



Influence of Hormone Release during Acute Stress upon Plasma Glucose and Arterial Pressure

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SUMMARY. Stress is a common factor in daily routine, and yet little attention is given to the possible changes and disturbances caused by stress upon homeostasis. Therefore, this study aims to evaluate blood pressure (BP) and blood glucose (BG) before and after acute stress simulation and to verify the influence of catecholamine secretion upon these parameters. Acute stress simulation was achieved by submitting fifteen volunteers to a ride on a free-fall simulator at an amusement park. The distance of the fall is approximately 69.5 m and the velocity reaches 94 kph. BG was determined before and after the stress situation and BP was checked before and after that condition. The result demonstrated that the volunteers who had previously mentioned being afraid of the ride had a significant increase in BG immediately after stress and tended to have a higher BP, indicating that psychological factors, such as fear and anxiety, are related to significant changes in the parameters under evaluation.

KEY WORDS: Acute stress, Blood glucose, Blood pressure.

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