

expressed as a percentage of nutrient requirements. Interrelationships were assessed using least-squares regression after log transformation of the variables. Results: By univariable analyses, both the change in Katz and the change in WalkEndur were positively correlated with nutrient intake at discharge and its change (from admission to discharge) and inversely correlated with multiple indicators of inflammation at discharge and their change. When all covariates were included in a multivariable analysis, the strongest correlate of WalkEndur change was change in tumor necrosis factor soluble receptor 1 followed by change in protein intake (model $R^2 = 0.17$, $p < 0.001$).

Conclusion: For older recuperative care patients, both inflammation and nutrient intake appear to be important independent determinants of functional recovery. It is unknown whether therapeutic interventions designed to reduce inflammation would have a significant impact on functional outcomes.

NUTRITIONAL RISK...AN ISSUE OF EVERYDAY LIFE IN ELDERLY WOMEN IN THE MUNICIPALITY OF GUADALAJARA MEXICO

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INTRODUCTION: There is a clear correlation between nutrition and its effect on health, quality of life and welfare. Also, it can be predictive of morbidity and mortality. PURPOSE: To consider the nutritional risk of elderly women of Guadalajara and related factors. MATERIAL/METHODS: A sample of 638 women was interviewed from October to November 2007. The Nutritional Risk was evaluated with the Nutritional Risk Screening (NRS), sociodemographic data and health. Odds Ratio (OR) and confidence interval (95%) were obtained. RESULTS: Average age 70.9 ± 2.7 (60-95 years), 54,4% with low educational level (≤ 4 years) and 78,5% with low income $\leq \$4000$ per month (≤ 350 dls). 87.6% suffered at least one sensorial problem and chronic diseases 2.63 ± 2.53 , 94,5% are ill and 82,9% take medicines. Those who need dental prosthesis 46,9% does not use it. They present/display 13,6% cognitive deterioration and depression 27.6%. An overwhelming majority lives with NR (82.9%), the 64,2% with high risk, 17,1% without NR. About the RN, the following ORs resulted from these factors: to have depression obtained $OR = 5.87$ (IC 2.8-12.39), not to use dental prosthesis and to need it $OR = 4.76$ (IC 1.9-12), to have at least sensorial problem $OR = 1.93$ (IC 1.1-3.3) in olfactory $OR = 3.85$ (IC 1.2-12.6). To suffer at least one disease $OR = 3.12$ (IC 1.5-6.4), cognitive deterioration $OR = 3.10$ (IC 1.3-7.3), low income $OR = 1.79$ (IC 1.1-2.8). To be ≤ 75 years $OR = 1.73$ (IC 1.1-2.9), to take medicines $OR = 1.68$ (IC 1.02-2.8) and low educational level $OR = 1.58$ (IC 1.04-2.39). CONCLUSIONS: A significant nutritional risk was found in elderly women. An eminent presence of modifiable nutritional risk factors exist

that can be used to prevent or delay the onset of disease, and improve overall health and quality of life.

BODY COMPOSITION IS RELATED TO WHITE MATTER INTEGRITY IN THE AGING BRAIN

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Central obesity is a risk factor for vascular dementia. However, it is unclear if central obesity is related to decreased cerebral white matter integrity (CWMI). The purpose of this study was to determine relationships between body composition (BC) and CWMI. Fifteen older adults (66.2 + 6 yrs) had their BC evaluated: weight (73.3 + 11 kg); body mass index (BMI, 26.2 + 4 kg/m²); circumferences (waist, 84.3 + 13 cm; abdomen, 90.1 + 13 cm); and percent body fat (%BF, 29.7 + 10 %; estimated from 4 skinfolds). Structural and diffusion tensor imaging (DTI, 21 directions, repeated x 4) was done using a 3.0 Tesla MRI unit. 3D T1 MP-Rage and fractional anisotropy (FA) were computed from raw DTI data. InsightSNAP software was used to outline brain regions. Controlling for age, gender, and aerobic fitness, significant associations were found in the posterior cingulum. Greater FA was associated with higher BC values on the left side (weight: $r = 0.694$, $p = 0.012$; BMI: $r = 0.504$, $p = 0.09$; abdomen: $r = 0.622$, $p = 0.031$; %BF: $r = 0.679$, $p = 0.015$), whereas greater FA was associated with lower BC values on the right side (weight: $r = -0.701$, $p = 0.011$; BMI: $r = -0.671$, $p = 0.017$; abdomen: $r = -0.720$, $p = 0.008$; waist: $r = -0.724$, $p = 0.008$; %BF: $r = -0.222$, $p = 0.489$). These preliminary findings suggest segmental and side-specific associations between BC and CWMI in specific brain regions. Funding: UNC-BRIC.

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DYNAMICS OF SYSTEMIC DYSREGULATION AND FRAILITY: A STATE-OF-THE-ART LOOK

CHAIR:

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Frailty is hypothesized as a syndrome of decreased health reserves resulting from underlying physiological dysregulation. Despite its frequent casting as a cycle of mutually exacerbating declines, surprisingly the dynamics of its etiology has been little studied. This symposium narrows this gap through dynamic modeling of frailty development at multiple time and measurement scales. It employs methodologies at the quantitative state of the art to illuminate data from the Women's Health and Aging Studies and the Baltimore Longitudinal Study on Aging. Our first paper is focused at a macroscopic scale: clinical status. Multinomial logit modeling is employed to elucidate the dynamics of frailty and mortality, and demonstrate variance in these by socioeconomic position. A second paper drills down to