



How safe is European baby food?

Prof. Adriana Maggi
CASCADE



Your daily chemical cocktail...

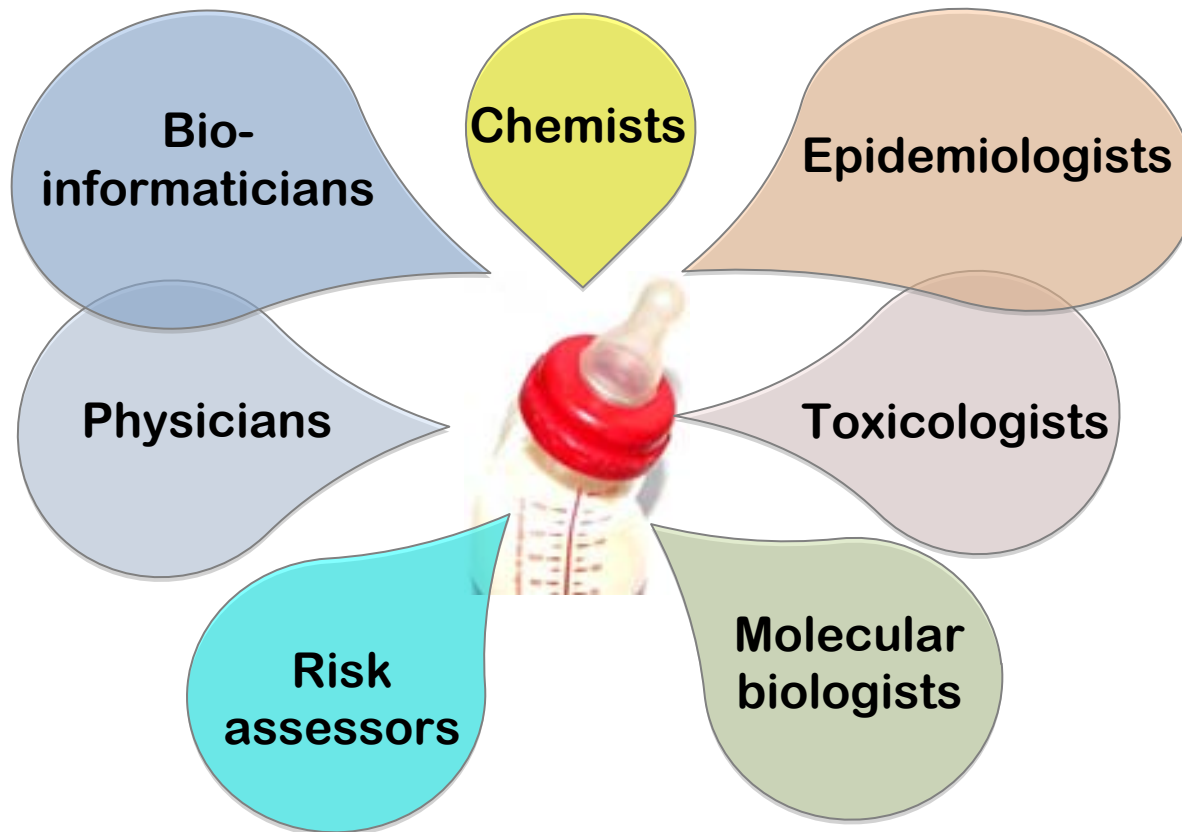
- Every year, **10 million tons** chemicals are released into environment
- Close to 100.000 chemicals are produced in the EU market
- An average European consumer may be exposed to **10.000 chemicals daily**



- Started in 2004
- A multidisciplinary network of scientists
- Focus on chemicals as contaminants in the food chain
- Together, CASCADE experts have **examined European baby food**

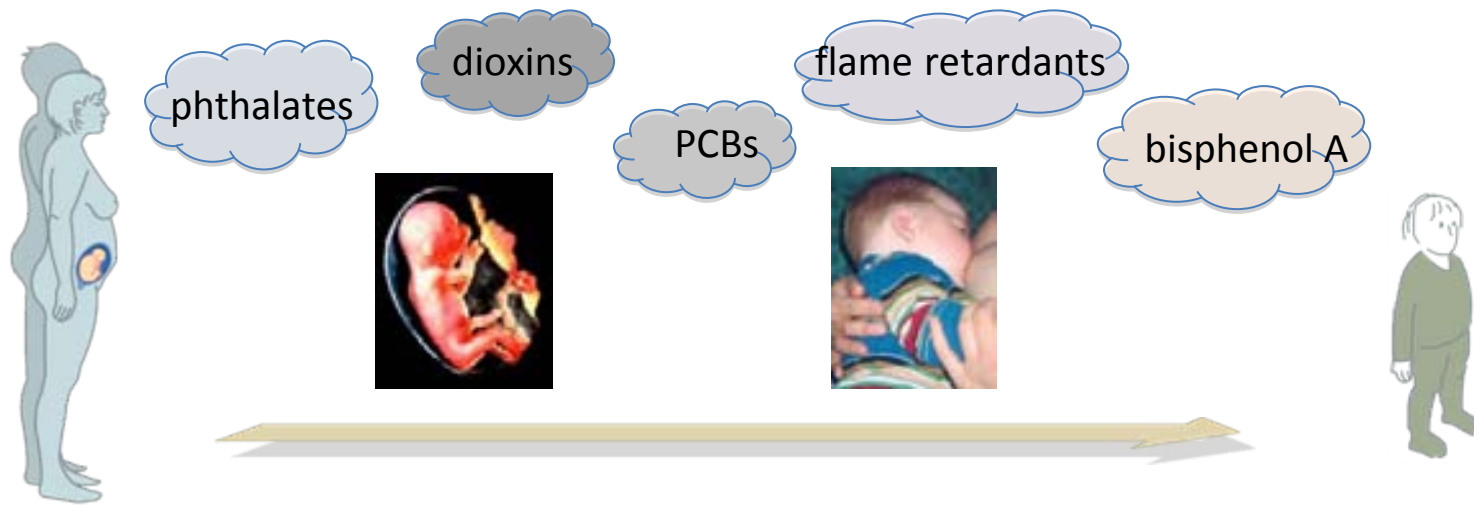


CASCADE's team of experts



Chemicals affect our hormonal systems

- Chemicals may interfere with hormonal systems
- The fetus and new-borne babies particularly sensitive to these disturbances



Chemicals targeting our endocrine systems raise concern because...

- Harmful effects on reproduction, growth and development in some species of **wildlife**
- Increases in some human **endocrine-related disorders** (e.g. obesity, diabetes, reproductive disturbances, certain cancers)
- Adverse effects from environmental chemicals known to act on the endocrine system observed in laboratory **animals and in cultured cells**

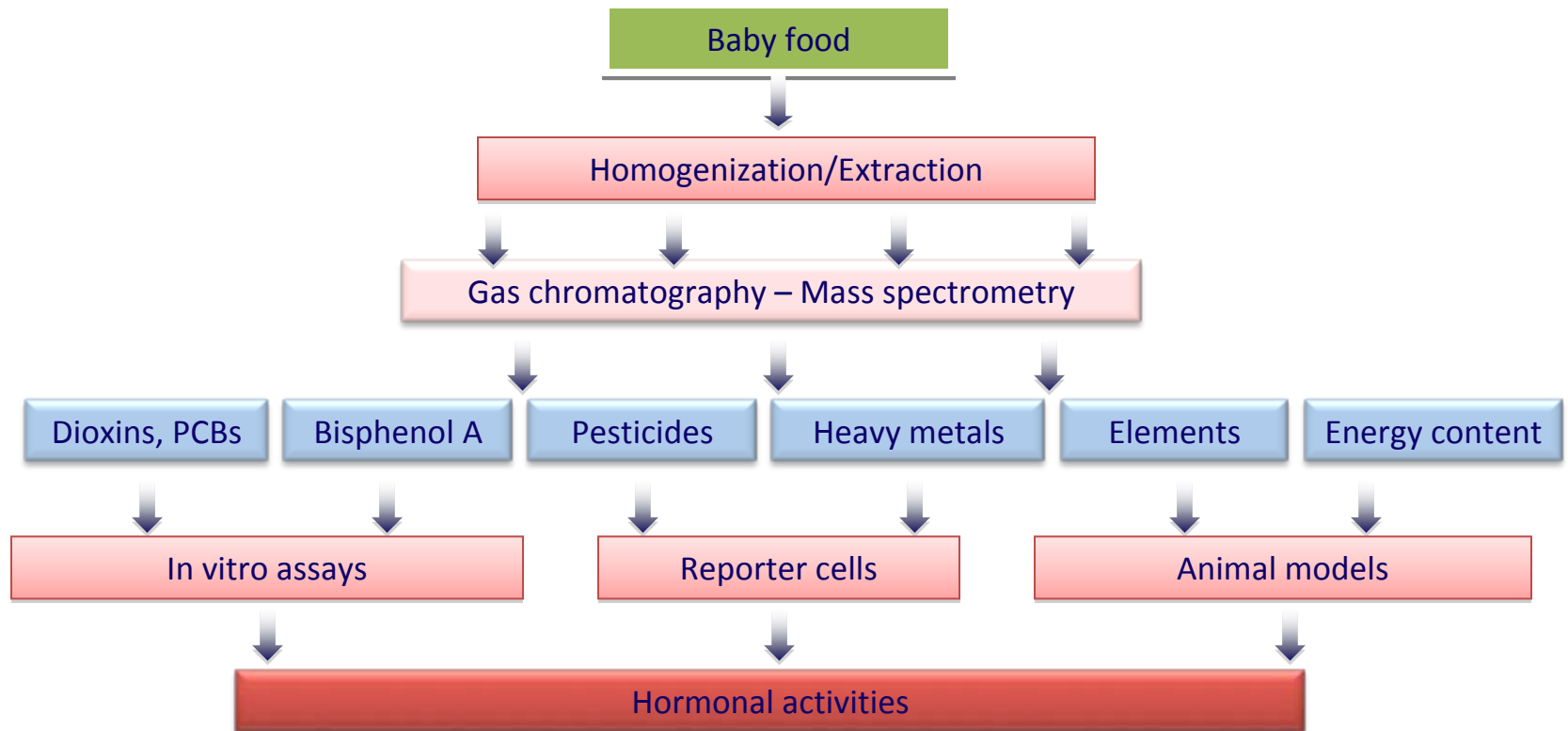


What the average European baby eats

- Today, increasing numbers of babies eat only industrially processed foods
- CASCADE has developed a “**baby food basket**”, representing what an average European baby eats
- Analyzed contaminants present in commercial baby food sold throughout Europe
- Different types of formulas, supplements and solid foods were analyzed



Harnessing resources to assess baby food safety



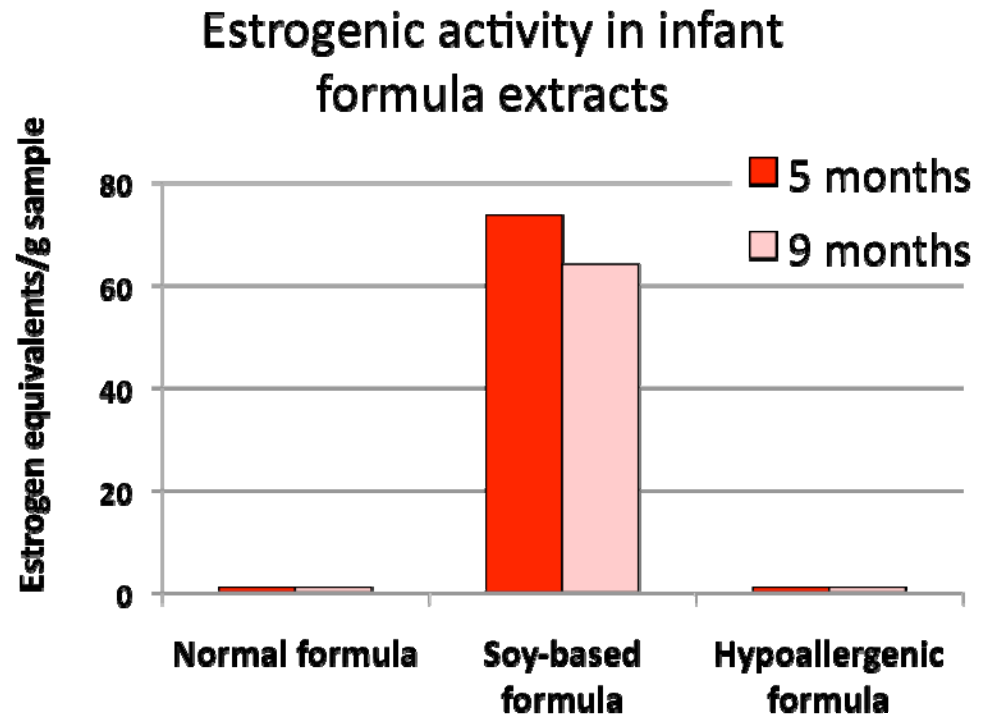


Good quality!

- CASCADE analysed the presence of over 30 contaminants like dioxins, PCBs, bisphenol A and pesticides
- This analysis shows that European baby food is generally of **good quality**
- For instance, **dioxins** and **PCBs** were **undetectable** in all tested baby food

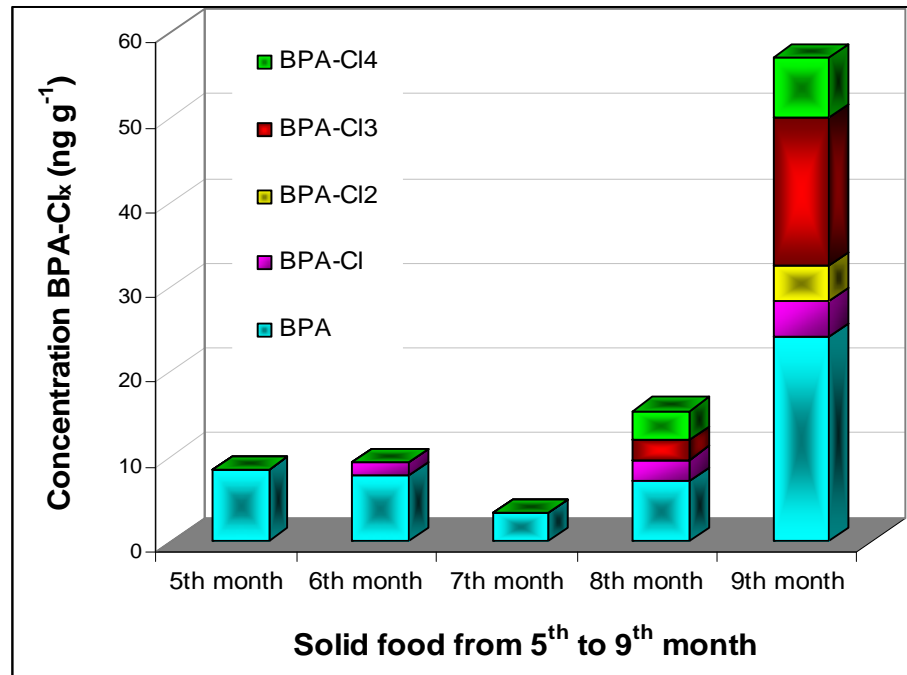
- However, **hormonal activities** were demonstrated in cell-based assays
- **Soy-based** infant formulas were high in **estrogenic** content

But...



But..

- In **solid** food, elevated levels of **bisphenol A** (BPA) were observed



Food for thought...

- Low dose effects
- Age at exposure: Are there susceptible “windows”?
- What happens when the baby is fed with soy-based (high estrogen) food?
- Mixtures of chemicals: “the cocktail effect”
- Latency from exposure: what happens later in life?





CommNet



NovelQ



EuroFIR
European Food Information Resource



Thank you for your attention



EuroPrevall



Nutri
MENTHE



MoniQA



eurreca

EUROpean micronutrient RECommendations Aligned



BRAFO

www.commnet.eu