

good hygiene and food safety practices may also lead to food contamination [4,5].

### Objective

The sample consisted of canteens of public and private educational establishments and of public and private social solidarity institutions, totalling 26 canteens and 127 professionals. Data collection was performed using a diagnostic sheet of the structural conditions and operation of the facilities.

### Results

Measurements of polar compounds in canteens indicated good quality, except for one of the measurements that indicated a less satisfactory quality. In the evaluation of food temperature, it was found that there are some foods that are served in the "danger zone" (< 65°C). School cafeterias (without food confectionery) had, in majority, deficient conditions of installation because they were rooms of activities where the meals were served. For this reason, there were no water baths or meal service facilities.

### Conclusions

With this work it was concluded that there are deficiencies regarding the structural and operating conditions of canteens/refectories, which could be filled by the construction/enlargement of spaces. Regarding the evaluation of the quality of the oils and temperature of the meals, there were flaws, with possible repercussions on the quality of the meals served. It is also important to develop skills for the elaboration of menus suited to the different age groups and the confection of healthier diets. Emphasis can be placed on the training of manipulators in order to raise awareness of the repercussions of their role and responsibilities in preventing contamination. Ensuring and promoting food safety is nowadays a requirement of any institution, where food is produced or distributed, as a means of ensuring the promotion of high levels of confidence and safeguarding of the consumer's health.

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### Keywords

Public Health; Food Safety; Canteens; Promoting Food Safety.

### P102

#### Evaluation of the correlation between height and health of the spine in the student population in the age group of 16 - 19 years old - evaluation with spinal mouse

Alexandra Monteiro, Nelson Azevedo, João Silva, Liliana Rodrigues, Gilvan Pacheco

Instituto Superior de Saúde do Alto Ave, 4720-155 Amares, Portugal

**Correspondence:** Nelson Azevedo (nelsonjaze@gmail.com)

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### Background

The increasing number of postural deviations observed in the student population leads to changes in the spine's normal curvature, which translates into a greater vulnerability to mechanical stress and traumatic injuries. Although the causes of these postural deviations are diverse and difficult to analyse, the present study decided to investigate whether the height of the students may be one of the factors influencing the appearance of postural alterations detected by the non-invasive evaluation method of the Spinal Mouse®.

### Objective

Analyse differences in the incidence of postural changes in a sample of students aged 16-19 years with different heights (cm).

### Methods

Eighty-five (85) students aged 16-19 years from Amares High school (Braga) were selected and submitted to a non-invasive postural evaluation by the Spinal Mouse® device, which showed the presence of hypomobility, normal mobility and hypermobility at the sagittal plane in three zones of the vertebral spine (sacral, thoracic and lumbar), as well as an overall tilt in three distinct positions: orthostatic, flexion and extension. Data analysis was performed using the statistical program IBM® SPSS® (Statistical Package for the Social Sciences), version 25. In the statistical tests performed, it was considered as levels of significance, the values of 0.05 (significant) and of 0.01 (extremely significant).

### Results

The results indicate statistically significant differences (Kruskal-Wallis test, H) in the incidence of postural deviations (sagittal plane) in the sacral zone in flexion position (H = 6.629, p-value = 0.036), in general slope in flexion position (H = 6.738, p-value = 0.046), in the thoracic zone in the extension position (H = 11.390, p-value = 0.003) and in the lumbar zone in the extension position (H = 6.738, p-value = 0.034) for the different height groups considered ("<159 cm", "159 - 177 cm" and "> 177 cm").

### Conclusions

Through the results we can conclude that there is a significant relationship between postural changes and students' height. In this way, it is fundamental to equate the ergonomic model of the school support material in order to adjust to different postures.

### Keywords

Spine, Postural changes, Adolescent height, Ergonomics, Spinal Mouse.

### P103

#### The contribution of a Portuguese innovation to prevent complication in venous catheterization

Inês Cardoso<sup>1</sup>, Anabela Salgueiro-Oliveira<sup>1</sup>, Arménio Cruz<sup>1</sup>, José M Martins<sup>1</sup>, Liliana Sousa<sup>1</sup>, Sara Cortez<sup>2</sup>, Filipa Carneiro<sup>3</sup>, Pedro Parreira<sup>1</sup>

<sup>1</sup>Coimbra Nursing School, 3046-851 Coimbra, Portugal; <sup>2</sup>Muroplás - Indústria de Plásticos, 4745-334 Muro, Trofa, Portugal; <sup>3</sup>Innovation in Polymer Engineering, University of Minho, 4800-058 Guimarães, Portugal

**Correspondence:** Inês Cardoso (inescardoso@esenfc.pt)

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### Background

Venous catheterization is one of the most frequent procedures in nursing clinical practice. Despite the procedure's importance for healthcare quality, it has some risks and complications such as infiltration, bloodstream infection and phlebitis. Healthcare associated infections are considered a worldwide problem, having a considerable impact on the patients' and community's health and economy [1,2]. According to the European Centre for Disease Prevention and Control, prevalence of this type of infections is 6.0% and 10.6%, in Europe and in Portugal, respectively. Bloodstream infections, related with venous catheters, have one of the lowest prevalence, but they may lead to serious consequences [2].

### Objective

Explore the procedure of venous catheterization as a risk factor for infection. Explore the role of an innovation as a contribution to the implementation of a prevention measure, in the practice of flushing.

### Methods

A literature review involved search in EBSCOhost databases, including articles up to 2017. Some terms used were "infection", "venous catheter", "catheterization", catheter-related infection", "complication" "prevention" "management" "practices", "flushing".