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Changes in Physiological Activity of Mulberry Leaf Tea Manufactured in Some Different Condition

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Mulberry(Morus alba) leaf tea was prepared by roasting, crumpling and finishing touches that the tea was roasted and crumpled one to five times. Quercetin, kaemperol and myrecetin were isolated as flavonols, and quercetin was higher than others as $57.5\%(379.6~\mu g/g)$. Flavonols were decreased about $59\sim70\%$ during roasting, crumbling and finishing touches. Polyphenols were analysed seven varieties in mulberry leaf, and chlorogenic acid($1.70\sim4.64~mg/g$) and epigallocatechin gallate($1.53\sim2.10~mg/g$) were 81% of them. And also polyphenols decreased 50% during the process. Rutin content showed 0.97~mg/g in dried mulberry leaf, but decreased during the tea making procedure about $23\sim30\%$. However rutin increased after finishing touches. Deoxynojirimycin was 4.31~mg/g in dried mulberry leaf and slightly increased at just one time roasting and crumbling process, but decreased after repeated five time roasting, crumbling and finishing touches. Chemical components and physiological activity materials were much in tea just one time roasting and crumbling process than five treatment mulberry leaf tea, but showed poor an article on a commercial scale. However in tea five time roasting, crumbling and finishing touches, color, taste, flavor and overall preference were best of them.