Background and relevance Constipation is distressful to the patient, parents and pediatrician. The ESPGHAN/NASPGHAN have recommended therapy for functional constipation, however, studies have shown that constipation is still prevalent among children and accounts for at least 3% of visits to the general pediatric clinic and as much as 30% of visits to the pediatric gastroenterologist. The use of a ‘Constipation Pamphlet’ may be effective in alleviating symptoms and recurrence of constipation.

Objective To determine the effectiveness of ‘Constipation Pamphlet’ in improving outcomes among children with functional constipation.

Methods Patients include 2 to 18 years old, fulfilling the ROME IV Criteria for functional constipation, or with Blethen grade 2 or 3 on abdominal radiograph, seen at the University of Santo Tomas Hospital. The Control Group was given the recommendations of ESPGHAN/NASPGHAN in the management of functional constipation; the Experimental Group was given a ‘Constipation Pamphlet’, which in addition to the above recommendations, the following were recorded daily in a stool calendar: consumption of fruits, vegetables, and water; bowel movement, stool consistency; and laxative intake. Both groups were followed-up every 2 weeks, and outcomes were assessed after 8 weeks.

Results There were a total of 90 patients. All patients had less than 3 bowel movements per week (100%), painful bowel movement, and hard stools (93.33%). Abdominal radiograph revealed fecal stasis (73.33%). More consumption of fruits, vegetables, and water was noted in the Experimental Group (P<0.001, P<0.001, and P=0.007); Regular daily bowel movement and normal stool consistency of Bristol type 4–5 was observed in the Experimental Group (P=0.009, P<0.001); Acceptable toilet habits were established by the 4th week (P=0.002) and maintained in the Experimental Group. (P=0.015). A greater proportion of patients in the Experimental Group ceased lactulose intake by the 4th week (P=0.045) in contrast to the Control Group which continued until the 8th week of the study period. The Experimental Group were already symptom-free by the 2nd week, and sustained up to the end of the 8th week (P<0.001).

Conclusion The use of a ‘Constipation Pamphlet’ is effective in alleviating symptoms and preventing recurrences of constipation among pediatric patients.

Introduction The most common food allergy in children is cow’s milk protein allergy, and the clinical manifestations of the entity are very diverse.

Beside the organic symptoms of milk protein allergy, behavioural problems often occur in these children: the parents describe problems with attention, increased impulsivity and sleeping disorder; the biological background of these symptoms in not fully understood at the moment. The aim of our human research is to examine the psychological aspects induced by these proteins.

Methods Participants of the study were children above 3 years of age, with suggested symptoms of cow’s milk protein allergy (n=43). The location of the study was the Paediatric Gastroenterology Department of the Balassa János County Teaching Hospital. The parents of the involved children were asked to fill in a self-edited questionnaire, which contained questions about sociodemographical and health status, as well as features about behaviour (according to DSM-5 symptoms-cheklist about attention deficit-hyperactivity disorder). The evaluation of the questionnaires were performed with SPSS statistical program.

Results Examining the entire research population (n=43, mean age:7.88 years, 41.9% female) the score received according to the ADHD symptoms-cheklist before the diet (6.88, SD: 4.43) showed significant decrease after 3 months of the elimination diet (4.48, SD: 3.69, p=0.001). The above mentioned score of the children with sleeping disorder (n=13, 10.62, SD: 4.23) also represented a significant reduction after 3 months of the diet (6.69, SD: 4.59, p=0.009).

Discussion According to our results it is found that psychological symptoms (attention deficit, hyperactivity, sleeping disorder) can be induced by cow’s milk protein allergy, but a significant improvement in these symptoms – beside the somatic symptoms - can only be achieved with a strict elimination diet.