

Hyo-on CA Storage of Chicken Meat- Case of Addition of Sodium Chloride

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Abstract

The freezing point of chicken meat was varied by adding sodium chloride. The chicken meat were stored by the Hyo-on CA storage (controlled freezing point and controlled atmosphere storage) method by introducing carbon dioxide. Then changes in the qualities of chicken meat stored by the Hyo-on storage (controlled freezing point storage, at -10C or -30C) method or by the partial freezing storage (at -30C) method were monitored. Based on the measurement data thus obtained, the chicken meat qualities were evaluated depending on freshness (taste), smell, lipids, meat color, microbial proliferation, etc., thus performing total evaluation. As a result, the storage temperature related to every storage factor and contributed in particular to the maintenance of freshness (taste) and the prevention of bacterial proliferation. Addition of sodium chloride was effective in preventing oxidation and bacterial proliferation, while introduction of carbon dioxide was effective in inhibiting pH value increase and preventing bacterial proliferation. It was found out that the surface color of chicken meat turned into red in atmospheric storage, into pale beige in CA storage and into unnatural yellowish white after adding sodium salt.