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Studying the benefits of green workplace environment on health promotion in sympathoadrenal and Kallikrein-Kinin systems(Article)

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Краткое описание

This study is performed to study the positive effects and benefits of going green and creating green physical environments of work on health promotion and stressors reduction on workers in Sympathoadrenal and Kallikrein-Kinin Systems. It also evaluates environmental conditions of workplace, as well as sympathoadrenal and kallikrein-kinin systems for early (prenosological) signs of de-adaptation to work-related stressors in workers engaged in non-ferrous metallurgy. Workplace health promotion (WHP) has been proposed as a preventive intervention for stress, possibly operating by promoting positive organizational culture or via programs promoting healthy lifestyles. In order to do this a trial experiment was done on animals (white rats). Adrenaline and noradrenaline (AD and NAD) levels in the liver, adrenal glands and hearts of rats were measured throughout 2, 4 and 12 trial weeks. Changes in sympathoadrenal system, detected in workers, who were working at the main workshops for a long time, reflect all the stages of non-specific adaptation process to work-place environment, defined as a standard activation of stress-realizing system. At the last stages of stress, the KKS, which represents a cascade, promotes body resistance to work-related stressors and negative environmental conditions. Signs of early de-adaptation were found in healthy workers to identify who of them are at risk of adaptive breakdown. Our tests were used at five times as part of health examination, and some related guidelines were published. © Foundation Environmental Protection & Research-FEPR.