

Hydration Evaluation In A Working Population in Greece

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Abstract : Introduction: Adequate hydration is a vital factor that enhances concentration, memory, and decision-making abilities throughout the workday. Various factors may affect hydration status in workplace settings, and many variables, such as age, gender and activity level affect hydration needs. Employees frequently overlook their hydration needs amid busy schedules and demanding tasks, leading to dehydration that can negatively affect cognitive function, productivity, and overall well-being. In addition, dietary habits, including fluid intake and food choices, can either support or hinder optimal hydration. However, factors that affect hydration balance among workers in Greece have not been adequately studied. Objective: This study aims to evaluate the hydration status of the working population in Greece and investigate the various factors that impact hydration status in workplace settings, considering demographic, dietary, and occupational influences in a Greek sample of employees from diverse working environments. Materials & Methods: The study included 212 participants (46.2% women) from the working population in Greece. A validated questionnaire (Water Balance Questionnaire) was used to evaluate hydration status, along with additional questions on drinking habits and work-related factors. In particular, volunteers answered questions of different categories such as a) demographic socio-economic b) work style characteristics c) health, d) physical activity, e) food and fluid intake, f) fluid excretion and g) trends on fluid and water intake. Individual and multivariate regression analyses were performed to assess the relationships between demographic, work-related factors, and hydration balance. Results: Analysis showed that demographic factors like gender, age, and BMI, as well as certain work-related factors, had a weak and statistically non-significant effect on hydration balance. However, the use of a bottle or water container during work hours ($b = 944.93, p < 0.001$) and engaging in intense physical activity outside of work ($b = -226.28, p < 0.001$) were found to have a significant impact. Additionally, the consumption of beverages other than water ($b = -416.14, p = 0.059$) could negatively impact hydration balance. On average, the total consumption of the sample is 3410 ml of water daily, with men consuming approximately 440 ml / day more water (3470 ml / day) compared to women (3030 ml / day) with this difference also being statistically significant. Finally, the water balance, defined as the difference between water intake and water excretion, was found to be negative on average for the entire sample. Conclusions: This study is among the first to explore hydration status within the Greek working population. Findings indicate that awareness of adequate hydration and individual actions, such as using a water bottle during work, may influence hydration balance.

Keywords : hydration, working population, water balance, workplace behavior

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