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### **The role of intestinal micro biota, the diagnostic approach and management of cow's-milk protein allergy in infants and children**

The role of intestinal microbiota has acquired a growing importance thanks to the recent extensive investigations performed in the last years. It was evidenced that, in the interaction between microbiota and host organism, a well-balanced microbiota carries to the host organism advantages in term of resistance to colonization, contribution to the realization of the intestinal wall, production of short chain fatty acids, production of vitamins, mainly of group B, interaction with immune system at mucosal level. It seems therefore evident that maintaining microbiota balance is an essential element in the contribution to the global health of host organism. The main characteristics for a positive, effective and well tolerated interaction between a probiotic and the host organism are: vitality; metabolic characterization and taxonomic identification; administration of adequate amounts of microorganisms; a clear definition, obtained through clinical trials, of health benefits for the host; safety evaluation performed through pre-marketing trials and rather monitored, in the post-marketing period, from Pharmacovigilance to guarantee a constant control. The viability of the microorganism is an essential element that has to be warranted both in the industrial process and in the product shelf-life with adequate trials on termoresistance, but also after ingestion thanks to characteristics such as gastroresistance and bile-pancreatic resistance. The diagnostic algorithm based on recently published evidence-based guidelines on CMPA. If CMPA is suspected by history and examination, then strict allergen avoidance is initiated. In certain circumstances the diagnosis can be made without a milk challenge. Treatment and reevaluation.

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