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ESTIMATING HOUSEHOLD FOOD WASTE IN DENMARK: CASE STUDY OF SINGLE FAMILY HOUSEHOLDS

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Food waste prevention remains the first priority in the European Waste Framework Directive, which aimed to halve the amount of food wasted within the EU Member States by 2025. Thus, reliable data on food waste composition and quantity are crucial for assessing the current food waste situation and determine potential improvements. In Denmark, although many sorting campaigns involving household waste has been conducted, little attention has been placed on food waste. Comparison of recent studies made for examples in Austria, and the UK suggests that quantity and material composition of food waste vary significantly among the studies and differ from one country to another. Here, we provide a consistent methodology for characterization of household food waste, so that data comparability and source information are ensured. In this study, residual household waste was sampled and manually sorted from more than 211 single-family houses in Denmark. The residual waste from each household was collected and sorted separately to obtain a representative variation of the quantity and composition of food waste among households. The main fractions contributing to the household food waste were avoidable vegetable food waste and non-avoidable vegetable food waste. Furthermore, avoidable vegetable and animal food waste were the primary source of household food waste. Statistical analysis found a positive linear relationship between household size and the amount of the household food waste suggesting the amount of household food waste increases with the number of occupants per household.