

Planning Committee's List of Short-term Action Items

The Workshop Planning Committee met after the Acrylamide in Food Workshop to discuss the research needs priority conclusions of each of the five Working Groups. While all of the priorities represent important areas for the generation of additional knowledge concerning acrylamide in food, focus was on identification of those high priority needs that are amenable to action in the short term. Projects will be developed for each of the high priority areas identified. The Planning Committee will determine potential funding mechanisms for each of the projects.

Priority areas and projects:

1. Analytical Methods

- Establish proficiency testing program and materials

2. Methods of Formation

- Develop data for various foods on quantity of free asparagine for various foods and data on the quantity of glucose, fructose (and other sugars) and other amino acids.
- Develop data on time/temperature/pH/moisture/surface area-mass mapping and the kinetics of asparagine/carbonyls reactions in various matrices.
- Define the direct relation of asparagine to acrylamide production in foods.
- Develop data on the kinetics of acrylamide inhibition/destruction/scavenging under various reaction/process conditions.

3. Exposure

- Expand the database of acrylamide levels in U.S. foods through collection of additional data and establish mechanisms for information sharing, such as the WHO/FAO Acrylamide in Food Network operated by JIFSAN through its Food Safety Risk Analysis Clearinghouse.
- Develop and conduct appropriate animal and/or human studies on the bioavailability of acrylamide in foods.

4. Toxicology

- Develop data on the absorption/distribution/metabolism/excretion of acrylamide.
- Develop and conduct studies on DNA/protein glycidamide and acrylamide adducts to determine metabolic consequences of acrylamide.

5. Risk Communication

- Conduct qualitative attitudinal research on consumer awareness and knowledge of acrylamide in food. Triggers for behavioral change may be identified for acrylamide and other potential health hazards.
- Formally document the unique process used to develop and accomplish the Acrylamide in Food Workshop.
- Establish an information clearing house and evidence review process with full participation by a broad group of stakeholders. The WHO/FAO Acrylamide in Food Network provides the starting foundation for this.