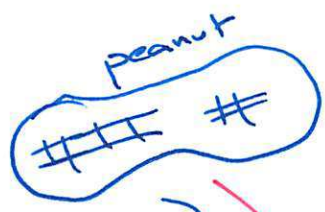


Antibiotics

- pregnancy
- neonatal
- On foods and consumer products (ie triclosan)



gut wall

adjuvants

⊕

→ lymph node



immune cell

immune recognition

X X X

protective barrier (mucous, antimicrobial peptides)

tolerance (no allergy)

↑IL-22

~~Clostridia (a normal, symbiotic gut bacteria)~~

Sensitization

allergy