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## SOME PHYSICOCHEMICAL PROPERTIES OF SKIM MILK POWDER

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**M**ilk powder is commercially consumed around the world is of different quality that depends on various conditions such as the physiochemical contents, processing methods, storage time and backing material. In this study, the physicochemical properties of skim milk powder were determined. Milk powder samples were tested for accelerated storage at 70oC. Samples showed wide variations in the color parameters L\* (lightness value) and b\* (yellowness value). Rehydration results indicated no significant differences between samples. All high heat powders had greater than 99% reduction in rehydrated size which was similar to low and medium heat powders. All powders fall within the slightly hygroscopic range. Powder samples met the solubility standard specifications regardless of the heat class or type. The high heat powders tend to have slightly higher sediments than the low and medium heat powders. The reconstituted low heat products had the greatest heat stability when evaluated at ultra-

high temperature of 140oC. The particle size in volume, weighted mean of milk powder samples showed significant variations with a range of 29.32-94.24 µm. Significant differences in the viscosity of reconstituted milk were apparent with high heat powders having greater viscosity. The present study showed significant differences in the physicochemical properties of tested samples which may be noticeably influence their functional properties.

### Biography

Abdelmoneim K Abdalla completed his PhD in Dairy Science Technology and Microbiology from Assuit University, Egypt and University of Wisconsin-Madison, USA and Postdoctoral studies from University of Wisconsin-Madison and Center of Dairy Research, USA. He worked as an Assistant Professor of Food Science and Technology "Dairy" at South Valley University, Egypt. He has published more than 12 papers in reputed journals.

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