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Effects of Different Cooling Methods on the Carbon Footprint of Cooked Rice

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Abstract

Global warming has become a serious problem facing the international community. All countries strive to reduce greenhouse gas (GHG) emissions. The food system produces a large amount of GHGs, and thus study of the carbon footprint (CF) in the food industry has attracted the attention of researchers. Based on the lifecycle assessment (LCA) method, the present study calculated CFs of cooling of cooked rice, as a unit operation under different operational conditions. The results showed that the carbon footprints for cooling 200 g cooked rice were 54.36 ±1.07 gCO_2eq for refrigerator cooling at 0 °C, 66.05 ±2.00g CO_2eq for refrigerator cooling at 8 °C, 741.55 ±27.26 g CO_2eq for

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