

Study of Saltiness Using Taste Sensor with Different Lipid/Polymer Membranes

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We evaluated the saltiness of sodium chloride with coexisting bitterns such as magnesium sulfate, magnesium chloride and calcium chloride. Model samples which consist of sodium chloride and bitterns were measured using a taste sensor with lipid/polymer membranes. Standard data of saltiness were obtained from the sensor output in order to evaluate taste quantitatively and objectively. We proposed an evaluation model of saltiness based on sensor outputs and a human sensory test. The method enabled us to evaluate the taste of salts on the market with a trace of bitterns depending not only on the concentration of Mg^{2+} or Ca^{2+} , but also on their ratio.