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347 - CROSS-SECTIONAL ASSESSMENT OF NUTRITIONAL STATUS, DIETARY INTAKE, AND PHYSICAL ACTIVITY LEVELS IN CHILDREN (6–9 YEARS) IN VALENCIA (SPAIN) USING NUTRIMETRY

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Resumen

Background/Objectives: “Nutrimetry” combines accessible and easy anthropometric variables, in order to facilitate a joint interpretation of these indicators and generate a more complete diagnosis of nutritional status. This multifaceted approach provides detailed, personalized, and actionable insights into a child’s nutritional status and can help prevent and treat obesity, ultimately promoting healthier lifestyles and better long-term health outcomes for children. The aims of this research were to evaluate the current nutritional status applying nutrimetry, dietary intake and its compliance with established recommendations; and physical activity and its compliance with established recommendations.

Methods: This descriptive cross-sectional study was part of the Antropometría y Nutrición Infantil de Valencia (Valencian Anthropometry and Child Nutrition) or ANIVA project conducted on 2724 schoolchildren aged 6-9 years old attending primary school in the Valencian community during the 2016-2023 academic years. Nutritional status was assessed using nutrimetry, dietary intake through a questionnaire and 3-day food journal completed by the parents and physical activity with an ad hoc questionnaire. In this study, children were classified as sedentary/lightly active, moderately active, or very active. The physical activity level factor (PAL) was calculated individually for each child, considering the child’s age, the type/intensity of daily physical activity, and the duration of daily physical activity.

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Results: The nutricode with the highest prevalence (51.3%) was healthy weight/normal stature. For the BMI for age Z-score, those in the overweight/obesity category represented 37.5% of the sample, while the thinness category included 7.6%. Intake of calories, proteins, sugar, lipids, SFA, MUFA, and cholesterol were significantly higher than recommended. The thinness groups consumed a significantly higher amount of excess calories while the overweight/obesity groups had the lowest mean excess calorie intake. Children in the thinness category presented the highest rates at both ends of the spectrum for sedentary activities.

Conclusions/Recommendations: Nutrimetry classifications do not appear to be solely related to caloric intake or dietary quality. The results show that a physical activity intervention would not be sufficient to improve anthropometric status. The results for the risk of thinness and overweight/obesity according to individual nutrient intake should be carefully interpreted. Lifestyle is a fundamental aspect to consider when combating malnutrition, especially at the level of dietary and physical activity habits, to combine various methods of intervention to improve nutritional status.

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