Lecture Slides

Allergen Avoidance in Primary, Secondary and Tertiary Prevention

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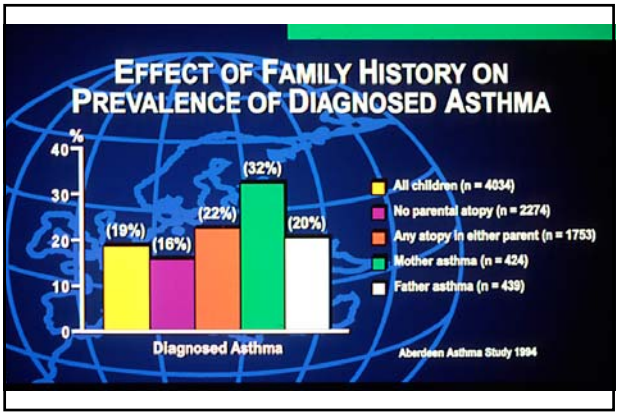
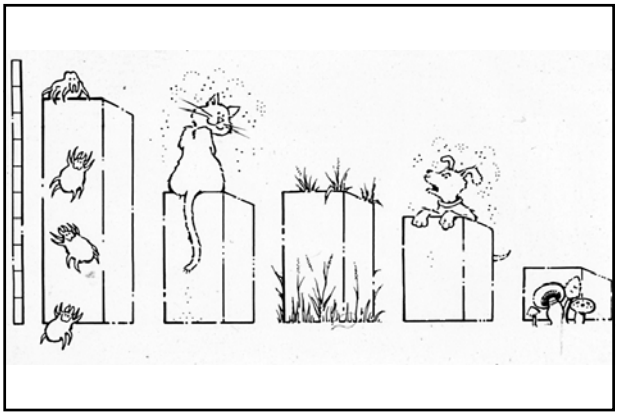
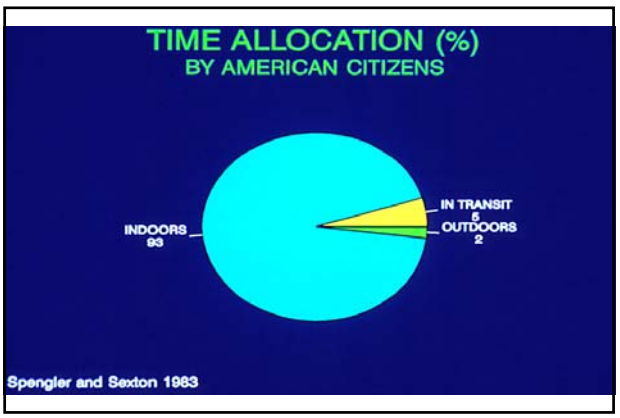
Prevention of Allergy

- **Primary Prevention – before sensitisation occurs**
- **Secondary Prevention – after sensitisation, but before symptoms**
- **Tertiary Prevention – treatment of symptoms**







THE ALLERGENIC BEDROOM

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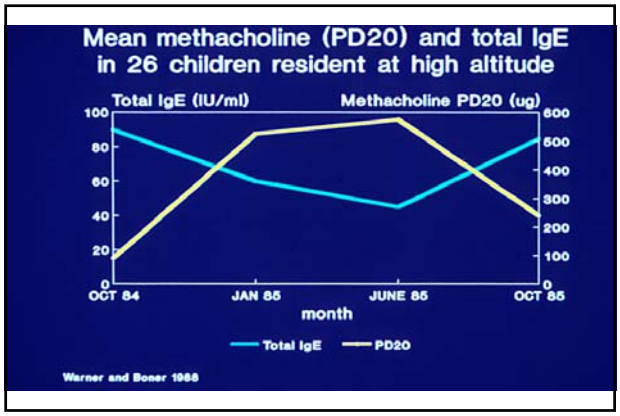

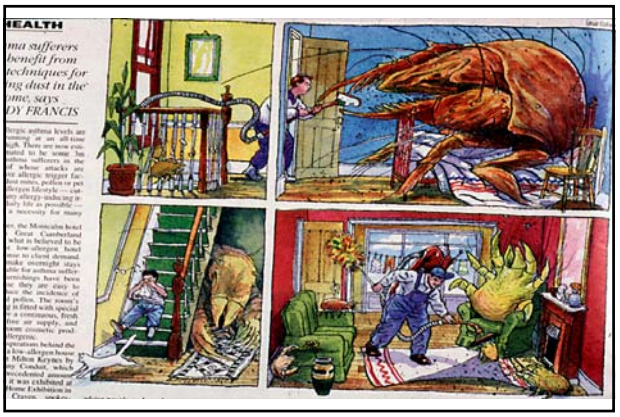

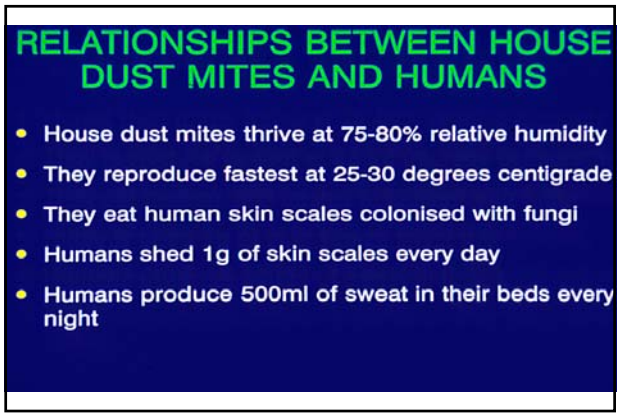

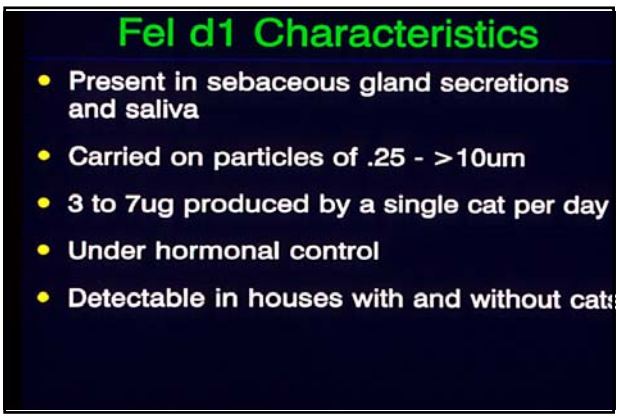

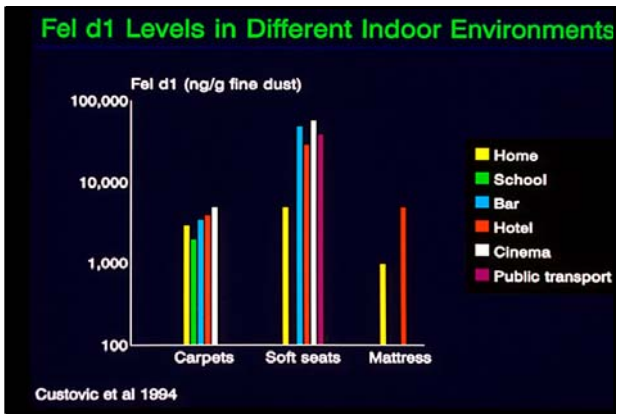

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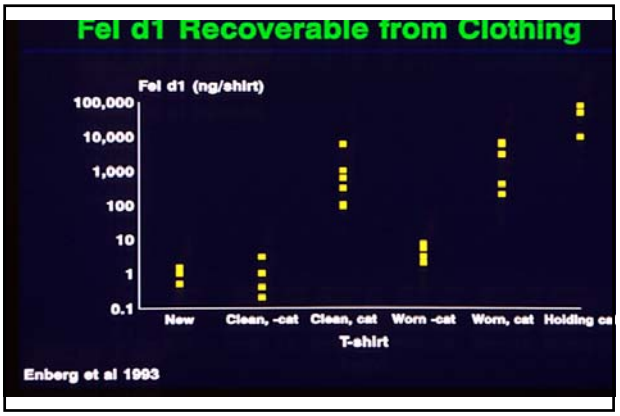
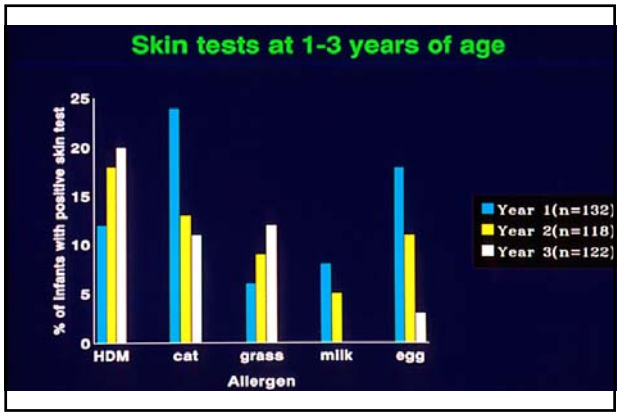
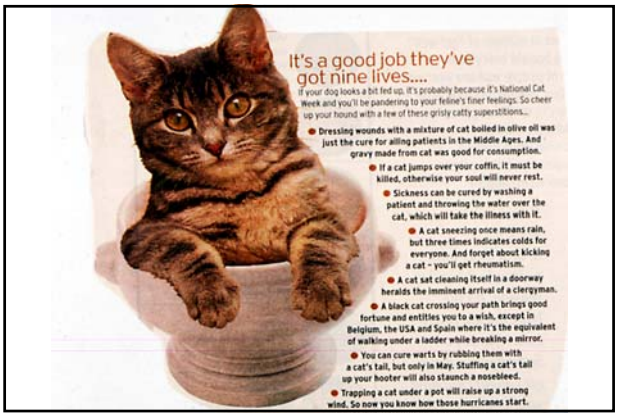






Techniques to Reduce Inhalant Allergens in Homes

- Bedcovers
- High efficiency vacuum cleaners
- Steam cleaners
- Dehumidification and ventilation
- Acaricides and detergents
- HEPA filters
- Freezing (liquid nitrogen) or heating
- Ionisers


House dust mite control measures for asthma

Abstract

Background

Objectives

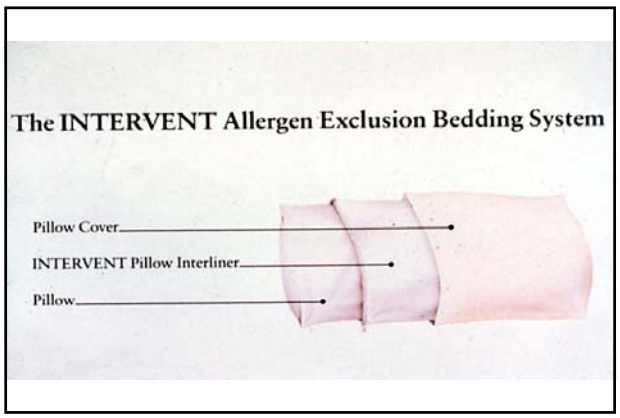
Search strategy

Selection criteria

Data collection and analysis

Main results

Authors' conclusions



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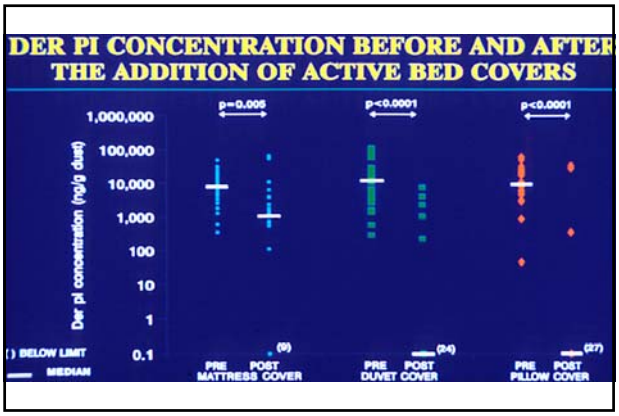
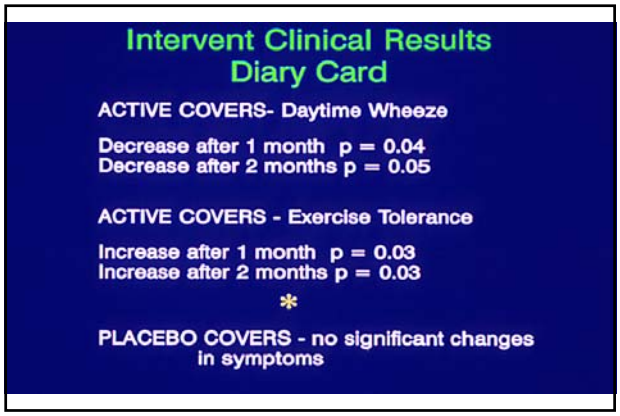
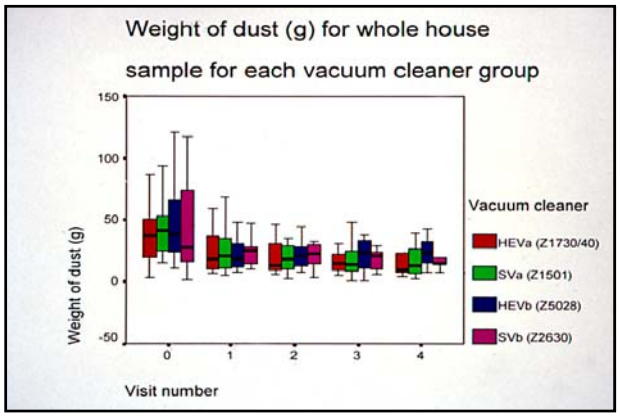
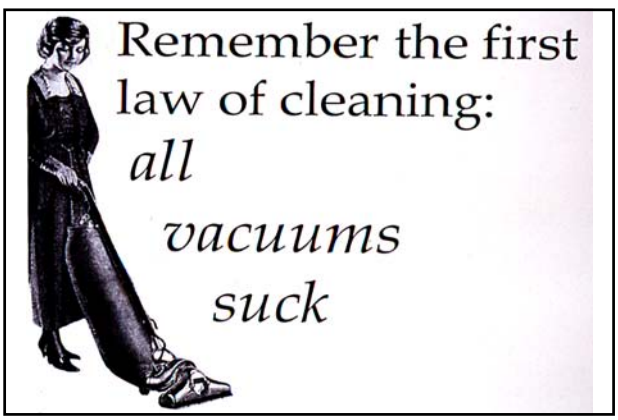
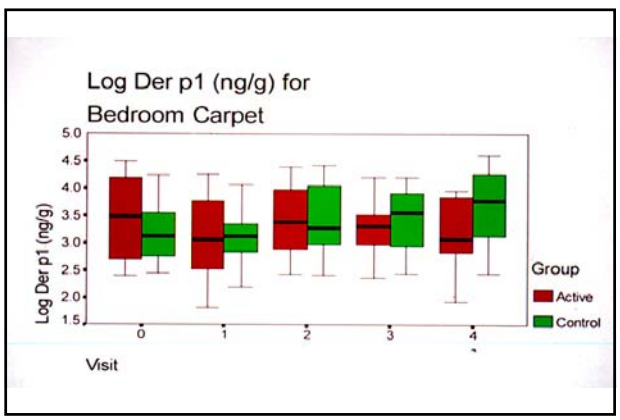
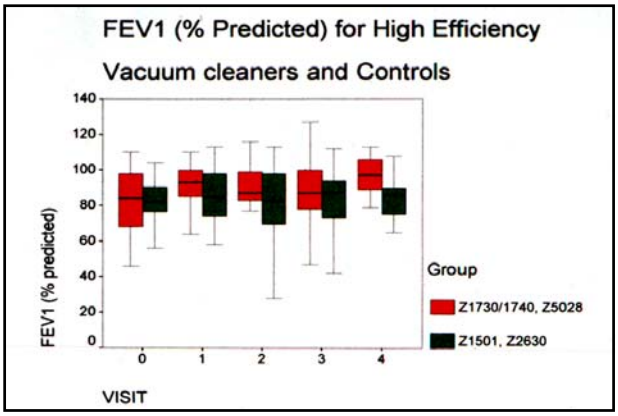


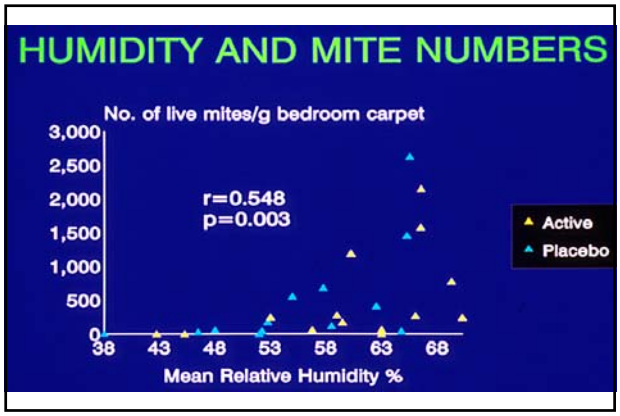


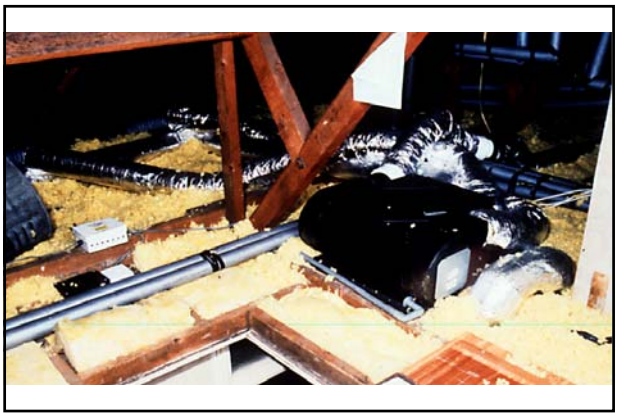


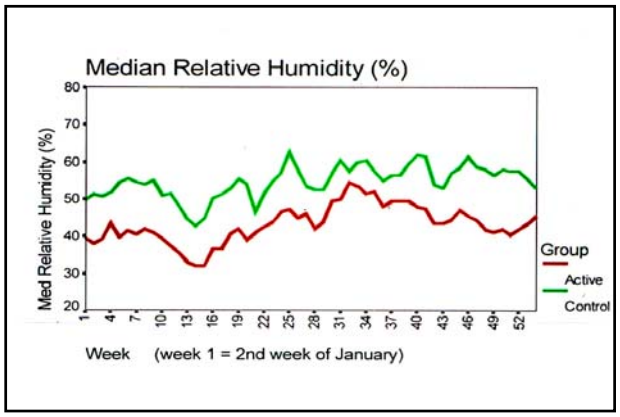


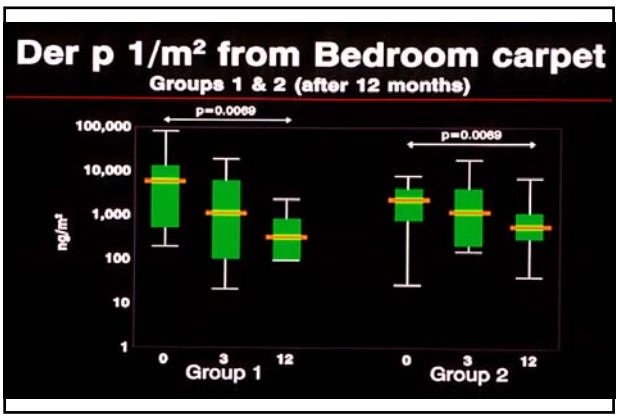


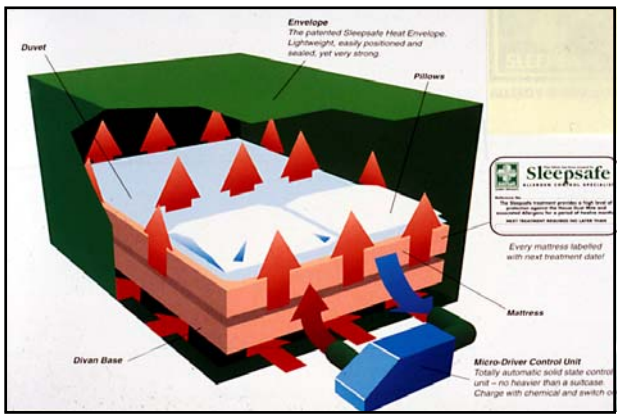

FEV1 (% Predicted) for High Efficiency
Vacuum cleaners and Controls
FEV1 (% predicted)
VISIT
Group
Z1730/1740, Z5028
Z1501, Z2630


HUMIDITY AND MITE NUMBERS
No. of live mites/g bedroom carpet
r=0.548
p=0.003
Active
Placebo
Mean Relative Humidity %



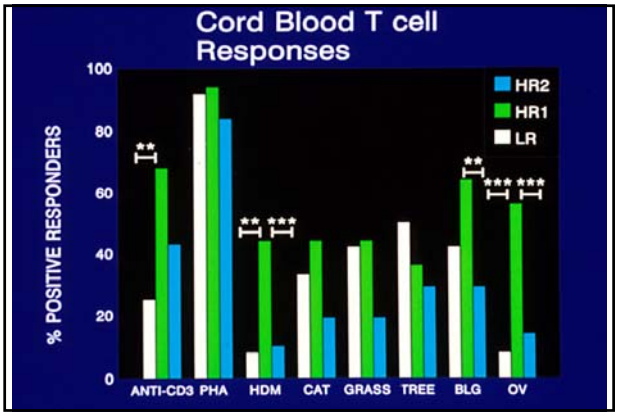

Median Relative Humidity (%)
Med Relative Humidity (%)
Group
Active
Control
Week (week 1 = 2nd week of January)

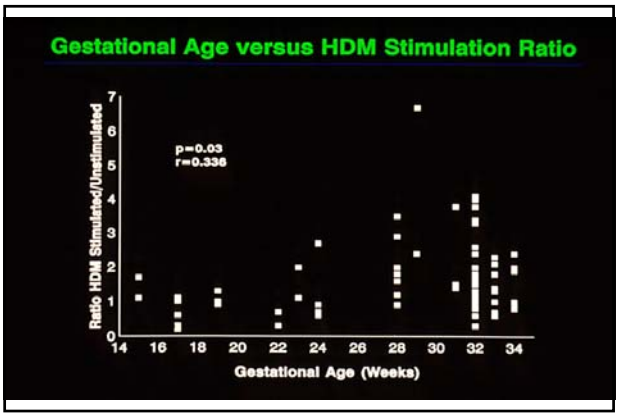

Der p 1/m² from Bedroom carpet
Groups 1 & 2 (after 12 months)
p=0.0069
p=0.0069
ng/m²
Group 1
Group 2

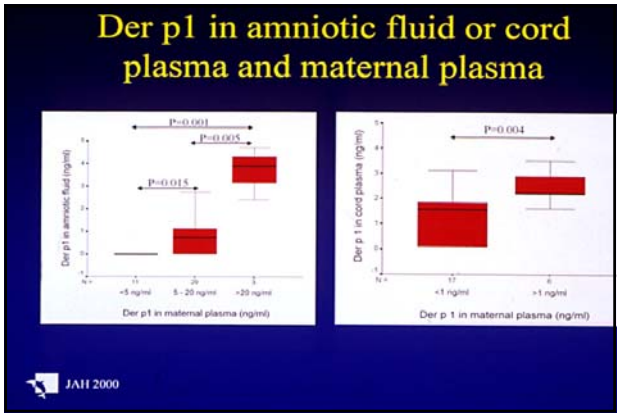

Envelope
Duvet
Pillows
Sleepsafe
Mattress
Divan Base
Micro-Driver Control Unit

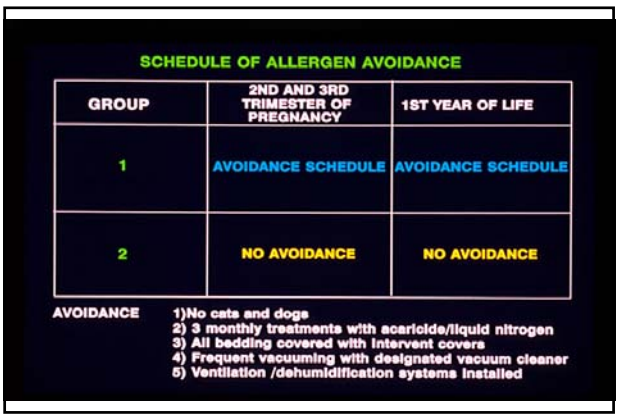
Can we reduce inhalant allergens sufficiently to prevent primary sensitisation?

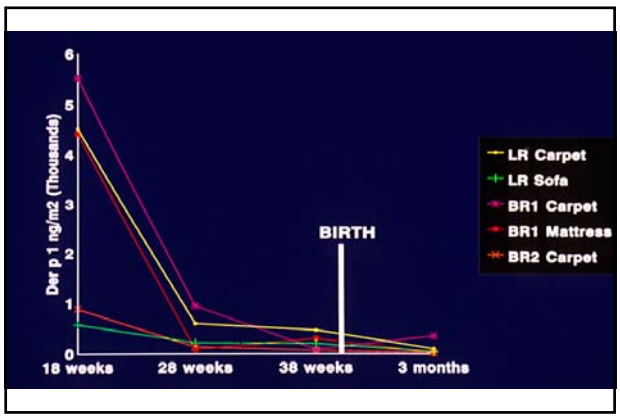
When should avoidance start?











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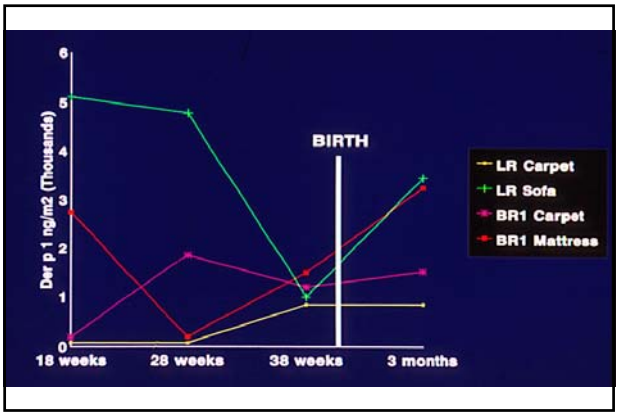

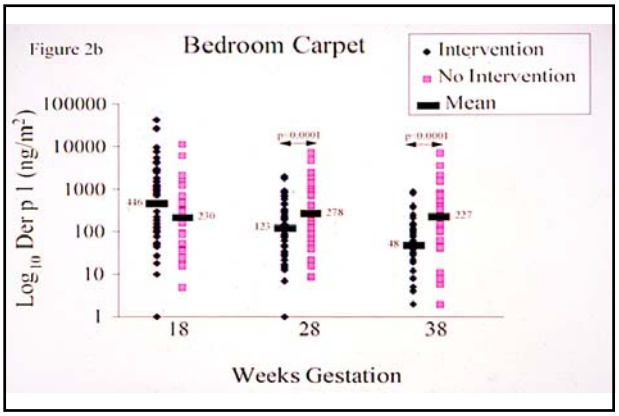

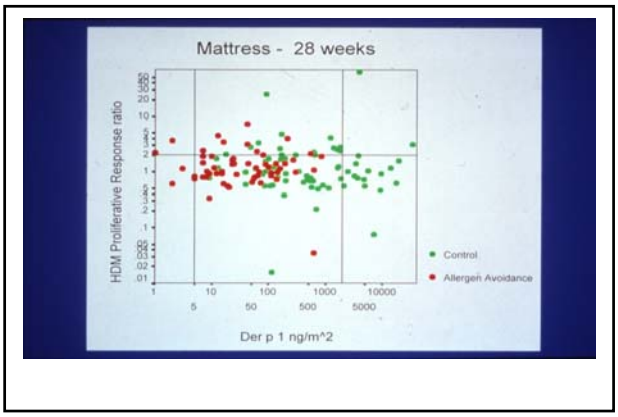

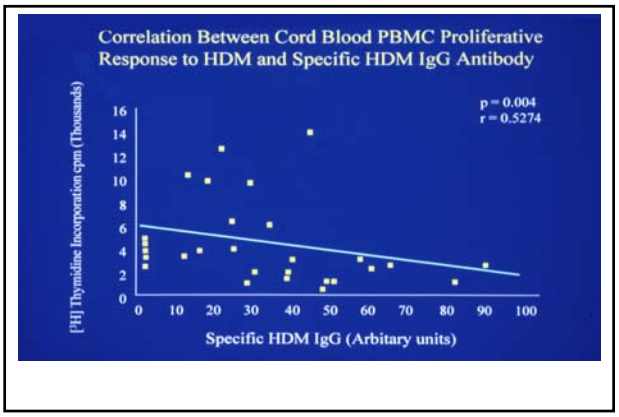

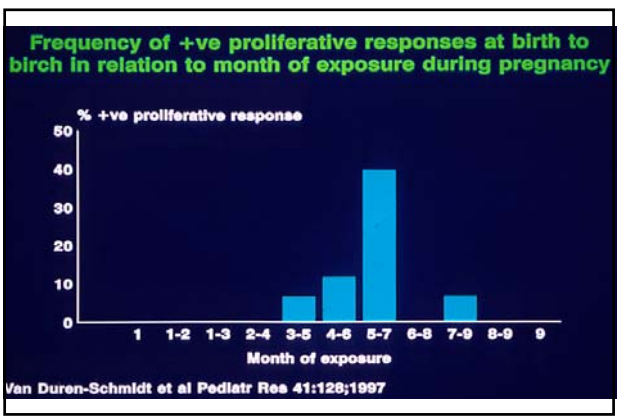

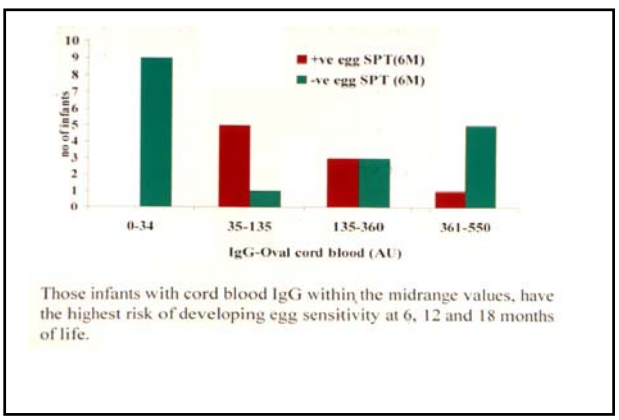

Those infants with cord blood IgG within the midrange values, have the highest risk of developing egg sensitivity at 6, 12 and 18 months of life.

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Summary

- Effective allergen avoidance for secondary and tertiary prevention is likely to comprise a multi-source approach
- However well allergens are reduced in the home they will still be encountered elsewhere
- Sometimes complying with the alterations to lifestyle required is harder than coping with the disease
- Techniques that are used in secondary and tertiary prevention may not be universally helpful in primary prevention
- Primary prevention will probably be most successful if immune modulation can be promoted to induce tolerance