

OLVG Food Allergy Growth Study

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Risk factors for poor growth in food allergic children are ongoing inflammation caused by atopic dermatitis, food allergy and possibly low energy and nutrient intakes.

Ethische beoordeling	Niet van toepassing
Status	Werving gestart
Type aandoening	-
Onderzoekstype	Observationeel onderzoek, zonder invasieve metingen

Samenvatting

ID

NL-OMON25057

Bron

NTR

Verkorte titel

Growth studie

Aandoening

Food allergy

Ondersteuning

Primaire sponsor: OLVG

Overige ondersteuning: Nutricia Research

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

Height-for-age: Most recent height/length, head circumference and weight are derived from the medical record, using calibrated digital scales, length board or height board and a non-stretchable tape measure measured by medical staff during routine medical visits at the paediatric departments OLVG Oost and West.

Toelichting onderzoek

Achtergrond van het onderzoek

International Survey on Growth in Children with Food Allergies with unexpected finding for OLVG

Recently, the department of Pediatrics of the OLVG participated in an international survey on growth in children with food allergies, initiated by Dr. Rosan Meyer, Imperial College, London. The purpose of this survey was to establish growth of children with food allergies and factors that impact on growth from allergy centers across the world. Surprisingly, it was found that the Dutch children had the lowest height-for-age z-score, while the Dutch people are the tallest in Europe.

The lower height-for-age-scores in the Dutch children may be (partly) explained by 1. Ethnic background of the study population, 2. High percentage of non-IgE mediated and mixed food allergy, 3. Lack of dietetic counseling on elimination diets, resulting in low energy and/or nutrient deficiencies (although in not all countries dietitians were involved), and 4. Ongoing inflammation due to the allergic status of the children.

Poor growth data in food allergy is frequently reported in the literature according to a recently published review on growth in food allergic children. It was concluded that children with food allergies often have poorer growth parameters than the general population. Risk factors for poor growth are atopic dermatitis and cow's milk allergy. Nutritional deficiencies are frequently found, in particular calcium and vitamin D, but also low serum levels of zinc, iron, B vitamins and deranged fatty acids have been found.

To our knowledge no other data have been published on growth in food allergic children in the Netherlands.

AIM: To overall aim of the OLVG GROWTH STUDY is to study growth in food allergic children 0-18 years at OLVG, taking into account target height, ethnicity, nutrition intake and other risk factors.

Methods:

1. In all patients length and weight will be measured during routine out-clinic hospital visits. In addition to the routine care, within 4 weeks after signing informed consent:
2. Patient characteristics will be collected from the medical record;
3. Patients will be interviewed about possible contributing factors to poor growth, either on location or by telephone;
4. Patients will collect 2 stool samples, which will be collected at home and returned by mail to OLVG;
5. Sixty patients will fill in 3x an online 24-hour recall diary about all foods and drinks consumed;
6. Sixty patients will be asked if to give consent for being contacted by the researchers in a follow-up study for a blood sample (inflammation markers, status of relevant vitamins or minerals, such as calcium, vitamin D, iron, vitamin B6, folic acid), microbiome analysis in the spare stool sample, and personal growth charts via the Preventive Child Healthcare centers.

Total duration of project: 12 months

Starting date: 1 November 2020

End date: 31 October 2021

Doel van het onderzoek

Risk factors for poor growth in food allergic children are ongoing inflammation caused by atopic dermatitis, food allergy and possibly low energy and nutrient intakes.

Onderzoeksopzet

Within 4 weeks after handing in signed informed consent:

Primary outcome

Height-for-age: length board or height board

Secondary outcomes:

Weight-for-height and weight-for-age SDS: calibrated digital scales, Dutch growth standards, WHO growth standards

BMI: kg (cm)^2

risk factors: telephone questionnaire

calprotectin: stool sample

nutritional intake: 3 online 24-hour recalls

Onderzoeksproduct en/of interventie

none

Contactpersonen

Publiek

OLVG

Berber Vlieg-Boerstra

0620965612

Wetenschappelijk

OLVG

Berber Vlieg-Boerstra

0620965612

Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

Any child between 0-18 years of age with a confirmed food allergy and elimination diet:

1. Confirmed through either skin prick testing/specific IgE testing which has led to a recommendation for the elimination of these allergens from the diet;
2. Confirmed through a food challenge;
3. Confirmed through an elimination diet followed by re-introduction at home ;
4. Children born à term (between 37 and 42 weeks of gestation).

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

1. Children with non-allergic co-morbidities – Down’s Syndrome, cerebral palsy etcetera;
2. Children where it is not possible to measure growth parameters;
3. Children where food allergies have not been confirmed;
4. Not able to speak and write in Dutch or English properly;
5. Preterm children: birth before 37 weeks of gestation.

Onderzoeksopzet

Opzet

Type:	Observationeel onderzoek, zonder invasieve metingen
Onderzoeksmodel:	Anders
Toewijzing:	N.v.t. / één studie arm
Blinding:	Open / niet geblindeerd
Controle:	N.v.t. / onbekend

Deelname

Nederland	
Status:	Werving gestart
(Verwachte) startdatum:	01-11-2020
Aantal proefpersonen:	200
Type:	Verwachte startdatum

Voornemen beschikbaar stellen Individuele Patiënten Data (IPD)

Wordt de data na het onderzoek gedeeld: Nee

Ethische beoordeling

Niet van toepassing

Soort:

Niet van toepassing

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register	ID
NTR-new	NL9166
Ander register	ACWO OLVG : WO20.216

Resultaten