

## **A Healthy Strong Immune System Starts with a Healthy Digestive System**

*Begin cultivating your child's health by cultivating a healthy gut flora in their digestive system.*

It is speculated that most of the growing sites for healthy bacteria (proflora) species such as *lactobacillus* and *bifidobacterium*, in the human gastrointestinal tract are established during gestation and early infancy. Proflora species play an important role in digestive function, assimilation and absorption of vital nutrients, development of the immune system, healthy mucus membranes and healthy skin. Infants have a sterile gut upon leaving the womb and are exposed to bacteria via the birth canal; the mother's skin and breast milk which provide the starters for the gut flora. It may take up to two years for full colonization of the flora and maturity of the gastrointestinal tract.

There are many things in a child's first two years that can interrupt proper colonization, including formula feeding, maternal diet and digestive health of the mother when breastfeeding, food introduction and antibiotic use. Antibiotics disrupt normal flora growth and colonization. It is estimated that a course of antibiotics may disrupt normal flora colonization for up to three months post use.<sup>1</sup> If a child has been given several courses of antibiotics before the age of two, as is the case for many American children, the normal flora may be severely compromised, increasing the risk for common childhood illnesses, including diarrhea, allergy, atopic dermatitis, sinus infections, ear infections, common cold, upper respiratory infections, colic, dental caries, urinary infection and IBS.<sup>2</sup>

Outcomes of several recent scientific studies have concurred, acknowledging the role of probiotics for a healthy immune system. A Finnish study looked at the effect of a probiotic on reducing atopic disease in infants when administered to the pregnant mother in the third trimester

of her pregnancy, during the breastfeeding period and to the infant. The occurrence of atopic disease dropped by 50% in the probiotic group and continued to stay low for the entire four years of the study without further supplementation of probiotics.<sup>3</sup> Several other studies have looked at supplementation of children in day care centers with probiotics and the occurrence of upper respiratory infection, fever and GI infection. It was found that the probiotic supplemented groups had significantly less occurrence of infections.<sup>4,5</sup>

Supplementation of probiotic blends which include *Lactobacillus* and **bifidobacterium** species, such as **MegaFlora** or **MegaFlora Plus** can be taken during pregnancy and breastfeeding to support immune and digestive system health for mother and baby. Infants may be supplemented with *Bifidobacterium* species to support colonization of healthy gut microbes.

#### References;

- <sup>1</sup> De la Cochetiere et al: Early intestinal bacterial colonization and necrotizing enterocolitis in premature infants: the putative role of Clostridium, *Pediatr Res Sep*;56(3): 366-70,2004
- <sup>2</sup> Pediatric Probiotics, Impact on the development of a normal immune system, *Naturopathic Doctor News and Review Feb*; 3(2) 10-12, 2007
- <sup>3</sup> Kalliomaki M et al: probiotics and prevention of atopic disease: 4 year follow up of randomized placebo-controlled trial, *Lancet* 361:1896-1871, 2003
- <sup>4</sup> Weizman Z et al: Effect of a probiotic infant formula on infections in child care centers: comparison of two probiotic agents, *Pediatrics* 115:5-9, 2005
- <sup>5</sup> Hatakka K et al: effect on long-term consumption of probiotic milk on infections in children attending day care centers: double-blind, randomized trial, *Clin Nutr Aug*; 24(4):481-91,2005