

ACUTE PHASE PROTEINS IN CHILDREN WITH MARASMUS**L. Todorovska¹, N. Radlovic², D. Bogicevic², M. Jurhar³, M. Spiroski³**¹*Department of Physiology and Anthropology, Medical Faculty Skopje, Skopje, Macedonia*²*Department of Paediatrics, Medical Faculty Skopje, Belgrade, Serbia and Montenegro* ³*Department of Immunobiology and Human Genetics, Medical Faculty Skopje, Skopje, Macedonia*
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We investigated the status of acute phase proteins in 40 children with marasmus (MC) (age 10.2 ± 1.7 y) and 40 healthy, well-nourished children (HC) (age 10.4 ± 1.5 y). Nutritional status was evaluated with clinical, anthropometric and laboratory parameters. Following APP were obtained with turbidimetry, nephelometry and RID (Behring, Germany): c-reactive protein (CRP), α 1-acid glycoprotein (α 1AG), fibrinogen, haptoglobin, C3, C4, α 2-macroglobulin (α 2MG), α 1-antitrypsin (α 1-ATR), C1-inhibitor (C1INH), ceruloplasmin (CPL), albumin (AL), prealbumin (PAL) and transferrin (TR). Mean AL, PAL and TR were significantly lower in MC (32 ± 3.9 , 1.95 ± 0.2 and 0.19 ± 0.07 gr/l), compared with HC (43 ± 2.4 , 2.31 ± 0.25 and 0.28 ± 0.07 gr/l, respectively). Mean CRP, fibrinogen, α 2MG, C1INH and CPL were significantly higher in MC (0.443 ± 0.89 mg/dl, 3.7 ± 0.9 , 2.8 ± 0.8 , 0.27 ± 0.04 and 0.391 ± 0.13 gr/l), compared with HC (0.028 ± 0.12 mg/dl, 3.0 ± 0.5 , 2.3 ± 0.6 , 0.24 ± 0.03 and 0.328 ± 0.07 g/l, respectively). Correlation between anthropometric parameters and most of the APP wasn't significant. Children with marasmus show significant changes in all groups of APP.

