

(28°-32°C) and refrigerator temperature (2°-11°C). The solutions were then kept in a water bath at 37°C for another 24 hours for observation and culture. The PN solutions with no sign of precipitation were reprepared and determined for particles under the same conditions with Coulter technique and electron microscopy.

The results showed that precipitate formation, or turbidity which was an indicator for the compatibility, was enhanced by decreasing concentrations of dextrose and amino acids, using amino acid solutions with higher pH values, increasing in storage temperature and standing time. The compatibility was significantly associated with all factors studied, including concentrations of the two salts and solution pH. All additives had main and interaction effects on solution pH, but there was no significant difference between pH of PN solutions without lipid and those with lipid. PN solutions stored at refrigerator temperature had higher pH values than those stored at the ambient for 24-48 hours. There was also a gradual drop in pH with increasing time. Electron microscopy and particle size analysis revealed many particles smaller than 16 μm , but these were mostly in the BP-limit. 92 of 216 formulas were visibly clear. Of these, 42 formulas were composed of Aminoplasma L-10, 12 formulas of Amiparen-10, and 38 formulas of Aminovenös N-päd. Further studies are necessary to determine the effects of other factors and to evaluate these formulas.