



Organic Food Quality & Health

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# The Koala Study

K O A L A



Birth Cohort Study  
The Netherlands

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**Louis Bolk Institut, Netherlands**

# The Koala Study

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## Organic Food and Human Health

- **KOALA is a birth cohort study 2001 – 2005, adopted by the FQH-initiative in NL in 2001**

### Collaboration between:

- **University of Maastricht, the Netherlands**
- **Louis Bolk Institute, the Netherlands**
- **TNO, the Netherlands**
- **Others**

# Presentation

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- **Introduction**
- **Sweden study**
- **KOALA study**
- **Comparable research**

# Introduction

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**Relationship between organic food and health can be investigated on the following 4 levels:**

- **nutrient contents and expectations of health effects**
- **lab tests on cell cultures with foodjuices**
- **animal feeding experiments**
- **human studies, which can be divided into**
  - **small groups**
  - **large groups (epidemiological)**

# Introduction - continued

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**In 2001 the possibility arose in the Netherlands to join an epidemiological study with 2500 mothers and their newborn child, the KOALA study by the University of Maastricht.**

**KOALA design:**

- **2000 mothers with a conventional lifestyle and of different genetic makeup**
- **500 mothers with an alternative lifestyle**

**Alternative lifestyle factors are: organic food, adapted vaccination, adapted use of medicine and clothing.**

# The Koala Study

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**Design based on Sweden study - Lancet 1999**

**In Sweden a retrospective study among Waldorf school children was done, controls were children from conventional schools**

**Outcome:**

**Differences in lifestyles resulted in differences in allergy occurrence. Waldorf school children had less allergies.**

# Sweden study - continued

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**Main lifestyle factors contributing to this difference in allergy occurrence were:**

- **Food**
- **Vaccination**
- **Medication**
- **Clothing**
- **etc.**

# The Koala Study 2001-2005

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**Main difference between the KOALA and Sweden study: KOALA is a prospective study and the Sweden study was a retrospective study.**

**KOALA study: the mothers are followed throughout the last two trimesters of pregnancy and the child is followed till the child reaches the age of 2.**

# The Koala Study- continued

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The aim of the study is to discriminate between the influences of the different lifestyle factors.

The following measurements are done:

- Questionnaires (f.e. food analysis)
- Blood samples
- Stool samples
- Physical examination
- Breast milk analysis

**- RESULTS EXPECTED IN 2005 -**

# Comparable research in Europe

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**PARSIFAL is another allergy study.**

**PARSIFAL is the successor for the Sweden study.**

**This is a retrospective EU-study, performed in 5 countries with 4 groups:**

- **Waldorf school children**
- **conventional school children**
- **farm children**
- **non-farm children**

**- RESULTS EXPECTED END 2004 -**