concentration of T2D patients.

### Biography

Peteris Tretjakovs completed his PH.D. Currently he is a professor of physiology and the head of department of Human physiology and biochemistry at the Riga Stradins University in Latvia.

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