

Development of nutraceutical product

ABSTRACT

The aim of this study was to discuss the development of nutraceutical product which includes the current market trends, challenges, and exploitation of natural resources through various processing. Wet granulation and dry granulation techniques were adopted for such processes. Wet granulation covers high shear mixing granulation, fluidized bed granulation, and twin screw granulation. Dry granulation covers roll compaction and uniaxial die compaction. These techniques were compared and reviewed in terms of physical, chemical and toxicity studies. The physical study considered the particle size, density, morphology, flowability and dissolution. The chemical study discussed on the active ingredients in the nutraceutical products and the toxicity study was presented by investigation carried out on rats. There is a high potential for development of nutraceutical product. By understanding the various techniques of processing and characterisations, more nutraceutical products can be marketed.

Keyword: Nutraceutical; Wet granulation; Dry granulation; Natural resources; Characterisation