Assessment of Muscular Activity and Postural Load During Coffee Harvesting Activities: A Case Study [

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text (article)

Analítica

Objective: The goal of this case study was to analyze and evaluate the posture, force and repetitive movement risks associated with manual coffee harvesting activities. Materials and Methods: A self-discomfort report was administered to 28 participants, of whom 4 volunteered for an evaluation of postural load on muscular activity using electromyography and electrogoniometry. Eight upper limb muscles and the kinematics of the wrist and upper arm of the dominant arm were assessed. Results: The results of the self-discomfort report showed a greater demand, from the harvester's perception, in areas such as the back, lower back, knees and feet during a period of one week of work. The outcomes of the muscular activity assessment showed that the extensor carpi ulnaris (ECR) was the muscle with the highest demand during the assessment. The dynamic activity of the muscle exceeded 20% of the maximum voluntary contraction (MVC), which classifies coffee harvesting as a threatening activity. The postural load on the body segments revealed that wrist deviation was critical due to an abnormal range of the wrists during the activity. Conclusions: It is necessary to improve the working conditions of the coffee harvesters
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