a significant decrease in leukocytes number (6.08 ± 1.55mil/mm3 vs 4.68 ± 1.09mil/mm3; p = 0.029) was observed in CG and a significant decrease in IGF1 (344.03 ± 90.83ng/ml vs. 291.60 ± 58.29ng/ml; p = 0.049) resulted in TRFG. A significant decrease in body fat percentage (14.03 ± 1.54% vs. 8.53 ± 1.21% p =<0.0001) was also evidenced in the TRFG
Conclusions: The TRF followed for 30 days had no effect on endurance performance in high-level cyclists, but resulted in a significant decrease in body fat and some changes in blood parameters of potential interest.

A26
SARCOPENIA IN RENAL CRONIC DISEASE IN CONSERVATIVE THERAPY

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Introduction: Sarcopenia is a risk factor associated with chronic kidney disease (CDK). The aim of the following study was to evaluate muscle mass and its function in patients with MRC in conservative therapy.
Methods: 94 patients (F = 32, M = 62) were enrolled. The nutritional status has been evaluated through anthropometric measurements, biochemical analysis and bioimpedance exam. The glomerular filtrate (eGFR) was estimated according to the MDRD (Modification Diet Renal Disease) equation. The contractile force of the hand was evaluated using the Lafayette dynamometer (HG). Presarcopenia and sarcopenia were defined according to the EWGSOP criteria.
Results: The prevalence of presarcopenia was observed in 4.7% (M = 7.3%, F = 0) with an increase in advanced stages of MRC (1.2%, 1.2% and 2.4% in stages 1,3,4, respectively); while, sarcopenia was observed in 10.6% (M = 7.3%, F = 16.7%) without significant differences between the CDK stages. In addition, diabetic patients showed reduced muscle strength compared to non-diabetic patients (HGdx: 24.9 ± 8.8Kg vs 28.1 ± 10Kg, p < 0.05). The HG values are directly related to the eGFR (p < 0.05).
Conclusions: Our data suggest that presarcopenia is more common in men, while sarcopenia in women. The presence of presarcopenia in early stages of CDK and the reduction of muscle function associated with the decline of glomerular filtrate, indicate that during this pathology there is a rapid change of the body composition with progressive loss of muscle strength.

A27
CORRECTION OF A PATIENT'S MICRONUTRIENT STATUS PRIOR TO SLEEVE GASTRECTOMY COULD BE USEFUL IN PREVENTING EARLY POSTOPERATIVE MICRONUTRIENT DEFICIENCIES: A RETROSPECTIVE COMPARATIVE STUDY

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Introduction: Micronutrient deficiencies (MD) after sleeve gastrectomy (SG) are frequent. Obese patients often show MD before SG. Aim of this study was to assess whether the correction of MD prior to SG plays a role in preventing early postoperative MD.
Methods: Eighty patients (58 females, 22 males) who underwent SG were retrospectively evaluated. Patients were divided according to whether (Group A, n = 42, 30 females, 12 males) or not (Group B, n = 38, 28 females, 10 males) they received preoperative MD correction. Micronutrient status were assessed preoperatively and at 3- and 12-months post-SG in both groups. After SG, all patients followed the same postoperative diet and micronutrient supplementation, and their nutrient intake was evaluated.
Results: Before SG, patients without micronutrient correction were mostly deficient in vitamin B12 (10,5%, 3 females, 1 male), folic acid (15,8%, 5 females, 1 male), vitamin D (39,5%, 10 females, 5 males), iron (26,3%, 8 females, 2 males), and zinc (7,9%, 2 females, 1 male). Patients who had preoperative micronutrient correction had no deficiencies. At 3- and 12-months post-SG, no patient from the preoperative micronutrient correction group developed new deficiencies, whereas all patients who had MD in one or more micronutrients continued to be deficient, despite the supplementation. No differences in estimated nutrient intake were observed in both groups, demonstrating that MD seen in the early post-SG period are mostly due to preexisting deficiencies and not caused by the surgery.
Conclusion: Pre-SG identification and correction of MD could be helpful in preventing early postoperative MD.

A28
RAW BIOELECTRICAL IMPEDANCE (BIA) VARIABLES AND PHYSICAL FITNESS IN YOUNG ADULTS

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Background: Body composition and physical fitness (PhF) are components of nutritional status closely related to each other, which can be assessed respectively using PF tests and bioelectrical impedance analysis (BIA). In particular, raw BIA variables should be evaluated because of their potential relationships with muscle strength. Of note, bioimpedance (BI) index is related to fat-free mass (FFM), while impedance ratios (IR) and phase angle (PhA) are indexes of body cell mass and extracellular/intracellular water ratio. The objective of the study was to evaluate the relationships between PhF and raw BIA variables in healthy young adults.
Methods: Ninety-seven subjects participated in the study: 48 males (età 23.2 ± 24 yrs, body mass index-BMI 25.3 ± 3,1 kg/m^2) and 49 females (age 24,5 ± 2,4 yrs, BMI 23.2 ± 3,4 kg/m^2) . With respect to BIA, impedance (Z) and PhA were measured every 25 kHz in the range 5−300 kHz (HUMAN IM-TOUCH, DS Medica, Milano). BI indexes were calculated as stature^2/Z at 5−300 kHz, while IRs as ratios between Z at 50−300 kHz, and Z at 5 kHz. The PhF tests performed were hangrip strength (HGS), long jump (LJ) and gait speed (GS).
Results: HGS, SJ and LJ were more strictly correlated with BI index, IR and PhA than with age, stature, weight and BMI. Higher correlation coefficients were observed when BI index was calculated at ≥100 kHz. The association with PhF was similar for different IRs and reached a maximum among PhAs for that measured at 50 kHz. GS was associated with IR and PhA, but not with BI indexes, age, stature, weight and BMI. Multiple regression analysis showed that BI indexes plus IR or PhA were significant predictors of PhF (often with high R^2).
Conclusions: The results of the study show that in young adults physical fitness is consistently related to raw BIA varia-bles. These relationships vary depending on the measurement frequency selected.

A29
NUTRITIONAL CARE IN THE REHABILITATION PROCESS OF SEVERE BRAIN INJURIES: PRELIMINARY RESULTS

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Introduction: The latest ESPEN Neurological Guidelines recommend the presence in the Severe Brain Injuries (SBI) multidisciplinary rehabilitation team of a nutrition specialist who can elaborate a personalized nutritional plan and monitor it over time. The aim of this study is to evaluate the effects that an experienced Nutrition Team can have on the rehabilitation process of the patient with SBI.
Methods: We enrolled 50 patients admitted to the SBI ward of our hospital. Data regarding Malnutrition Universal Screening Tool (MUST) and Disability Rating Scale (DRS) scores, number and grade (EDUAP Guidelines) of pressure sores (PS), and biochemical markers of malnutrition were collected at admission and discharge.
Results: Compared to admission, at discharge patients (mean age 59 years, 34% women) had lower MUST and DRS scores (MUST: 2.1 ± 1.0 vs. 1.3 ± 1.2, p < 0.001; DRS: 20.9 ± 4.9 vs. 16.3 ± 7.8, p = 0.003),