Development solution for water stress situations in military activities

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Introduction: The effects of dehydration in sports have been studied in depth but not in other areas such as military or rescue and security, where a number of factors can cause water stress: prolonged exercise, extreme environments or carry personal gear. Dehydration can negatively influence the effectiveness of the mission, equipment, vehicles or weapon handling, monitoring and warning statements or decisions.

Objective: To design a moisturizing solution prepared for use in different areas of health, in which water stress is generated. Establish a model to assess the ability of rehydration, based on the development of an activity and subsequent measurement of the physical and cognitive recovery.

Method: A literature review was performed to determine the composition of the beverage, define the activities that reproduce the conditions that can lead to dehydration in these groups and identify possible benchmarks for rehydration profile prepared in accordance with physical and cognitive obtained state. This method supports these assessments. The possible design of a prepared rehydration solution is set. A model that reproduces the collective activity is designed. Indicators of physical and cognitive status of the population tested is justified.

Conclusions: The need for a rehydration drink for application to the military field is established and similar. A possible design of the drink and a program to evaluate its rehydration effectiveness is determined.

Key words: water stress, military activity, rehydration.

DOI:10.3305/nh.2015.32.sup2.10285