

Encontro Investigação Jovem da Universidade do Porto

**BOOK OF
ABSTRACTS**

**06 - 07 - 08
Maio 2026**

19.^a Edição



ORGANIZAÇÃO



APOIO



**Encontro
Investigação
Jovem da
Universidade
do Porto**

**YOUNG
RESEARCHERS
MEETING**

**06 - 07 - 08
Maio 2026**

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ORGANIZAÇÃO



APOIO



TÍTULO | *TITLE*

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Young Researchers Meeting of U.Porto*

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Professor Doutor Pedro Rodrigues

ijup@reit.up.pt

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Encontro Investigação Jovem da Universidade do Porto



PROGRAM

**06 - 07 - 08
Maio 2026**

19.^a EDIÇÃO

May, 6th

May, 7th

May, 8th

8H	Opening of the secretariat for all participants		
8H30 > 10H30	PARALLEL ORAL SESSIONS I A1 – Criminology and Law I A2 – Health Sciences I A3 – Sport Sciences I A4 – Architecture I A5 – Engineering I A6 – Biological Sciences I	PARALLEL ORAL SESSIONS IV A1 – AgroFood I A2 – Health Sciences IV A3 – Sport Sciences III A4 – Astronomy A5 – Chemistry I A6 – Biological Sciences IV	PARALLEL ORAL SESSIONS VII A1 – Arts I A2 – Health Sciences VII A3 – HSS IV – History, Archeology, Cultural Studies and Communication Sciences A4 – Physics I A5 – Chemistry III A6 – Biological Sciences VII
10H30 > 11H	Coffee Break		
11H > 13H	PARALLEL ORAL SESSIONS II A1 – Criminology and Law II A2 – Health Sciences II A3 – Sport Sciences II A4 – Architecture II A5 – Engineering II A6 – Biological Sciences II	PARALLEL ORAL SESSIONS V A1 – AgroFood II A2 – Health Sciences V A3 – Sport Sciences IV A4 – Maths & Physics A5 – Engineering IV A6 – Biological Sciences V	PARALLEL ORAL SESSIONS VIII A1 – Environment II A2 – Health Sciences VIII A3 – Psychology & Education Sciences III A4 – Physics II A5 – Chemistry IV A6 – Economics & Management
13H > 14H30	Lunch Break		
14H30 > 16H	POSTER SESSION I Architecture Biological Sciences I Criminology and Law Engineering I Health Sciences I Sport Sciences I	POSTER SESSION II AgroFood Biological Sciences II Chemistry Engineering II Health Sciences II Sport Sciences II	POSTER SESSION III Arts Astronomy, Physics & Maths Economics & Management Environment & Geology Health Sciences III History & Sociology Psychology & Education Sciences
16H > 16H30	Coffee Break		
16H30 > 18H30	PARALLEL ORAL SESSIONS III A1 – HSS I – Political Sciences A2 – Health Sciences III A3 – Psychology & Education Sciences I A4 – HSS II – Political Sciences, Sociology and Geography A5 – Engineering III A6 – Biological Sciences III	PARALLEL ORAL SESSIONS VI A1 – Environment I A2 – Health Sciences VI A3 – Psychology & Education Sciences II A4 – HSS III – History of Art A5 – Chemistry II A6 – Biological Sciences VI	PARALLEL ORAL SESSIONS IX A1 – Arts II A2 – Health Sciences IX A3 – Psychology & Education Sciences IV A4 – HSS V – History A5 – HSS VI – Literature and Philosophy A6 – Health Sciences X

24575 | The importance of NRS-2002 and Handgrip Strength to assess Nutritional Risk in patients of a Central Hospital

C. Pereira Pinto¹; A. da Silva Pereira¹; S. Pinhão^{1,2}; A. Ribeiro⁴; C. Matos¹; S. Cascareja¹; C. Teixeira^{2,3}; J. Almeida^{2,5}

¹ Faculty of Sciences Food and Nutrition of University of Porto, Portugal; ²ULS S.João, Porto Portugal; ³ Department of Nutrition ULS S.João, Porto, Portugal; ⁴ School of Biotechnology, Portuguese Catholic University, Porto, Portugal; ⁵Department of Internal Medicine, ULS S.João, Porto, Portugal

Background & Aim: Early nutritional assessment is essential to identify undernourished or at-risk inpatients and improve clinical outcomes. This study aimed to evaluate the nutritional risk of hospitalized adult patients in the Men's Medicine Department at Hospital São João using Handgrip Strength (HGS)¹ and the NRS-2002², and to explore their association. **Methods:** This cross-sectional observational study included 99 male inpatients aged ≥ 50 years, assessed within the first 72 hours after admission. Nutritional risk was evaluated using the NRS-2002 tool, and HGS was measured with a calibrated Gripwise® dynamometer. Statistical analysis was performed using SPSS software with a 95% confidence level. **Results:** According to NRS-2002, 91.9% of patients were at nutritional risk, and all patients aged ≥ 70 were classified as at risk. HGS was assessed in 78 patients, of whom 89.7% had values below 27 kgf, indicating a high prevalence of possible malnutrition. A weak but statistically significant negative correlation was found between HGS and NRS-2002 scores ($p = -0.259$, $p = 0.010$), and between HGS and nutritional deficit ($p = -0.216$, $p = 0.032$). No significant correlation was observed between HGS and age ($p = 0.396$) or disease severity ($p = 0.739$), nor between nutritional deficit and disease severity ($p = 0.750$). Most patients (95.2%) without HGS measurement were also at nutritional risk. **Conclusions:** A high proportion of hospitalized patients, particularly those aged ≥ 70 , were at nutritional risk. HGS showed a significant inverse association with NRS-2002, suggesting that reduced muscle strength may reflect nutritional impairment. HGS appears to be a practical and useful tool for identifying patients at nutritional risk in hospital settings^{3,4}. Early detection and nutritional intervention are crucial to improve outcomes and prevent malnutrition-related complications.

Keywords: malnutrition; nutrition-assessment; nutrition-risk; handgrip strength.

References:

- [1] WANG, J., & CHEN, X. (2024). The effect of handgrip strength on intrinsic capacity in elderly inpatients. *Chinese Journal of Geriatrics*, 329-335.
- [2] Amaral, T., Matos, L., Ferro, M. D. G., Kent-Smith, L., Gomes, F., Alves, A. P., ... & Borges, N. (2020). Desenvolvimento de uma versão portuguesa do nutritional risk screening NRS 2002.
- [3] Norman, K., Stobäus, N., Gonzalez, M. C., Schulzke, J. D., & Pirlich, M. (2011). Hand grip strength: outcome predictor and marker of nutritional status. *Clinical nutrition*, 30(2), 135-142.
- [4] Flood, A., Chung, A., Parker, H., Kearns, V., & O'Sullivan, T. A. (2014). The use of hand grip strength as a predictor of nutrition status in hospital patients. *Clinical nutrition*, 33(1), 106-114.