

Effect of music exposure on the weight and body-length of rat-litters

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Abstrak

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Music is related to stress reduction and increased levels of growth-hormone. In rat, music exposure since prenatal period was found to increase body-weight of 7-days-old litters and brain cells. Somatic growth was primarily influenced by growth-hormone and supported by psycho-physic condition. The objective of this study was to analyze whether music exposure since prenatal until 35 days post-natal period could affect the weight and body-length of the rat-pups. Four pregnant Wistar rats were daily exposed to one hour classic music (Mozart) every 17.30 PM since gestation period day one until the 22 litters were 35-days-old. Controls were 5 pregnant rats and their 36 litters caged in a different room with no music. Weighing and measuring the body-length (the most anterior point of nasal-septum to the base of the tail) were conducted at day 7, 25 and 35. Data were analyzed using Multivariate General-Linear-Model ($\alpha = 0.05$). It was revealed that the mean weight of the experimental litters was significantly higher than those of the controls either at day 7 ($p = 0.00$), day 25 ($p = 0.012$). Conclusion: Music exposure since prenatal period has significant influences on the weight of the rat-litters aged 7, 25 and 35 days and on the body-length of the 25-days-old litters.