pomegranate juice.(table 49) The AUC ratio and Cmax of candesartan with water were not significantly altered by administration of either liquorice or orange juice.

As shown in figures 10 to 13, when candesartan was administered alone its serum level reached its maximum (964.692 ng/ml) after half an hour and then gradually declines to reach a minimum concentration of (272.679 ng/ml) after 6 hours from the administration of candesartan.

And when candesartan was administered to an orange pre-fed rat groups, slightly increase in serum concentration levels were resulted, Candesartan reaches its maximum serum concentration after half an hour (1253.163 ng/ml) and then gradually declines to reach a minimum concentration after 6 hours (253.149 ng/ml).

But when candesartan was given to a liquorice pre-fed rat groups, a slightly decrease in serum concentration levels were obsereved. Candesartan reaches its maximum serum concentration after half an hour (818.287 ng/ml) and then gradually declines to reach a minimum concentration after 6 hours (276.467 ng/ml).

Never the less, when candesartan was administered to a pomegranate pre-fed rat groups, a significant decrease in serum concentration were resulted, at the first half an hour of administration candesartan reaches its maximum serum concentration (475.967 ng/ml) and then gradually declines to reach a minimum concentration of (188.174 ng/ml) at the end of follow up period (6 hours). Regarding pomegranate juice uptake, the metabolic effect is not necessary to be only via the hepatic enzymes, and since candesartan in mainly excreted unchanged, we considered according to our result that pomegranate juice might as well affect the intestinal metabolic system which resulted in beverage-drug interactions. The mechanism of beverage-drug interactions in the intestine consists of several systems (Lilja et al., 2003). mainly