



Joyfully growing with Allergies!
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Probiotics in Allergy Prevention and Treatment –

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Allergy prevention strategies are important. Prevention must include strategies starting in pregnancy.

The environment, such as bacteria, diet, allergens, pollutants, and other play a role on Epigenetic regulation (gene expression) and genetic predisposition. Genetic predisposition impacts on immune development and disease predisposition.

The following factors promote a healthy GUT microbiota: Vaginal birth, birth out of hospital, birth and infancy on a farm, and avoidance of unnecessary antibiotics. Allergen exposure in the presence of breast milk is important between 4 – 6 months. The current role of probiotic supplementation for allergy prevention and treatment is unclear. There are studies supporting benefit of probiotics in prevention, and studies that fail to support benefit. The ultimate answer to the probiotic strategy may well depend on actual bacterial strains (not all organisms have equal benefit), dose, viability and timing of intervention. Specific strain and dose recommendations should be determined, as genetic influences determine individual variability and response. There is insufficient evidence at present, to give a clear recommendation.

There is no benefit to the allergen exclusion diet in preventing allergy in pregnancy. Polyunsaturated fatty acid (PUFA) supplementation (fish oil supplementation), has shown to reduce atopic dermatitis in offspring. Regular exercise and a healthy diet are also recommended. Some other strategies to prevent allergy in pregnancy include: avoiding smoking, planning a vaginal birth, planning post-natal allergy prevention strategies, keeping the maternal allergic condition well controlled, and preventing maternal stress, as this might increase neonatal IgE or allergic disease.

Vitamin C: The authors demonstrated that lung function during the first week of life was statistically significantly better among infants born to mothers randomised to receive vitamin C, compared with infants born to mothers randomised to receive the placebo. The prevalence of wheeze in the first year of life was also significantly lower among infants of mothers in the vitamin C group than infants of mothers in the placebo group.

Probiotic supplementation has not yet been proven beneficial in atopic dermatitis, food allergy, allergic rhinitis or asthma.

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