

**Preparation and Characterization of Oral Disintegrable Pellets**

Chun-Hian Lee (李俊賢), Hui-Mei Yu (游慧美), Hung-Hong Lin (林恆弘)

Department of Pharmacy, Chia Nan University of Pharmacy and Science, Tainan, Taiwan  
71710, R.O.C.

During the production of orally ingested pellets, we can adjust the formula to achieve the dissolution profile we desire. The study is to create pellets that will dissolve when taken orally but will not dissolve during the preparing process. In comparison to previous pellets prepared by other methods, as sodium alginate does not easily break down, the addition of disintegrating agents may be allowed the pellet to dissolve more easily. The following disintegration agents such as Primojel, Potato, Avicel will be used in the research. In our preparing process, we combine sodium alginate and the disintegrating agents in the proper mixture ratio. The addition of alcohol also plays an important role in the mixture. And then the mixture would be slowly dropped into a calcium chloride solution to prepare pellets. The pellet was dried in oven and was investigated the particle size changed and physical-chemical properties by texture analyzer and dissolution study. The results show that the particle size of the pellet which was combined with disintegrants was larger than that without disintegrants through dry process. To reconstitute dry pellets by water, Primojel has significant swelling effect on pellets. The above results will be helpful to possible development of the other disintegrable pellet controlled delivery systems.