

On the Scavenging Activity of Coffee Extract Against Reactive Oxygen Species

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SUMMARY

The generating and scavenging activity of Coffee extracts of various kinds of Coffee beans and instant coffee on reactive oxygen species were investigated and the followings were made clear: (1) At low concentration level of about 80 ppm, the scavenging activity was stronger than the generating activity of hydrogen peroxide. (2) Coffee bean extracts exhibited strong scavenging activity against hydroxyl radical and superoxide anion. These scavenging activities were observed dose-dependent. (3) The scavenging capacities of different Coffee bean extract against hydroxyl radical were as follows: Colombia > El Salvador > Tanzania > Sumatra > **Mandarin** > Brazil > Java Robusta. (4) The scavenging capacities of different Coffee bean extracts against superoxide anion were as follows : Java Robusta > Brazil > Tanzania > El Salvador > Colombia > Sumatra **Mandarin**. (5) The scavenging capacities of 4 kinds of instant Coffee against both hydroxyl radical and superoxide anion were observed. These capacities were stronger than that of Coffee beans.