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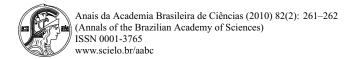
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EDITORIAL NOTE

The effect of stress on sleep quality in teenagers, the analysis of metal contaminati due to heaps of steel-slag accumulation in southern Madrid (Spain), and a review of the mechanisms of glutamine action during severe illnesses

ALEXANDER W. A. KELLNER Editor-in-chief

Researchers worldwide have pointed out the effects that stress produces upon the society. However, the particular stress situations that affect the growing up of an individual. As pointed out several times in the ature, human development itself can be regarded as a source of stress, starting with the child's learning processed to the physical and cognitive changes during the adolescence (e.g., Pereira and Tricoli 2003). But he stress affect teenagers? More specifically, can any relation be established between stress, sleep quality and performance?

Although this subject has been addressed by researchers in some countries, not much has been done in Brazi In the present issue of the *Anais da Academia Brasileira de Ciências* (AABC), Gema Mesquita and Rubens R both from the *Departamento da Saúde da Criança e do Adolescente* of the *Universidade de Campinas* (UNIO of Campinas (São Paulo), have shed some light on this problem by trying to understand the effect of stress on the quality of teenagers in Brazil (Mesquita and Reimão 2010). The authors have based their research on 160 s between 15 and 18 years and applied the Pittsburgh Sleep Quality Index (PSQI) in order to recover information sleep quality. They further used the Lipp Inventory of Stress Symptoms in order to establish stress symptom participants. Their results contribute to the goal to understand child and adolescent sleep disorders and migauthorities in mitigate negative effects.

Another problem that affects modern life is environmental pollution. One source that is not adequately und is the pollution caused by iron and steel production due to the significant steel slag accumulation achieved the years. In the past, the society was not fully aware on how such industrial activities could negatively aftenvironment and there was a general lack of pollution control. But presently authorities are getting more consince soil pollution might affect farmlands and their production.

Javier Garcia-Guinea from *Museo Nacional de Ciencias Naturales* of Madrid and colleagues have studied contamination with heavy metals due to heaps of steel-slag accumulation resulted in over 40 years of iron at production in the region of Getafe, southern part of Madrid (Garcia-Guinea et al. 2010). They have collected soil samples from different points of the area that were analyzed by conventional mineralogical and geoch methods with the purpose to establish the degree of contamination (Gunst et al. 2000). The results of this research can help local authorities in establishing plans for remediation in order to avoid risk to human health

Another important contribution published in the present issue of the AARC is the research on the effects of



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the literature, patients can experience low mucosal glutamine concentration (among others) during severe illnesses (Oudemans-van Straaten et al. 2001). In those cases, application of glutamine has improved the patient's condition, but as the present study shows, the results vary depending on the dose and route of glutamine administration. Oliveira et al. (2010) point out that more research is needed to fully understand the causes of the benefits in order to improve this therapy.

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