



**BERAS** *International*  
*Building Ecological Recycling  
Agriculture and Societies*



2015  
International  
Year of Soils

# SOILS AND THE FOOD WE EAT!

Järna 19<sup>th</sup> of May 2015

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Jackie Swartz,  
Child psychiatrist, GP, PhD  
Vidarkliniken, Järna, Sweden

30-40% of the world population now being affected by one or more allergic conditions



Rhinocon-  
junctivitis



Eczema



Asthma

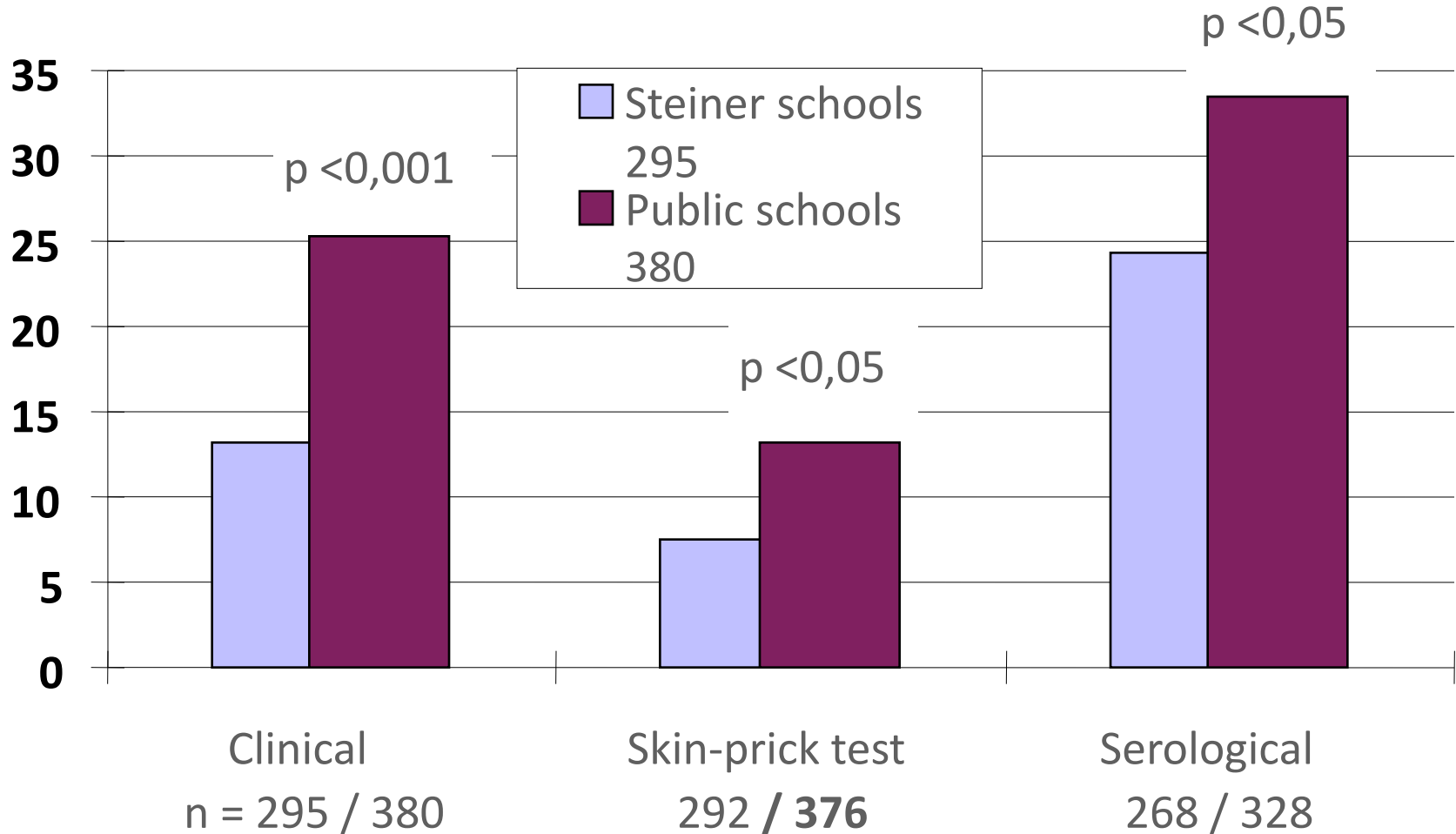
1997



Sachsska Children hospital, Vidarkliniken,  
Karolinska University hospital, Solna  
Karolinska Institutet

# Atopy proportion (%)

Cross sectional  
study  
5-13 years old



# Conclusion

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Lifestyle factors related to the anthroposophic way of life appear to lessen the risk of atopic disease in childhood.

# Atopy in children of families with an anthroposophic lifestyle

J Alm, J Swartz, G Lilja, A Scheynius, G Pershagen, Karolinska Institutet, Stockholm

*Lancet* 1999; 353:

1485-88

# The **PARSIFAL** Study

**P**revention of **A**llergy – **R**isk factors for **S**ensitisation  
In children related to **F**arming and **A**nthroposophic  
**L**ifestyle started 2003

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Sweden, Germany, Netherland, Switzerland, Austria

Age 5-13 years old

6 630 from Steiner schools + public schools

8263 farming children + controls from public schools

Allergy 2006: 61: 414–421



UPPSALA  
UNIVERSITET

Department of  
neuroscience

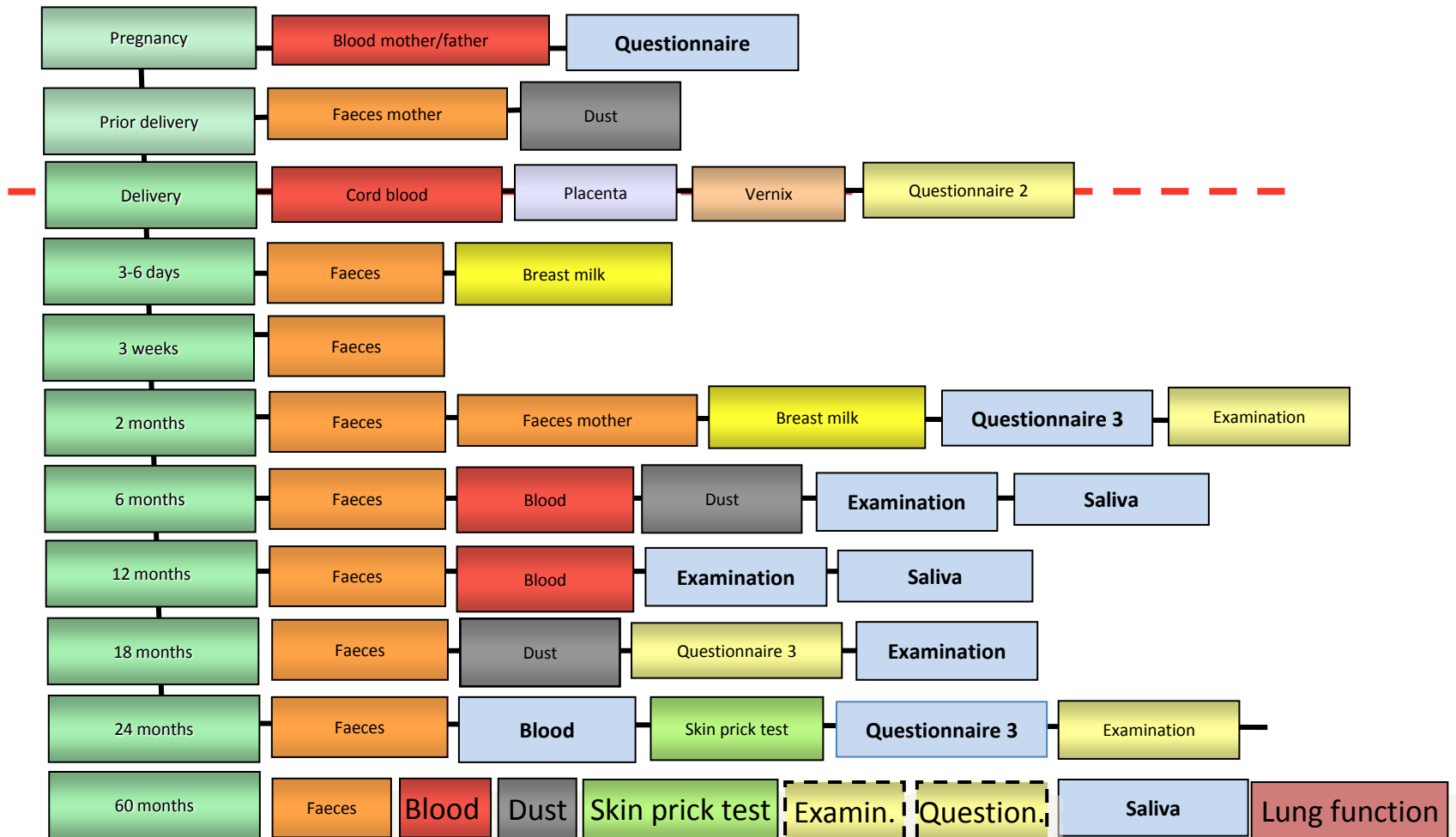


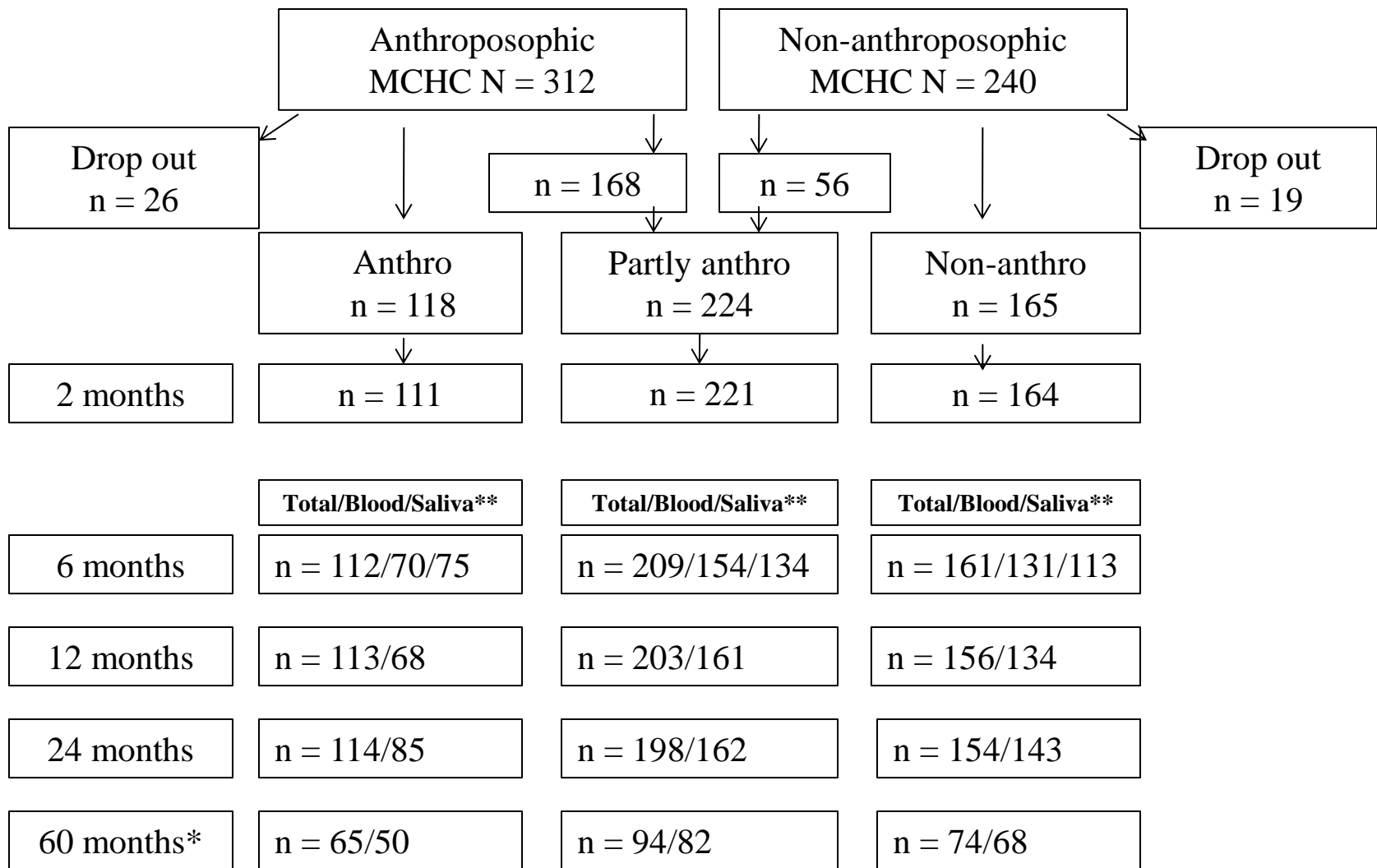
**ALADDIN** (*Assessment of Lifestyle and Allergic Disease During  
Infancy*) *Insamling av data började hösten 2004*

Lifestyle and allergy – a study of environmental and  
lifestyle factors during pregnancy and early childhood



## Flow chart of the data collection procedures





# Degree of adherence to an anthroposophic life style

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## **Anthroposophic**

- chosen an anthroposophic antenatal clinic
- preferred an anthroposophic type of school
- reported anthroposophic views of life that also influenced daily living

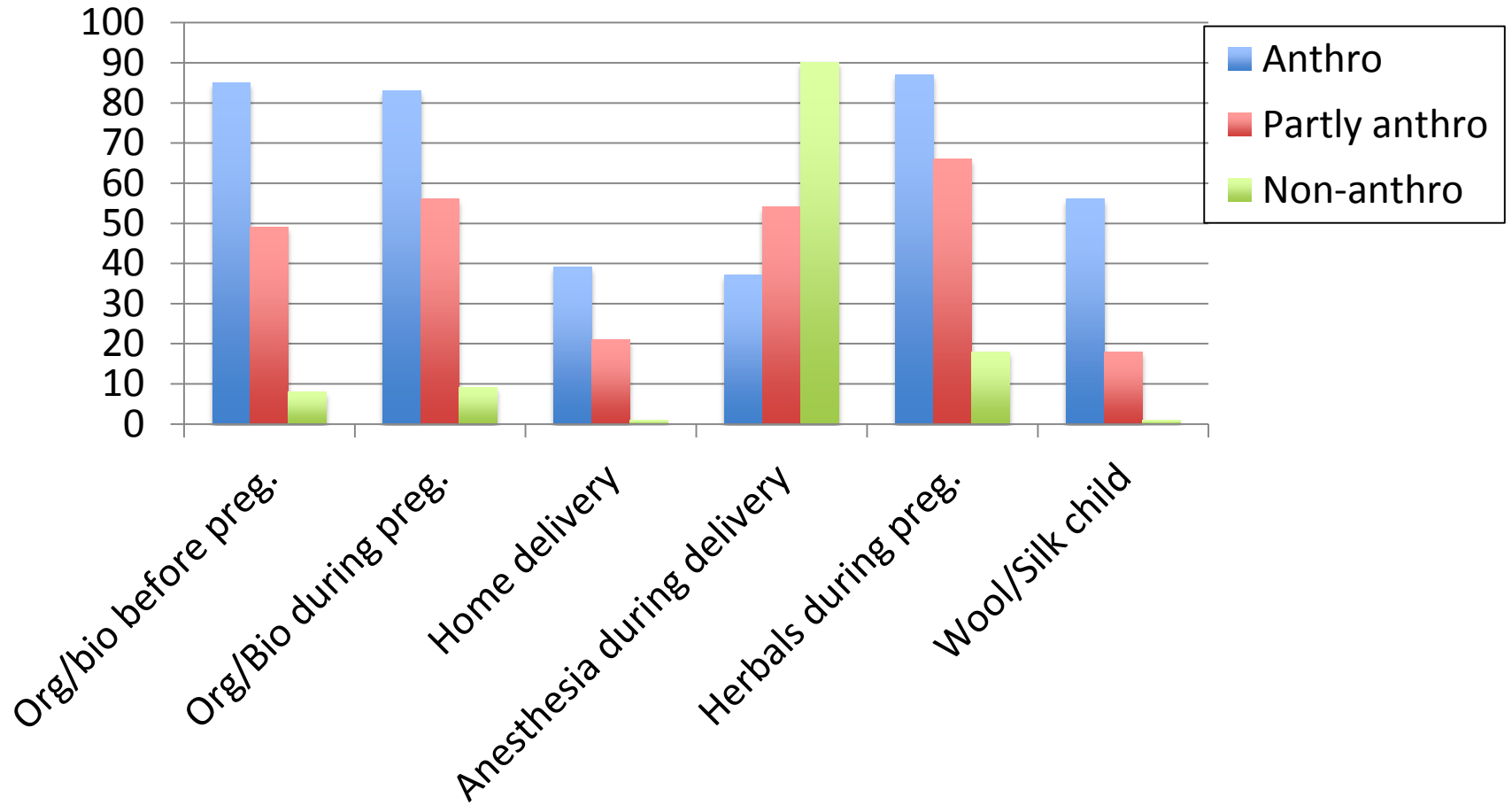
## **Non-anthroposophic**

- If they reported opposite values on all these issues

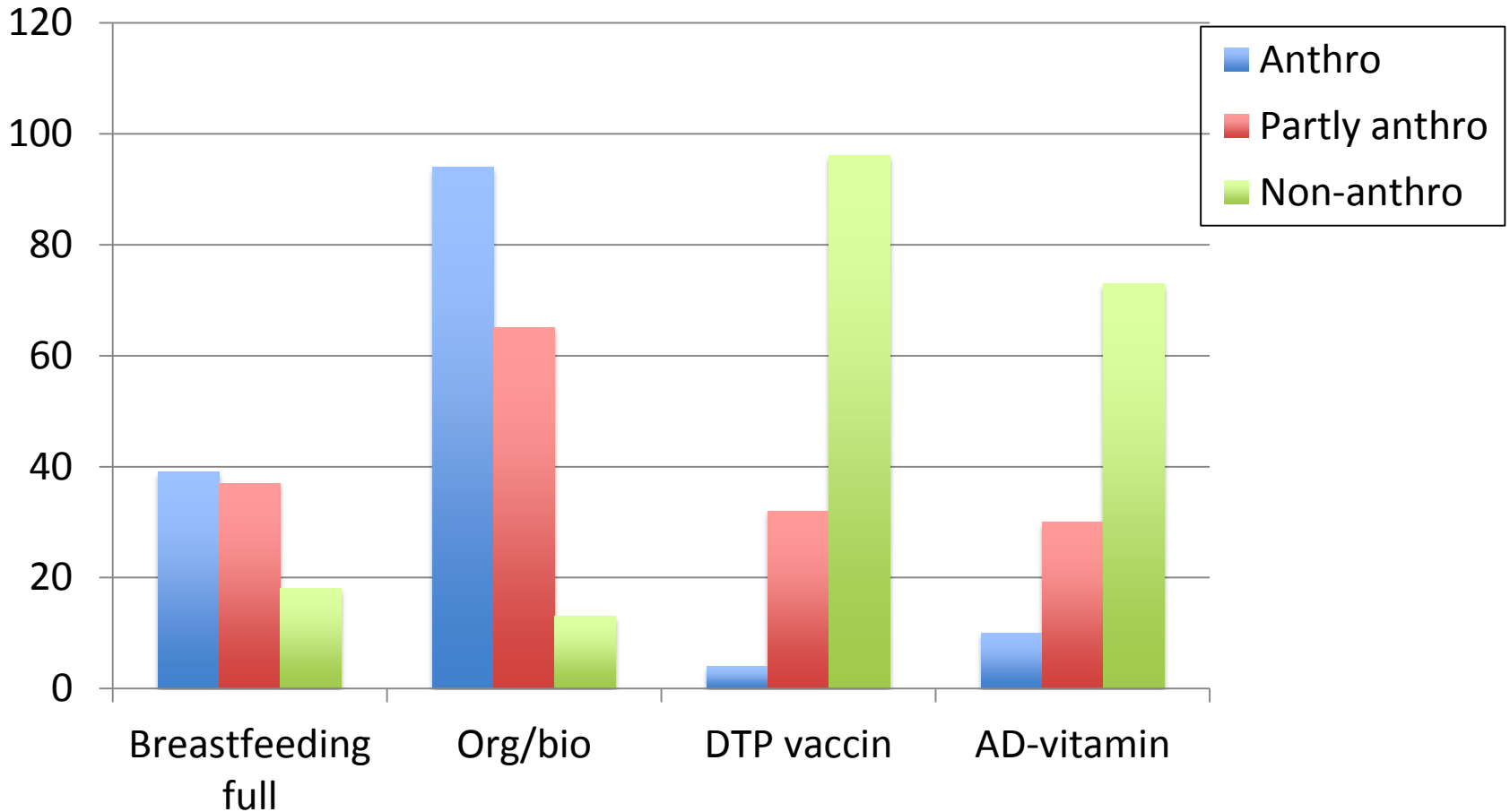
## **Partly anthroposophic**

- Other combinations of answers

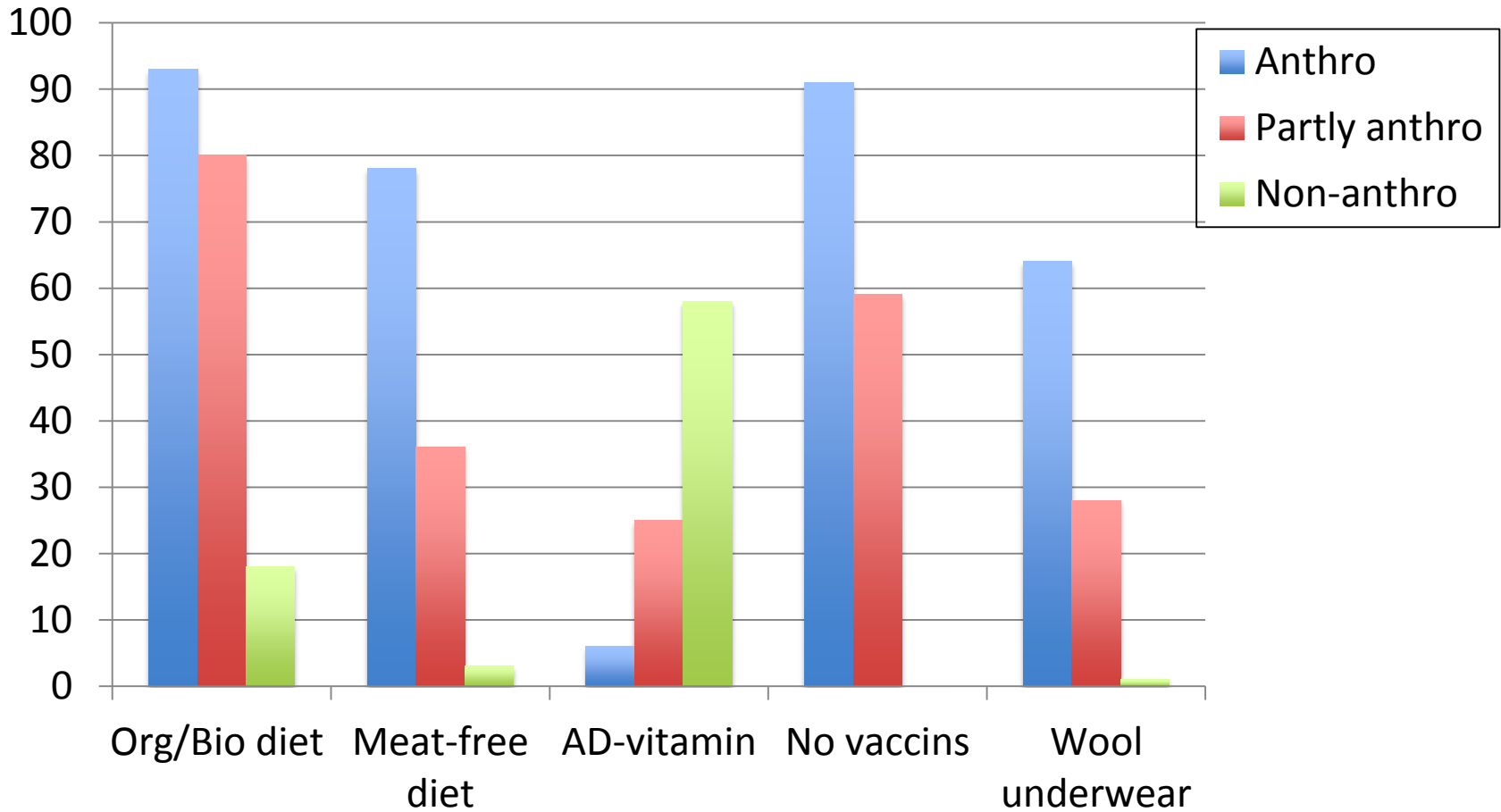
# Differences in lifestyle before pregnancy during delivery and right after (%)



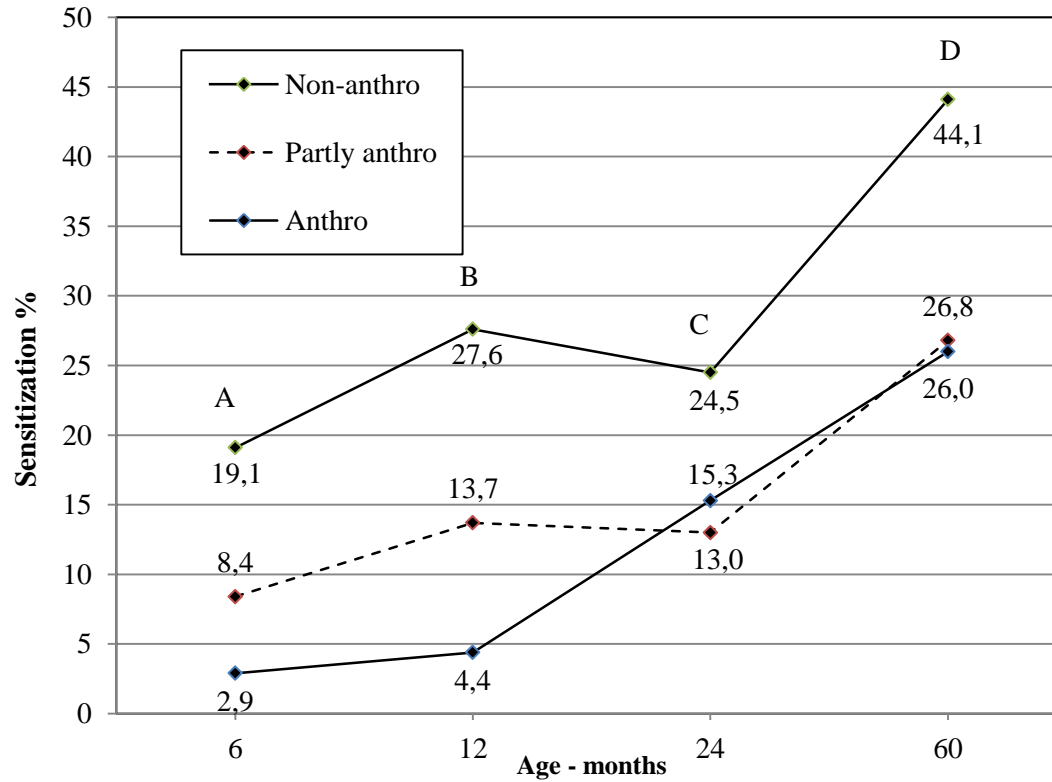
# Differences in lifestyle at child age 6 months (%)



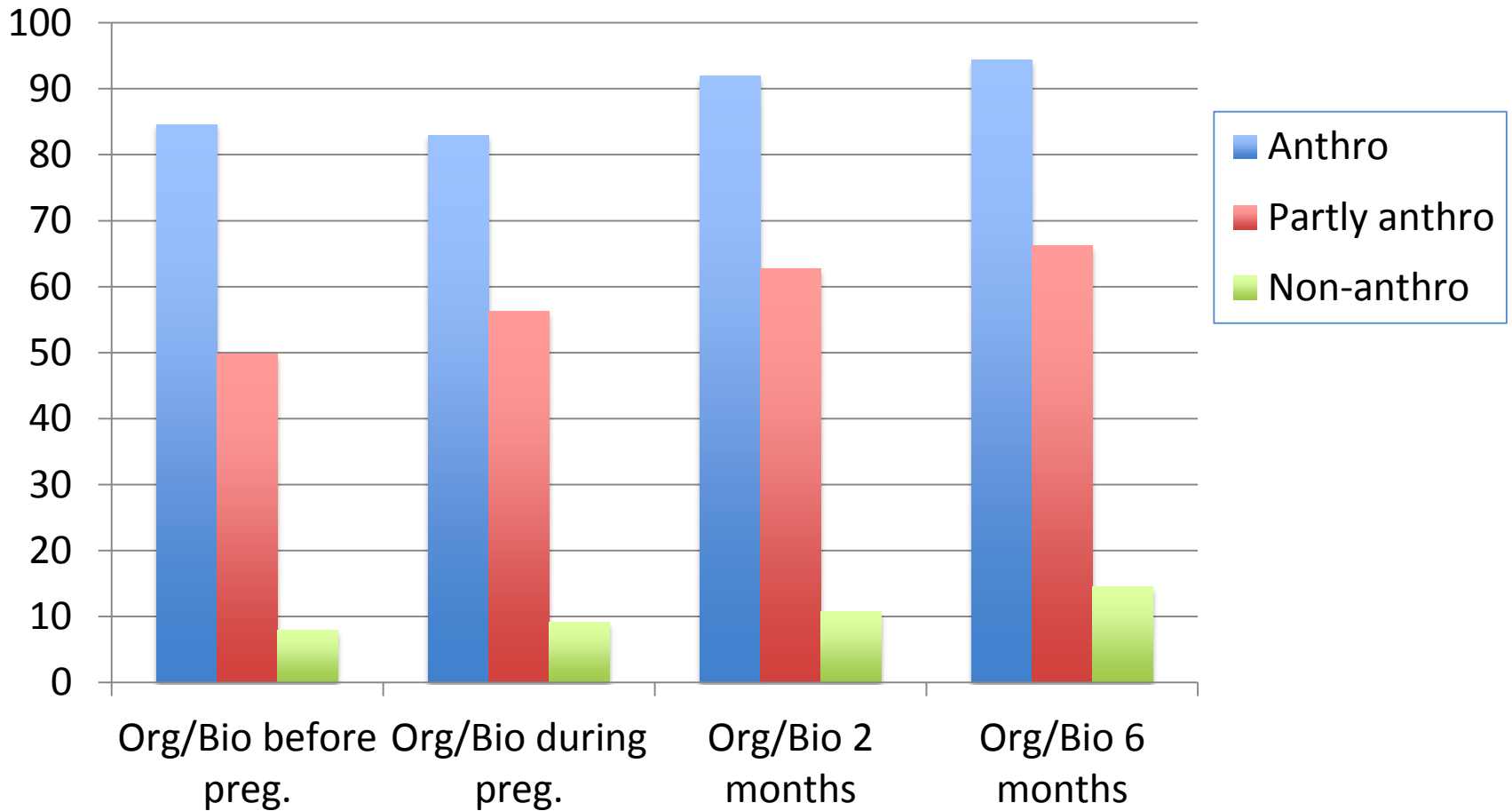
# Differences in lifestyle at child age 12 months (%)



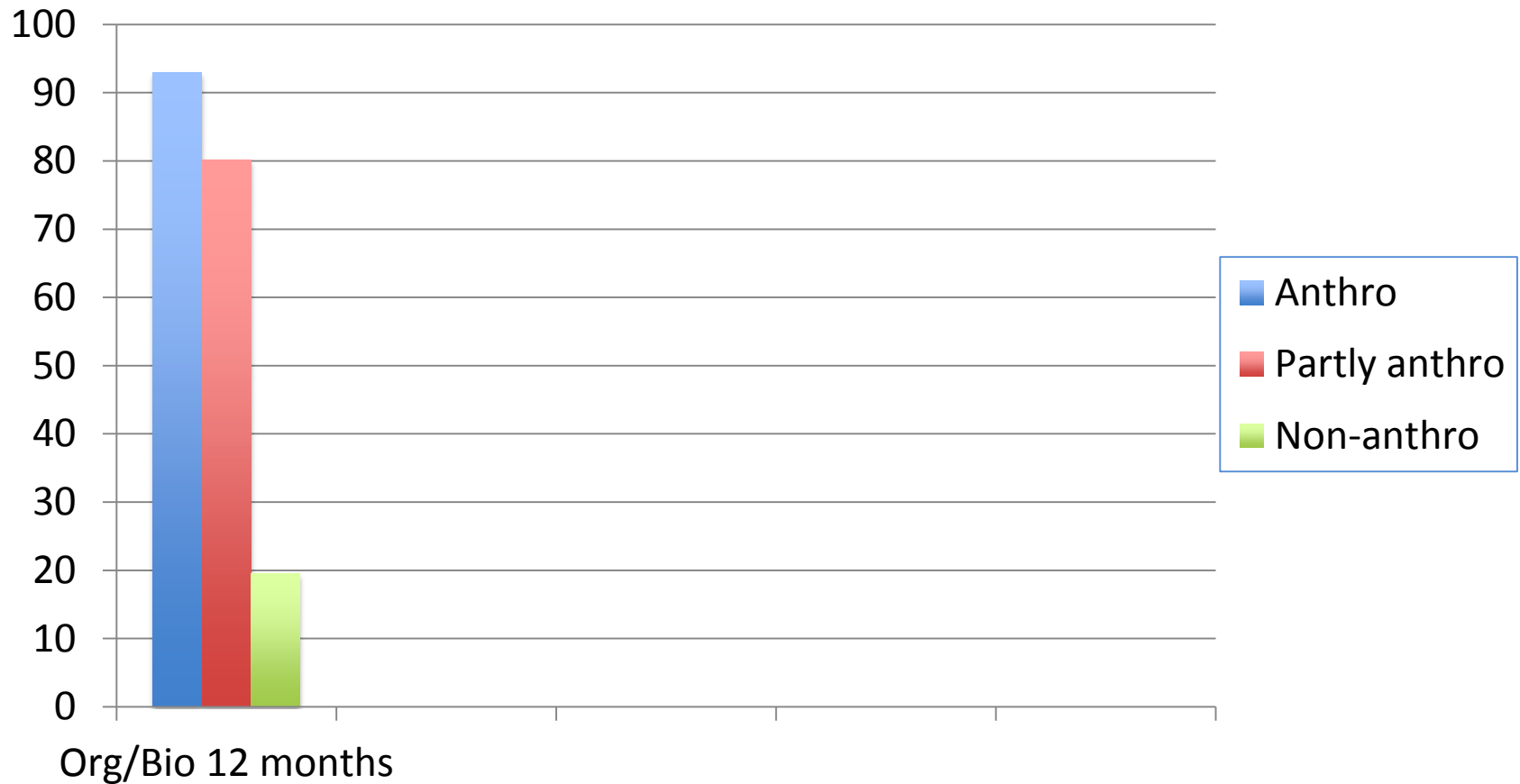
# Allergy sensitization 6 – 60 months



# Exposures of mothers organic/ biodynamic diet in relation to different lifestyle



# Exposures of organic/ biodynamic diet children 12 years old



## Sensitization child 6 months old

<i>Exposure</i>	Sens. (n)	Not sens. (n)	OR	95% CI	P-value
Org/Bio 1 year before pregnancy.	36	295	0,30	0,12-0,73	0,008
Org/Bio during pregnancy	36	297	0,40	0,18-0,90	0,027
Org/Bio 2 months	36	289	0,34	0,15-0,77	0,009
Org/Bio breast-feeding 6 months	32	258	0,27	0,11-0,64	0,003

**Adjusted for:** Sex, heredity mother, heredity father, siblings, living on a farm with animals, mother smoking during pregnancy, breastfeeding full at 6 months.

## Sensitization child 12 months old

<i><b>Exposure</b></i>	Sens. (n)	Not sens. (n)	OR	95% CI	P-value
Org/Bio 1 year before pregnancy	55	284	0,27	0,13-0,57	0,001
Org/Bio during pregnancy	55	285	0,38	0,19-0,74	0,005
Org/Bio 2 months	53	277	0,28	0,14-0,56	0,000
Org/Bio breast-feeding 6 months	47	251	0,27	0,13-0,56	0,000
Org/Bio <b>child</b> 12 months of age	54	287	0,34	0,18-0,65	0,001

**Adjusted for:** Sex, heredity mother, heredity father, siblings, living on a farm with animals, mother smoking during pregnancy, breastfeeding full at 6 months.

## Sensitization child 24 months old

<i>Exposure</i>	Sens. (n)	Not sens. (n)	OR	95% CI	P-value
Org/Bio 1 year before pregnancy.	61	293	0,66	0,36-1,22	0,185
Org/Bio during pregnancy	61	294	0,63	0,35-1,14	0,129
Org/Bio 2 months	61	287	0,58	0,32-1,03	0,064
Org/Bio breastfeeding 6 months	54	259	0,61	0,33-1,13	0,116
Org/Bio child 12 months of age	59	292	0,47	0,26-0,86	0,014

**Adjusted for:** Sex, heredity mother, heredity father, siblings, living on a farm with animals, mother smoking during pregnancy, breastfeeding full at 6 months.

# Conclusion

An organic/biodynamic diet appear to lessen the risk of allergic sensitization in childhood.

**Thank you for your attention!**