

## **Title and Authors:**

# THE DOUBLE BURDEN OF MALNUTRITION AND ITS RISK FACTORS IN SCHOOL CHILDREN IN TUNJA

**Pastor L <sup>\*1</sup>, Manrique-Abril F <sup>\*2</sup>, Ernert A <sup>\*3</sup>, Bau AM <sup>\*3</sup>**

<sup>\*1</sup> Institute of Tropical Medicine and International Health, Charité – Universitätsmedizin Berlin

<sup>\*2</sup> Grupo Salud Pública UPTC. Universidad Nacional de Colombia

<sup>\*3</sup> Institute for Experimental Pediatric Endocrinology, Charité – Universitätsmedizin Berlin

## **Abstract:**

**Objectives:** *Undernutrition and overnutrition are relevant Public Health problems in Colombia. We conducted a nutritional survey in Tunja to assess the magnitude of the problem in order to guide government interventions and serve as a baseline for future evaluations.* **Methods:** *Schoolchildren were randomly selected among all private and public schools. Information on health status, socioeconomic and demographic characteristics of their families was collected using a questionnaire, which also included the Colombian Household Food Security Scale. Anthropometric measurements of 1168 schoolchildren (5 to 19 years old) were obtained, analyzed with WHO AnthroPlus, and associated with the mentioned variables by further statistic analysis.* **Results:** *The overall prevalences of stunting, thinness and overweight were 11.3%, 1.7% and 17.6% respectively. The highest prevalence of stunting was found in rural areas (23%). Children from rural areas, attending public schools and in female-headed households had higher risks to become stunted. Overweight reached a percentage of 26.9% in children attending private schools, where the risk of overweight was doubled. Within the studied households 48.6% had some level of food insecurity.* **Conclusions:** *The prevalence of undernutrition in Tunja municipality is low. This could be an effect of government nutrition programs. However it continues to be a problem in vulnerable population groups mainly in rural areas. The rising prevalence of overweight, following the trend of countries in nutritional transition, is a new Public Health problem which should be addressed. Periodic controls are needed to evaluate the impact of government nutrition programs on the nutritional status*