

## The Impact of Legislation on Waste and Losses in the Food Processing Sector in the UK/EU

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**Abstract :** Introduction: European weight regulations with respect to food products require a full understanding of regulation guidelines to assure regulatory compliance. It is suggested that the complexity of regulation leads to practices which result to over filling of food packages by food processors. Purpose: To establish current practices by food processors and the financial, sustainable and societal impacts on the food supply chain of ineffective food production practices. Methods: An analysis of food packing controls with 10 companies of varying food categories and quantitative based research of a further 15 food processes on the confidence in weight control analysis of finished food packs within their organisation. Results: A process floor analysis of manufacturing operations focussing on 10 products found over fill of packages ranging from 4.8% to 20.2%. Standard deviation figures for all products showed a potential for reducing average weight of the pack whilst still retain the legal status of the product. In 20% of cases, an automatic weight analysis machine was in situ however weight packs were still significantly overweight. Collateral impacts noted included the effect of overfill on raw material purchase and added food miles often on a global basis with one raw material alone creating 10,000 extra food miles due to the poor weight control of the processing unit. A case study of a meat and bakery product will be discussed with the impact of poor controls resulting from complex legislation. The case studies will highlight extra energy costs in production and the impact of the extra weight on fuel usage. If successful a risk assessment model used primarily on food safety but adapted to identify waste /sustainability risks will be discussed within the presentation.

**Keywords :** legislation, overfill, profile, waste

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