

### 3.3 Discussion

Candesartan is an Angiotensin receptor blocker (ARBs) drug that binds to angiotensin II receptor type1 selectively and competitively and thus blocks the vasoconstrictor and aldosterone-secreting effects of angiotensin II in many tissues including vascular smooth muscle and the adrenal gland. and results in an overall decrease in blood pressure, it is a drug used chronically. In the recent years, an increase in beverage intake was noticed , drug interactions with beverages have received considerable attention. The interaction can affects the activity of a drug, Because a lot of juices shown to inhibit or induce liver enzymes or modulate intestinal drug absorption via the P-g pmediated efflux and OATP-mediated uptake transport systems the intestine and liver. It has been well documented that the components of grapefruit, such as bergamottin and (R)-6',7'-dihydroxybergamottin, demonstrate potent inhibition of CYP 450 system (Guo et al., 2000; Paine et al., 2004).

pomegranate has been widely consumed in many countries including the middle east region. Pomegranate is a rich source of several chemicals such as pectin, tannins, flavonoids, and anthocyanins. However, debaited data are available on whether the component(s) of pomegranate inhibits or induce the metabolism and/or absorption of drugs. Liquorices (*Glycyrrhiza glabra*),was firstly used by the pre-date ancient civilization of Babylonian, Egyptian and Chinese cultures(Wang, Ma, Fu, Lee, & Wang, 2004). Chemically, liquorice roots contain several triterpenes, such as glycyrrhizin and glycyrrhetic acid, together with variety of flavones, Glycerhizien glycoside is the main active ingrident of liquorice, it is a sweet-tasting constituent. Making it 50 times sweeter than sugar, (Acharya, et al., 1993).