

## Development of Novel Seasoning Salt Enhanced in Saltiness by Natural Materials

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### Summary

Salt, which is the basis for seasoning, is used in many menus. Salt plays an important role in cooking, giving salting effects to dishes. Moreover, a small addition of salt affects other tastes. Because the excess intake of salt triggers some diseases such as hypertension and cancer, reduction of salt intake is recommended. However, reduction of salt intake also reduces the saltiness and balance of taste in cooking, and ultimately degrades flavor. We sought to achieve salt intake reduction through synergistic effects of other taste components on saltiness without losing flavor in cooking.

In this study, we evaluated whether organic acids, such as citric and malic acids, and foods containing these organic acids enhance saltiness in salt solutions and solid salt. Consequently, the enhancement of saltiness by interaction between sourness and saltiness were recognized in salt solutions and solid salts. Results show that the enhancement of saltiness by organic acids depends on the salt solution concentration, and show that retention times in the mouth differed among organic acids. Panelists reported that organic acid-added solid salts were saltier than salt alone. This result was caused by synergistic effects of salt and organic acids. The effects varied for crystalline salts.