ABSTRACT

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Title of diploma thesis: Resveratrol - effect on the biological age

Objective: Resveratrol is a natural polyphenol contained in number of plants. It is a potent antioxidant, which is known to have a number of beneficial health effects and be part of many biological processes. The compound is produced by plants to increase their survival and resistance to disease. We found the effect of Resveratrol on parameters of biological age-on the threshold of perception of the intensity of the volume (hearing) and reaction rate.

Methods : A group of people used the resveratrol in a dose of 170 mg per day for 40 days. We measured by the PC program the selected parameter of hearing and reaction rate.

Results : It has been shown that statistically significant improvement of hearing has occurred. The exact mechanism of the effect is not known. Probably operates through a group of enzymes, sirtuins. Reaction rate was not affected by substance.

Conclusions : We have reviewed the potential effect of Resveratrol on human biological age. The improvement of hearing has been shown at the 0,01 significance level. The biggest improvement was in the hearing range to 4 KHz (low frequencies), and then in the range of high tones, from 15 to 19 KHz. The reaction rate has not improved.

Key words : Resveratrol, biological age, reaction rate, sensitivity of hearing