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Parallel session 6: New and emerging food safety risks- microbial, chemical and physical hazards

PS6.01 Migration from Food Contact Materials 421.00

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Abstract— In modern industrialised societies, all meat products have direct contact with a broad range of materials and articles while in transit from primary production to final consumption. Cutting devices, conveyor belts, tubes and containers are important in the production process, packaging materials are obligatory for storage of food, and kitchen utensils are used in restaurants and at the consumers' home. However, the volume of packaging materials by far exceeds other Food Contact Materials (FCM), which is therefore the primary subject of this presentation. The basic requirements in legislation are that FCM must be "inert" and the foodstuffs must be "pure" (EC 2004). Although the current EU legislation is rapidly changing, it still far from covers all materials and chemicals used. Furthermore, new materials and applications such as surface coatings, active and intelligent packagings, sterilisation procedures and applications utilising nanotechnology are constantly being developed by an innovative industry. The most important function of a packaging material is its ability to preserve the quality of the packed food. At the same time the packaging material should have minimal impact on the product in order to fulfill basic requirements in the current EU legislation regulating the food safety aspects of Food Contact Materials (FCM). The production of food contact materials includes beside positive listed substances (EC 2002) potentially several thousand different chemicals from i.e. printing inks, lacquers and adhesives. Others are non-intentionally added substances (NIAS) or reaction and degradation products that can be formed from reactive chemicals. It is certainly a significant task for the food producer to ensure that their FCM are compliant, a task which can only be solved by close cooperation between all shareholders upstream in the FCM production chain. This presentation will review several principally different examples of typical meat packaging's that potentially gives rise to problematic migration. Among the examples are investigations from our own laboratory concerning migration of plasticisers from PVC (Petersen et al., 2004) as well as printing ink ingredients (Petersen et al., 2007).

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Index Terms—, Legislative Requirements, Migration Plasticizers, Printing inks.

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