CLIPPINGS

Use of Probiotics and Prebiotics – Evidence Based Study *(Pediatrics - doi:10.1542/peds.2010-2548)*

Probiotics are used to treat childhood *H. pylori* gastritis, irritable bowel syndrome, chronic ulcerative colitis, and infantile colic, or to prevent childhood atopy. Evidence to date has not shown a benefit of probiotics in treating or preventing human cancers or in treating pediatric Crohn's disease. AAP subcommittee conducted this review to help pediatricians to make appropriate decisions. It was concluded that the clinical applications for probiotics, including the optimal duration of probiotics administration as well as preferred microbial dose and species is still to be studied and the long-term impact on the gut microflora in children is unknown.

Risky *vs* Rapid Growth in Infancy *(Arch Pediatr Adolesc Med. 2010;164:1091-1097)*

This retrospective cohort study was done to systematically analyze growth data from infant health maintenance records to characterize infant weight gain increasing risk for childhood overweight, and to identify additional information from those records that could refine risky infant weight gain as a screening tool.

Childhood overweight prevalence was 24.8%. At-risk infants gained at least 8.15 kg from ages 0 to 24 months. While 31.4% of at-risk infants became overweight children, 68.6% were resilient. At-risk, resilient infants had parents with more education, had lower weight gain from ages 18 to 24 months and 0 to 24 months and a smaller area under the weight-gain curve from ages 0 to 24 months, were more often exclusively breastfed for 6 months or longer, and were introduced to solid foods later than at-risk, overweight participants.

While most pediatricians would not recognize weight gain of 8.15 kg or more from ages 0 to 24 months as rapid growth, it was a fair screening tool for childhood overweight in this study and had the potential to be refined using information about demographic characteristics, growth patterns, and parental feeding choices.

Single-breath counting (SBC) – A novel technique for measuring pulmonary function in children (*AJEM 2011;29(1):33-36*)

It is well known that measuring peak expiratory flow rate in children is problematic because it is effort dependent. Forced expiratory volume in 1 second (FEV1) and the ratio of FEV1 to forced vital capacity (FEV1/FVC) are more accurate, but generally not available in the emergency situations.

Single-breath counting (SBC) is the measurement of how far an individual can count in a normal speaking voice after a maximal effort inhalation. The count is in cadence to a metronome set at 2 beats per second. SBC correlates with standard measures of pulmonary function in adults, but it has never been tested in children. The aims of this study were to determine if SBC can be easily performed by children and to assess the correlation between SBC and standard measures of pulmonary function in a pediatric population. Single-breath counting was found to be easy to perform in children, seems to correlate well with standard measures of pulmonary function, and shows promise for measuring asthma severity in children. The range of reference SBC values (as a function of age and/or body size) and an evaluation of the utility of SBC in an outdoor clinic are yet to be finalized.

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