

Allergy constitutes a widespread disease in children. Environmental factors in utero, contact with microbes, dietary factors and infections in infancy are thought to be of importance for the development of the immune system. We have previously found that children from anthroposophic families have a low prevalence of allergy. The anthroposophic life style is characterised by a diet containing live lactobacilli, restrictive use of antibiotics and vaccinations and by giving birth at home. The overall aim of this prospective study is to assess the role of environmental and life style factors for the development of allergy in children. One hundred fifty families from anthroposophic maternity welfare will be recruited and compared with 180 control families. Immunological markers in the parents, placenta, the newborn child and vernix, establishment of microbiota in the gut and serology for viral infections are studied. Antimicrobial components in breast milk, allergens and endotoxins in the house dust will be assessed. Psychosocial factors including stress are studied, preliminary, interesting variations in saliva cortisol between, but also within, the first 50 families are found. Outcome is allergic sensitisation/disease in the child at initially two years of age. The project is expected to supply new knowledge on the development of our immune system in relation to life style- and environmental factors, and could bring about new preventive and therapeutic measures and better quality of life for children. The anthroposophical population has been shown to offer a unique possibility to study the consequence of various life style exposures. Increased knowledge about the mechanisms behind undesired immunologic reactions is necessary to in a radical way enable prevention or early treatment of allergy, and thus improve living conditions for those affected today and tomorrow.