

Fig. 26 Cumulative blood level curve (or urinary excretion curve, or dissolution curve).

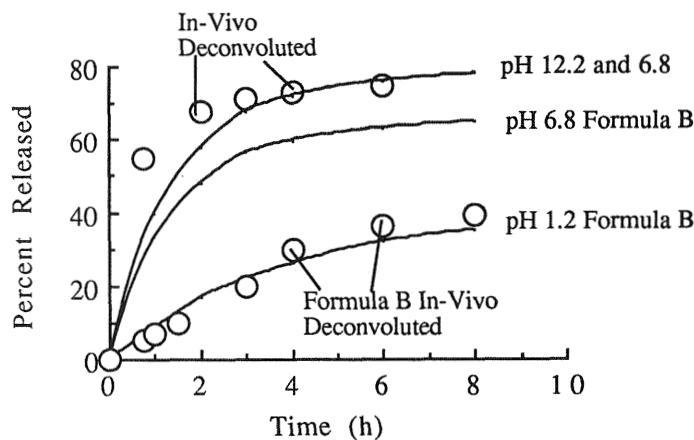


Fig. 27 Time vs. percent released. (Graph constructed from data published by Sugawara et al., 1994.)

The deconvolution method used was the one that has been described by Katori et al. (1991). Other, more recently developed methods are those of Gillespie and Cheng (1993). They first created a hypothetical clean curve with convolution. Then the absorption rates and cumulative amounts absorbed of the drug and metabolite were estimated by the proposed deconvolution method. For this purpose, polyexponential functions were fitted to the simulated data. The resulting parameters were compared by a multidimensional deconvolution program NDCREV (user-friendly IBM compatible).

8.10. Stability of Dissolution Curves

The problem from a stability point of view is that at times the dissolution curve will change as a function of storage time [as e.g. shown by Chafetz (1984) for hard shell capsules], but the bioavailability “stays the same.” In such a case the in-vitro