Spectroscopy Studies for the Microelement Ions Weights in the Solid State of NaCl - Foods

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Summary

In our investigation we paid a lot of attention to typical NaCl-foods, from which we observed very characteristic manganese two-value ions (Mn^{2+}) signals different from usual Mn^{2+} patterns so far obtained. Electron spin resonance (ESR) signals unusually conterminous a very sharp line at g=2, which is assigned to be kind of free radical species. Another signal is due to Mn^{2+}, which gives six hyperfine splitting with equivalent intensity owing to the nuclear spin I=5/2 of Mn nuclei. In typical NaCl-foods, however, the Mn^{2+} signals exhibit non-equivalent hyperfine intensity with relatively much higher intensity in the central groups.

Microelement ions weights in the solid state of NaCl-foods were developed by means of ESR. These Studies were reported Mn^{2+} weights of NaCl-foods, for example, Uji-cha(maccha); 195.00 μ g/g and red hibiscus(Hibiscus sabdariffa)-cha ; 216.00 μ g/g. The data suggest that are related with the effect and the mechanism of Mn-superoxide dismutase (SOD) .