



Training School Program

Building Skills on the Evaluation of Acrylamide Mitigation Measures in Cereal-based Products with a Risk-Benefit Balance Approach Considering Industry Perspectives and Regulations

Date : 01-03 Oct 2024

Venue : Department of Food Engineering, Beytepe Campus, Hacettepe University, Ankara

1st Day: 01.10.2024 (Lectures)*

09:00 – 09:30	Registration	
09:30 – 09:45	Opening Remarks	Vural Gökmen (TR)
09:45 – 10:30	Reaction mechanisms involved in the formation of acrylamide, other Maillard reaction products, flavor and color during thermal processing	Jane Parker (UK)
10:30 – 11:00	Coffee break	
11:00 – 11:45	Occurrence levels of acrylamide in cereal-based products	Marta Mesias (ES)
11:45 – 13:15	Lunch break	
13:15 – 14:00	Critical appraisal of acrylamide toolbox for cereal-based products	Vincenzo Fogliano (NL)
14:00 – 14:45	Use of asparaginase for the mitigation of acrylamide in cereal-based products	Zuzana Ciesarová (SK)
14:45 – 15:15	Coffee break	
15:15 – 16:00	Engineering aspects of baking process affecting acrylamide formation in cereal-based products	T. Koray Palazoğlu (TR)
16:00 – 16:30	Food industry perspectives on acrylamide mitigation and legislation	Michele Suman (IT)
17:00 – 18:30	Visit to Museum of Anatolian Civilizations	
19:00 – 21:30	Dinner	

* The 1st day program can be adjusted according to the availability of trainers.



2nd Day: 02.10.2024 (Lectures + Practices)

09:00 – 10:30	Technical and analytical skills required in implementing acrylamide mitigation measures considering risk and benefits <ul style="list-style-type: none">• Analysis of acrylamide• Analysis of free amino acids• Analysis of sugars and sugar decomposition products (dicarbonyl compounds and HMF)• Analysis of advanced glycation end products• Analysis of flavor profile• Color measurement• Sensory analysis	Burçe Ataç Mogol Tolgahan Kocadağlı Aytül Hamzalıoğlu Neslihan Taş Naz Erdem
10:30 – 11:00	Coffee break	
11:00 – 12:00	Discussion on possible scenarios for acrylamide mitigation in different cereal-based products considering potential risks and benefits <ul style="list-style-type: none">• Trainees break into 4-5 groups (5-6 trainees/group) for practical sessions.• The groups have a specific discussed scenario for applying mitigation tools to selected cereal-based products.	Vural Gökmen Burçe Ataç Mogol Tolgahan Kocadağlı Aytül Hamzalıoğlu Neslihan Taş
12:00 – 13:30	Lunch break	
13:30 – 15:00	Practical session: Lab-scale production of cereal-based products using the discussed acrylamide mitigation scenarios	Burçe Ataç Mogol Tolgahan Kocadağlı Aytül Hamzalıoğlu Neslihan Taş Naz Erdem
15:00 – 15:30	Coffee break	
15:30 – 17:00	Practical session: Preparation of the produced cereal-based products for the determination of acrylamide, other Maillard reaction products, sugar decomposition products, flavor profile and color.	Burçe Ataç Mogol Tolgahan Kocadağlı Aytül Hamzalıoğlu Neslihan Taş Naz Erdem
19:00 – 21:30	Dinner	



3rd Day: 03.10.2024 (Practices)

09:00 – 10:30	Practical session: Collection of experimental data on acrylamide, other Maillard reaction products, flavor profiling and color for the produced cereal-based products.	Burçe Ataç Mogol Tolgahan Kocadağlı Aytül Hamzalıoğlu Neslihan Taş Naz Erdem
10:30 – 11:00	Coffee break	
11:00 – 12:00	Practical session: Collection of experimental data ... (Continue)	Burçe Ataç Mogol Tolgahan Kocadağlı Aytül Hamzalıoğlu Neslihan Taş Naz Erdem
12:00 – 13:30	Lunch break	
13:30 – 15:00	Discussion on the experimental data on acrylamide, other Maillard reaction products, flavor profile and color for the produced cereal-based products.	Vural Gökmen Burçe Ataç Mogol Tolgahan Kocadağlı Aytül Hamzalıoğlu Neslihan Taş
15:00 – 15:30	Certificates	Vural Gökmen (TR)
15:30 – 16:00	Closing remarks	Vural Gökmen (TR)

For more information please contact:

Vural Gökmen (vgokmen@hacettepe.edu.tr)

Food Quality and Safety (FoQuS) Research Group, Department of Food Engineering,
Hacettepe University, Ankara, Türkiye