[Example 1]

Dark soy sauce was subjected to electrodialysis and powdered, and then the salt concentrations in terms of Na and the inorganic material concentrations were adjusted to the values shown in Table 1, thereby obtaining dark desalinated powdery soy sauce samples (experimental sections 1 to 4). In addition, powdery soy sauce obtained by directly spray drying the dark soy sauce without subjecting it to the electrodialysis was used as a control section 1.

[0036]

In this regard, Microacilyzer S3 manufactured by ~~ATOMS~~ASTOM Corporation was used for the electrodialysis, and the inorganic material concentrations were adjusted by a constant voltage operation.

[0037]

Mini spray dryer B-290 manufactured by Nihon BUCHI K.K. was used for the spray drying. The condition for the spray drying was an inlet temperature of 160°C, an outlet temperature of 90°C and a feed amount of 15 ml/minute.

[0038]

With respect to the inorganic material concentration, 0.1 g of the powdery soy sauce and 4 ml of concentrated nitric acid were mixed and decomposed at 500 W for 10 minutes and at 1000 W for 10 minutes using a microwave sample decomposition apparatus, and then the volume was adjusted to 5 ml by adding purified water, thereby obtaining an original solution. Then, the original solution was diluted in such a way that the Na concentration fell within the range of 0.1 to 4 ppm, and the inorganic material concentration was measured by subjecting the diluted solution to ICP emission spectroscopy. Optima 3300XL manufactured by PerkinElmer Co., Ltd. was used as the analyzer, and Ca, K, Mg, Na, P, Zn, Mn, Cu and Fe contained in the powdery soy sauce were measured.

[0039]

The salt concentration in terms of Na was calculated by multiplying the Na concentration measured by ICP emission spectroscopy by a coefficient of 2.54. The salt concentration in terms of Cl was measured by potentiometric titration method using DL 50 manufactured by Mettler-Toledo International Inc. The total nitrogen was measured by Kjeldahl method using Kjeltec auto sampler system 1035 manufactured by ACTAC Project Services Corporation. The water content of the powder was measured by reduced-pressure