

# IMProving Treatment of moderate to severe AtopiC Dermatitis in adults by immune- supportive Diet. A proof-of-concept study

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|                              |                                 |
|------------------------------|---------------------------------|
| <b>Ethical review</b>        | Approved WMO                    |
| <b>Status</b>                | Recruiting                      |
| <b>Health condition type</b> | Epidermal and dermal conditions |
| <b>Study type</b>            | Interventional                  |

## Summary

### ID

NL-OMON56216

### Source

ToetsingOnline

### Brief title

IMPACDD study

### Condition

- Epidermal and dermal conditions

### Synonym

atopic dermatitis, eczema

### Research involving

Human

### Sponsors and support

**Primary sponsor:** OLVG

**Source(s) of monetary or material Support:** Stichting Fonds Onderzoek Huidziekten;  
Stichting Wetenschappelijk Onderzoek OLVG

## Intervention

**Keyword:** atopic dermatitis, dietary efficacy, EASI, immune-supportive diet

## Outcome measures

### Primary outcome

main study outcomes (no primary outcome):

Differences in AD severity (including itch), cytokine production, quality of life, nutrition intake and use of medication.

### Secondary outcome

n.a.

## Study description

### Background summary

Atopic dermatitis (AD) is a chronic disease characterized by visible skin lesions and intense itching that causes serious disease burden in patients, both mentally and physically. There is no complete cure for AD and therefore management currently focuses on avoidance of triggers (e.g. bathing), skin hydration, and reduction of skin inflammation. The relationship between AD and diet and nutrition is complex and unclear and the evidence is scarce. Elimination diets are rarely significantly effective. However, patients with AD often follow unsupervised elimination diets. An immune-supportive diet may ameliorate AD because of the anti-inflammatory effects of the total diet, direct effects of specific nutrients or food components on innate and adaptive immune cells and the role of nutrition in the gut microbiome and gut permeability.

### Study objective

to study, in adults with moderate to severe AD,:

1. the effect of an immune-supportive diet on severity of AD (including itch), cytokine production, quality of life, use of medication and nutritional intake;

2. the dietary compliance and feasibility of the immune-supportive diet.

## **Study design**

: A multicentre non-randomised proof-of-concept study on severity of AD in adult patients who visit the outpatient clinics of the dermatology departments of OLVG or AUMC.

## **Intervention**

Patients will receive written and oral dietary advice by an allergy-specialist dietitian regarding the maintenance of a healthy and individually tailored immune-supportive diet during 4 months (including 1 month run in), supported by sample menus, recipes and product information.

At baseline and at the end of the study, AD severity will be measured by the dermatologist and scored by the patient. Cytokines in the skin will be determined by tape stripping, quality of life will be scored. Nutrition intake will be recorded by the patients using 3-day food diaries.

Itch and medication use will be scored on a weekly base. After 4 weeks of run-in diet the patients will score the AD severity to monitor the (placebo) effect of enrolment

## **Study burden and risks**

An immune supportive diet is a healthy diet and does not bring any extra risks for the participants. Participating in this study will yield some burden: extra time for dietary adherence and measurements, extra costs (15% extra) and restricted food choices.

However, patients will be reimbursed for extra costs and the dietician will ensure sufficient tasteful and acceptable alternatives. If effective, disease severity including itch will decrease and may heavily outweigh this burden.

## **Contacts**

### **Public**

OLVG

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### **Scientific**

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## **Trial sites**

### **Listed location countries**

Netherlands

## **Eligibility criteria**

### **Age**

Adults (18-64 years)

Elderly (65 years and older)

### **Inclusion criteria**

- Age 18 years or older
- Diagnosed with moderate to severe AD by the dermatologist, EASI score 7.1-72.
- Able to speak and write Dutch.

### **Exclusion criteria**

- Other skin diseases
- Not able to speak or write Dutch fluently;
- Pregnancy;
- Multiple clinical relevant IgE mediated food allergies (> 1 staple food or food group, such as cow\*s milk or nuts/peanuts/seeds);
- Avoidance of all dairy or gluten;
- Extensive eliminations due to Pollen Food Syndrome, so that a daily variety of raw fruits and/or vegetables is not feasible;
- Individual patients will not start the dietary intervention just before the time of the year in which the AD is usually worsening.
- Antibiotics shorter than 6 weeks prior to the study;
- Using systemic immune suppressants or biologicals;
- Not willing to stop probiotic and nutrient supplements from 4 and 2 weeks subsequently prior to the start of the study (except medically prescribed or recommended for age such as vitamin D).

## Study design

### Design

**Study type:** Interventional

Masking: Open (masking not used)

Control: Uncontrolled

Primary purpose: Treatment

### Recruitment

NL

Recruitment status: Recruiting

Start date (anticipated): 29-05-2024

Enrollment: 0

Type: Actual

### Medical products/devices used

Registration: No

## Ethics review

Approved WMO

Date: 13-12-2023

Application type: First submission

Review commission: MEC-U: Medical Research Ethics Committees United (Nieuwegein)

Approved WMO

Date: 08-07-2024

Application type: Amendment

Review commission: MEC-U: Medical Research Ethics Committees United (Nieuwegein)

## Study registrations

**Followed up by the following (possibly more current) registration**

No registrations found.

**Other (possibly less up-to-date) registrations in this register**

No registrations found.

**In other registers**

| Register | ID             |
|----------|----------------|
| CCMO     | NL85507.100.23 |