

ドリンク剤と作業能力に関する研究 - 健常者を対象とした二重盲検試験 -

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EFFECT OF THE VITAMIN SUPPLEMENT DRINKS ON WORK PERFORMANCE - A DOUBLE-BLIND, RANDOMIZED CLINICAL TRIAL ON HEALTHY VOLUNTEERS

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Abstract

Purpose: The sale of the vitamin supplement drinks claiming a refreshing effect and greater energy is increasing, but their efficacy has not been examined in clinical trials. The purpose of this research was to clarify the effect of three types of these supplements on work performance in a double-blind, randomized clinical trial in healthy volunteers.

Methods: We used three vitamin supplement drinks: type 1 comprised vitamins, taurine, caffeine and alcohol, type 2 also contained several amino acids, and type 3 also contained several botanical herbs. Twelve healthy volunteers given these vitamin supplement drinks described the effects on a subjective scale in a self-reported questionnaire followed by an interview with a medical doctor. As an objective measure, work performance was examined using the Uchida-Kraepelin mental work test and WAIS-R (Japanese Wechsler Adult Intelligence Scale-Revised) test.

Results and Conclusion: The self-reported questionnaire indicated significant improvements in prevention of sleepiness and lack of energy. In both the Uchida-Kraepelin mental test and WAIS-R test, the mean amount of work was increased by the administration of the drinks, but without statistical significance. In conclusion, the efficacy of the vitamin supplement drinks seems to be primarily subjective.

Key words: the vitamin supplement drinks, clinical trial, self-reported questionnaire, Uchida-Kraepelin mental work test, healthy volunteers