

<b>Thesis Title</b>	Effect of Calcium Sulfate on Compactibility of Spray Dried Starches as Direct Compression Fillers
<b>Name</b>	Kritsanaporn Tangkuptanon
<b>Degree</b>	Master of Science (Pharmacy)
<b>Thesis Supervisory Committee</b>	
	Ampol Mitrevej, Ph.D.
	Nuttanan Sinchaipanid, Ph.D.
	Nuwat Visavarungroj, Ph.D.
<b>Date of Graduation</b>	22 May B.E. 2540 (1997)

### ABSTRACT

The spray drying technique was used to develop various spray dried starches for direct compression tableting. The agglomerated product exhibited spherical shape, good flow and high compactibility. Calcium sulfate was co-sprayed with starches at 1, 2, and 2.5% levels. In general, the addition of calcium sulfate improved the compactibility of the spray dried products. The optimum amount of calcium sulfate depended on the starches. It was found that calcium sulfate at the level of 2% was optimum for rice starch, tapioca starch, wheat starch while 1% was optimum for corn starch. Potato starch appeared to have the lowest compactibility property whereas rice starch possessed the greatest compactibility. Disintegration time did not depend on compression force and quantity of calcium sulfate. It could be concluded that co-sprayed calcium sulfate-starches offered better tablet properties than the spray dried plain starches.