

# Improvement of Functional Properties of Bovine Serum Albumin through Phosphorylation by Dry-Heating in the Presence of Pyrophosphate

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**Table 1—Some characteristics of bovine serum albumin (BSA) evaluated**

Sample <sup>a</sup>	Sugar content <sup>b</sup> (%)	P content <sup>b</sup> (%)	Solubility <sup>b</sup> (%)
N-BSA	0.0 ± 0.0	0.00 ± 0.00	99.9 ± 0.7
DH-BSA	0.0 ± 0.0	0.00 ± 0.00	94.9 ± 0.5
MP-BSA	11.3 ± 0.6	0.00 ± 0.00	99.2 ± 0.8
PP-BSA-5d	0.0 ± 0.0	0.45 ± 0.01	98.4 ± 1.0
PP-MP-BSA-5d	19.8 ± 0.8	0.91 ± 0.01	97.6 ± 0.9

<sup>a</sup>N-BSA = native BSA; DH-BSA = BSA dry-heated at pH 4.0 and 85 °C for 5 d; MP-BSA = BSA conjugated with MP by incubation at 50 °C (65% RH) for 3 d; PP-BSA = BSA dry-heated at pH 4.0 and 85 °C for 5 d in the presence of pyrophosphate; PP-MP-BSA = MP-BSA dry-heated at pH 4.0 and 85 °C for 5 d in the presence of MP and pyrophosphate.

<sup>b</sup>Each value is the mean ± SD ( $n = 3$ ).

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**Table 1.**

**Enomoto and others.**