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## 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 and 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  $30 \text{ kg/m}^2$ ) 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. *This study was supported in part by grant No. 2014.10-4/VPP-1.1.2 and 5.1.2 of the framework of the Latvian National Program.*



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