Abstract

Profound changes in perioperative management, namely “fast track surgery” have been recently proposed. This is a bundle of various techniques used for subjects undergoing elective operations that allows an improved well-being, faster recovery, shorter hospitalization and better outcome. From a nutritional point of view this new approach translates into a more rapid return of bowel function and thus to safely tolerate oral re-feeding within 1-3 days even after major operations. Nevertheless, the classic indications for perioperative artificial nutritional support remain valid but they should now apply only to a minority of patients. Extensive research in the last 20 years has clearly shown that modifying the composition of standard nutritional feeds by adding supernormal doses of specific substrates that have immuno-modulatory, anti-inflammatory, anabolic, and tissue protective ability often translates into improved surgical outcome. The most convincing and reproducible results were obtained on the reduction of infectious complication by the perioperative use of enteral formulas enriched with arginine and omega-3 fatty acids.

Keywords
Surgery, Fast track, Artificial nutrition, Immunonutrition, Glutamine, Probiotics, Glucose metabolism, Outcome, Complications.