# 'Photo-allergic contact dermatitis from cinnamon and cinnamon-derivatives'

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We want to verify if cinnamon (-derivatives) allergic patients do show dermatological reactions to cinnamon-derived UV protectors.

Ethical review Approved WMO

**Status** Pending

Health condition type Allergic conditions

**Study type** Observational non invasive

# **Summary**

#### ID

NL-OMON29735

#### Source

ToetsingOnline

#### **Brief title**

'Photo-allergic contact dermatitis from cinnamon- and cinnamon-derivatives'

## **Condition**

- Allergic conditions
- Epidermal and dermal conditions

#### **Synonym**

allergy to cinnamon (-derivatives)

## Research involving

Human

# **Sponsors and support**

**Primary sponsor:** Vrije Universiteit Medisch Centrum

Source(s) of monetary or material Support: Ministerie van OC&W

## Intervention

**Keyword:** allergic contact dermatitis, cinnamon, cinnamon-derivatives, photo-allergy

## **Outcome measures**

## **Primary outcome**

Regarding the literature we expect that concomitant reactions or cross-reactivity between cinnamon (-derivatives) and cinnamon-derived UV protectors will occur. If we detect this association between cinnamon-derivatives allergy and UV protectors, we expect the finding to be of important clinical relevance.

# **Secondary outcome**

Frequency of allergy for cinnamon, cinnamon-derivatives and fragrance in the study population.

Presence and/or absence of cross-reactivity and concomitancy among cinnamon(-derivatives) and cinnamon derived UV protectors.

# **Study description**

# **Background summary**

Allergic contact dermatitis (ACD) is an inflammatory response of the skin to an allergen that has direct contact with the skin. Spices, food and flavours are important causes of ACD. Among spices is cinnamon one of the most common to cause sensitization. Sunscreens are other, less common, substances that can cause ACD, mostly photo-allergic contact dermatitis (PACD). In PACD the skin reacts to a photoallergen, which is an allergen that has been photo-activated by (UV-) irradiation. In (P)ACD the immune system cannot always distinguish between chemically closely related molecules. This can lead to cross-reactivity as clinically indicated by multiple positive patch test reactions to related congeners. Another explanation for multiple positive patch test reactions could be an allergy for an identical ingredient of different substances. This is called concomitancy. The \*cinnamates\*, one of the UVB protectors used in

sunscreens, are molecular related to cinnamon and, hence, may cause cross-reactivity.

Here, we aim to asses if cinnamon (-derivatives) allergic patients do show dermatological reactions to cinnamon-derived UV protectors.

## Study objective

We want to verify if cinnamon (-derivatives) allergic patients do show dermatological reactions to cinnamon-derived UV protectors.

# Study design

Prospective study

## Study burden and risks

Patients could experience discomfort because they have to invest time to come to the outpatient clinic for four times.

A photopatch test is an accepted routine procedure in dermatological diagnostics. The substances to be tested in this study are not foreseen to cause unexpected deviant reactions.

All patients are offered a dermatological examination including a photopatch test. The patients with a positive fragrance patch test are during nowadays routine diagnostics usually not offered further diagnostics. After the dermatological examination and photo-patch test the patients will have gained more information about their allergy and their own health.

# **Contacts**

#### **Public**

Vrije Universiteit Medisch Centrum

De Boelelaan 1117 1081 HV Amsterdam Nederland

#### Scientific

Vrije Universiteit Medisch Centrum

De Boelelaan 1117 1081 HV Amsterdam Nederland

# **Trial sites**

## **Listed location countries**

**Netherlands** 

# **Eligibility criteria**

#### Age

Adults (18-64 years) Elderly (65 years and older)

## Inclusion criteria

Patients with a known cinnamon (-derivatives) allergy
Patients with a positive fragrance patch test (fragrance mix 1 and/or fragrance mix 2)
Age 18 years and above
Written informed consent
Skin to be tested has been clinical normal for the preceding two weeks

## **Exclusion criteria**

Pregnant women

Topical therapy at skin to be tested in previous two weeks
Lotions and commercial skin treatments on skin to be tested in less than 24 hours
Previous (2 weeks) sun exposition at skin to be tested

# Study design

# **Design**

Study type: Observational non invasive

Masking: Open (masking not used)

Control: Uncontrolled
Primary purpose: Basic science

## Recruitment

NL

Recruitment status: Pending

Start date (anticipated): 20-11-2006

Enrollment: 100

Type: Anticipated

# **Ethics review**

Approved WMO

Application type: First submission

Review commission: METC Amsterdam UMC

# **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 NL13676.029.06