Cytochrome P450s (CYP) are enzymes, that play an important role in the metabolism of foreign compounds (e.g. drugs, carcinogens, pollutants) and they also participate in the metabolism of hydrophobic endogenic substrates (e.g. sterols, fatty acids, prostaglandins). Cytochromes of subfamily CYP1A are involved in activation of precarcinogens. Whereas the consumption of dietary supplements containing chemopreventive substances (e.g. flavonoids) that can prevent the process of carcinogenesis is significantly increasing in recent years, although these substances may also have a negative effect on the organism. That because these substances can induce the cytochrome P450s and thus increase the risk of activation precarcinogens. In this study had been investigated the inductive effect of some flavonoids compounds – β -naphthoflavone, myricetin, dihydromyricetin and a drug containing an extract of red vine leafs - Antistax®.