

Study of acrylamide levels in malts used in food industry

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Alike many others heat processed food products prepared from raw materials rich in starch/reducing sugars, malts may contain toxic processing contaminant acrylamide. Its levels depend on the temperature and time employed during their preparation. In our study we analysed two sets of malts that are intended for the use as additives (colorants, aroma donors etc.) in bakery and/or brewing industry. The levels as high as 900 µg/kg were found in caramel rye malt used for the production of the speciality beers. Generally, the higher was the temperature used for roasting (dark, caramel malts), the higher acrylamide levels were found. No acrylamide was detected (LOD of LC-MS/MS method) in pale wheat malt. In any case malts have to be considered as one of potential source of dietary acrylamide intake.

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