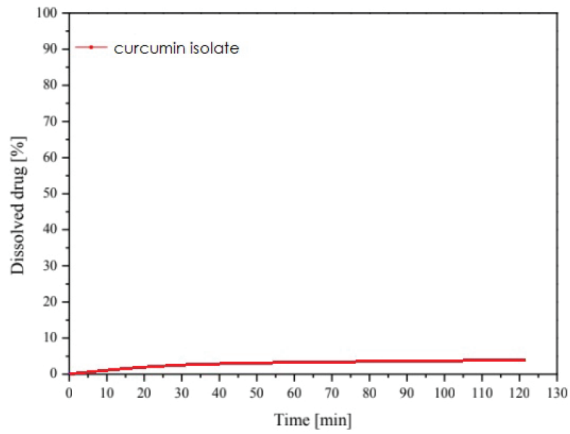
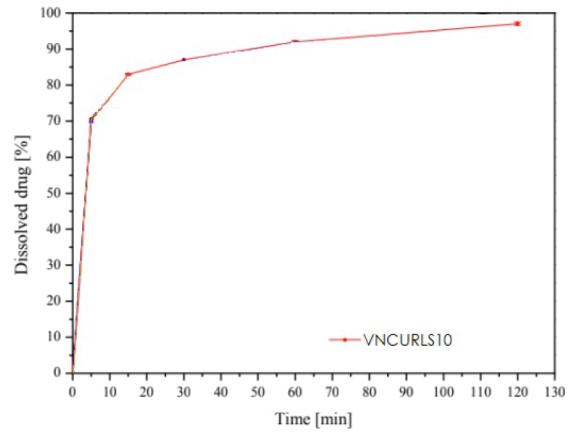


Curcumin VS SNEDDS™ CurcuSol™ LS (VNCURLS10) BASED ON PAMPA RESULTS

ANALYSIS CONDUCTED POZNAN UNIVERSITY OF MEDICAL SCIENCES Department of Pharmacognosy



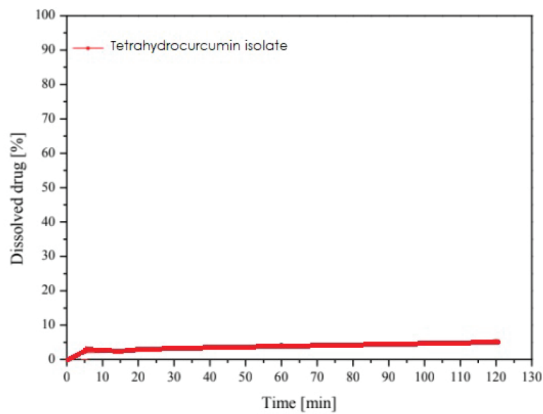
(a)



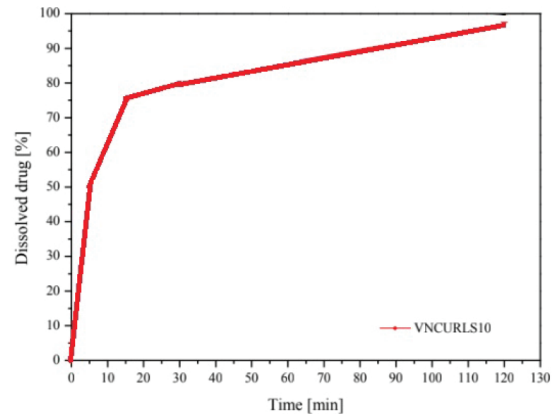
(b)

5% of Curcumin isolate dissolves in about 1 1/2 hours.

98% of Curcumin in SNEDDS™ VNCURLS10 dissolves in 1 1/2 hours.



(a)



(b)

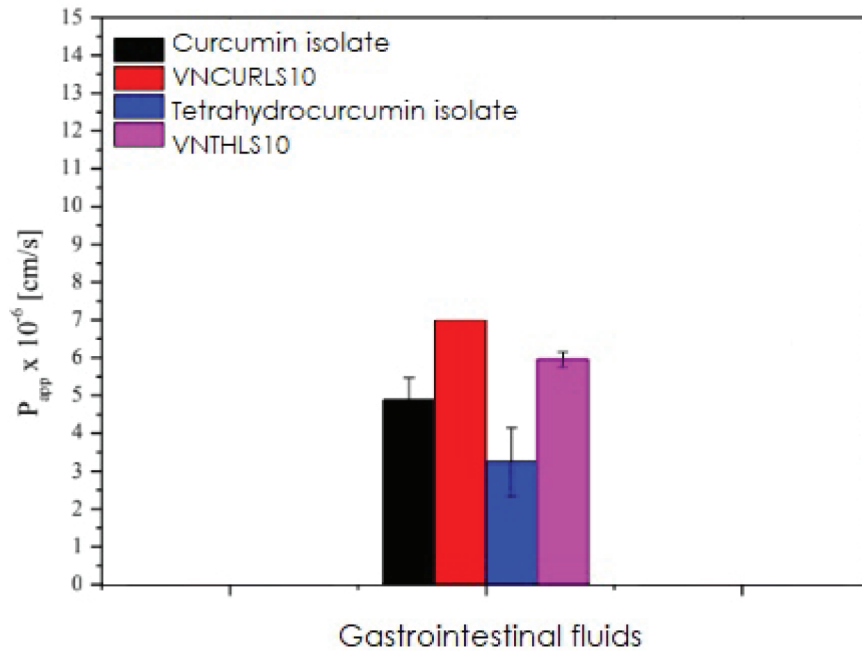
5% of Tetrahydrocurcumin isolate dissolves in about 1 1/2 hours.

98% of Tetrahydrocurcumin in SNEDDS™ VNCURLS10 dissolves in 1 1/2 hours.



Curcumin VS SNEDDS™ CurcuSol™ LS (VNCURLS10) BASED ON PAMPA RESULTS

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SNEDDS™ VNCURLS10 showed 2 times better permeability than Curcumin isolate.

SNEDDS™ VNCURLS10 showed 2 times better permeability than Tetrahydrocurcumin isolate.

PAMPA test results indicate the degree of passive diffusion of the VN SNEDDS™ from the GI tract directly into the circulation. In addition to passive diffusion, lipid based SNEDDS™ are transported via intestinal lymphatics and bypasses degradation via first pass in the liver.