

**Contaminants and Natural Toxicants Subcommittee**  
**Acrylamide in Foods**  
**Charge and Questions**

**Charge:**

The Subcommittee is being asked to evaluate whether the research steps outlined in FDA's action plan are scientifically adequate to describe and address the public health significance of acrylamide in food

**Questions:**

Given what we know of acrylamide – toxicology, occurrence, formation, exposure, and risks:

1) Are the following research steps appropriate to describe and address the public health significance of acrylamide in food?

The following sequence

1. Occurrence survey for cooked/prepared foods; validation of current methods; development of rapid, less expensive screening methods
2. Level and variability determination of acrylamide in each positive food category
3. Exposure evaluation - key foods, exposure levels, exposure variability, biomarkers

Concurrent with

- Formation studies
  - Processing time-temperature/ingredients
  - Mechanism (asparagine & glucose, Maillard, browning)

And

- Toxicity studies
  - Mechanistic studies to support low dose extrapolation
  - Germ cell genotoxicity evaluation
  - Neurotoxicity evaluation (dose/duration and development)
  - Long-term cancer studies

2) Are there gaps in the research plan or areas where emphasis should be increased?

3) Are there priority research needs that should be addressed first?