

STSM at the Danish Meat Research Institute (5th- 23rd March, 2023)

The aim of this STSM was to test the decontamination of pork belly with ultraviolet light (UV-C) treatment. Specifically, we investigated the relationship between time and dose of UV-C to the reduction of *Salmonella spp.* and *Listeria spp.* on the surface of fresh pork belly and its effect on the sensory quality of the products.

The results of the UV-C irradiation experiments suggest that this treatment has the potential to serve as an additional hurdle against microbial contamination in raw meat. While a defined UV-C radiation is difficult to achieve for all surfaces on a complete carcass due to shading of areas, under defined conditions with appropriate cuts, the positive effect reducing the microbial contamination could be usable. Since a UV-C station requires little space and material and the treatment times are short, it can be quite easily integrated into existing production lines.

The end report of this project will be published on the webpage of the Danish Technological Institute. Based on our findings, this project will be extended to conduct additional experiments and to establish a broader database. If those experiments confirm our findings the work will also be published in a Danish food magazine named FødevarerMagasinet.



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