revealed that glycyrrhetic acid (GA), the major metabolite of liquorice, significantly activated the functions of P-gp and CYP3A4through activating P-gp and CYP3A4, The results showes that Liquorice significantly decreased the peak blood concentration and the areas under the curves of CsA in rats.(Yu-Chi Hou,*et al.*. 2012).

Muneaki Hidaka report that pomegranate juice components impairs the function of enteric but not hepatic CYP3A. And a components of pomegranate inhibits the human CYP3A-mediated metabolism of carbamazepine. The ability of pomegranate to inhibit the carbamazepine 10,11-epoxidase activity of CYP3A was examined using human liver microsomes, and pomegranate juice was shown to be a potent inhibitor of human CYP3A. The inhibition potency of pomegranate juice was similar to that of grapefruit juice. In addition, the in vivo interaction between pomegranate juice and carbamazepine pharmacokinetics using rats. In comparison with water, and the area under the concentration-time curve (AUC) of carbamazepine was approximately 1.5-fold higher when pomegranate juice (2 ml) was orally injected.(Muneaki Hidaka, *et al.*. 2005).

D. Adukondalu,*et al.*. investigate the effect of pomegranate juice pre-treatment on the transport of carbamazepine across the rat intestine. Result showed that there was a significant ($p<0.05$) difference in the transport of carbamazepine from the intestinal sacs of pretreated with pomegranate juice and control. It seems that pomegranate juice might have induced CYP3A4 enzymes and hence drug is extensively metabolized.(D. Adukondalu,*et al.*. 2010).

Published data report that orange juice increases the bioavailability of pravastatin administered orally. Oatp1 and oatp2 may be related to increases of pharmacokinetics of pravastatin by orange juice. The pharmacokinetics of pravastatin (100 mg/kg p.o.)