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### Introversi n/extraversi n Does Not Affect Serum Melatonin Levels

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Introduction: Few studies focus on peripheral biological markers of personality. Melatonin (MLT), the main hormonal product of the pineal gland, has been used both as a diagnostic and therapeutic element and has been related with chronotype, depression and schizophrenia, among other psychiatric conditions. However, there is a paucity of studies on its use as a personality marker. The present work aims to determine whether serum MLT levels are related with the Eysenck`s personality extraversion/introversion (E/I) dimension. Methods: A sample of 100 healthy volunteers participated in the study. The E/I personality dimension was evaluated using the EPQ-BV (Eysenck Personality Questionnaire - Brief Version). Three blood samples were taken (at 09:00, 12:00 and 00:00 h) to measure MLT. MLT was analysed in serum by an ELISA. Serum MLT concentrations are expressed in pg/ml. Results: MLT levels displayed a clearly circadian pattern, with night levels being significantly higher than day-time levels (00:00:  $35.78 \pm 23.53$  vs. 09:00:  $7.78 \pm 5.56$ , 12:00:  $3.35 \pm 1.94$ ,  $p < 0.05$ ). Serum MLT levels at 09:00 h were significantly higher than MLT levels at 12:00 h ( $7.78 \pm 5.56$  vs.  $3.35 \pm 1.94$ ,  $p < 0.05$ ). No significant correlations were found between E/I scores and serum MLT levels at 09:00 ( $r = -0.06$ ,  $p = 0.55$ ) 12:00 ( $r = -0.12$ ,  $p = 0.25$ ) and 00:00 h ( $r = -0.01$ ,  $p = 0.99$ ). Conclusions: There is no relationship between MLT levels and the E/I personality dimension. Future studies should examine the neuroticism dimension of personality.