Table 1. Effect of EGCG on fluoride induced changes in the serum hepatic markers of control and experimental rats

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter** | **Control** | **EGCG** | **Fl** | **EGCG+Fl** |
| **SGOT (U/I)** | 48.06 ± 0.09a | 50.3 ± 0.45a | 67.02 ± 0.25c | 50.25±0.15d |
| **SGPT (U/I)** | 31.11 ± 0.72a | 33.43 ± 0.56ab | 43.51 ± 0.96c | 30.96±0.54cd |
| **ALP (U/I)** | 61.22 ± 0.57a | 63.1 ± 0.42ab | 82.31 ± 0.32c | 62.52±0.1d |
| **ACP (U/I)** | 40.3 ± 0.1a | 42.05 ± 0.65a | 71.43 ± 0.26c | 50.03±0.14cd |

Values are given as mean ± SD for six rats in each group. Values with different superscript letter

(a–d) in the same row or column differ significantly at p<0.05 (DMRT).

a values not differ significantly from control group at (P<0.05)

b values differ significantly from control group at (P<0.05)

c values differ significantly from EGCG group at (P<0.05)

d values differ significantly from Fluoride group at (P<0.05)

Table 2. Effect of EGCG on fluoride induced changes in the plasma glucose, liver glycogen, hexokinase and G6PD activities of control and experimental rats

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameters** | **Control** | **EGCG** | **Fl** | **EGCG + Fl** |
|  Glucose (mg/dl) Glycogen (mg/g) Hexokinase (U/mg /protein/min)G6PD (U/mg protein/min) | 93.44 ± 1.31a16.97 ± 0.21a8.32 ± 0.17a0.17 ± 0.03a | 120.04 ± 1.60b15.11 ± 0.18b6.33 ± 0.20b0.33 ± 0.02b | 188.72 ± 0.88c10.09 ± 0.31c3.70 ± 0.10c0.48 ± 0.02c | 150.43 ± 1.23d13.10 ± 0.27d5.04 ± 0.16d0.28 ± 12d |

Values are given as mean ± SD for six rats in each group. Values with different superscript letter

(a–d) in the same row or column differ significantly at p<0.05 (DMRT).

a values not differ significantly from control group at (P<0.05)

b values differ significantly from control group at (P<0.05)

c values differ significantly from EGCG group at (P<0.05)

d values differ significantly from Fluoride group at (P<0.05)

Table 3. Effect of EGCG on the level of plasma cholesterol, triglycerides, phospholipids, free fatty acids and lipoproteins concentrations in control and experimental rats.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameters** | **Control** | **EGCG** | **Fl** | **EGCG + Fl** |
| Cholesterol (mg/dl)Triglycerides (mg/dl)Phospholipids (mg/dl)Free fatty acids (mg/dl)VLDL-C (mg/dl)LDL-C (mg/dl)HDL-C (mg/dl) | 96.8 ± 4.01a78.5 ± 2.9a87.6 ± 2.8a80.5 ± 2.3a20.7 ± 0.5a44.4 ± 1.5a29.9 ± 1.0abc | 95.5 ± 3.7a76.1 ± 2.7a85.2 ± 2.7a77.1 ± 2.1a21.4 ± 0.7a42.8 ± 1.3a30.6 ± 1.2ac | 248.9 ± 9.4b257.1 ± 8.9b179.4 ± 5.5b175.1 ± 4.7b58.3 ± 2.0b138.1 ± 5.3b20.3 ± 5.1b | 121.2 ± 4.4c101.6 ± 3.4c134.2 ± 4.2c80.8 ± 2.1ac28.3 ± 0.9c61.6 ± 2.3c25.3 ± 1.3abc |

Values are given as mean ± SD for six rats in each group. Values with different superscript letter

(a–c) in the same row or column differ significantly at p<0.05 (DMRT).

a values not differ significantly from control and EGCG group at (P<0.05)

b values differ significantly from control and drug control group at (P<0.05)

c values differ significantly from Fl group at (P<0.05)

Table 4. Effect of EGCG on fluoride induced cholesterol, triglycerides, phospholipids, and free fatty acids in the liver of control and experimental rats.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameters** | **Control** | **EGCG** | **Fl** | **EGCG + Fl** |
| Cholesterol (mg/dl) Triglycerides (mg/dl) Phospholipids (mg/dl)Freefatty acids (mg/dl) | 12.6 ± 1.1a12.3 ± 1.4a20.9 ± 2.4a13.9 ± 1.5a | 11.6 ± 1.3a11.2 ± 1.2a21.7 ± 1.8a13.5 ± 1.3a | 20.7 ± 1.3b18.5 ± 2.4b30.3 ± 3.5b19.1 ± 1.4b | 15.4 ± 2.5c13.4 ± 1.3c24.6 ± 4.4c16.4 ± 3.4c |

Values are given as mean ± SD for six rats in each group. Values with different superscript letter

(a–c) in the same row or column differ significantly at p<0.05 (DMRT).

a values not differ significantly from control and EGCG group at (P<0.05)

b values differ significantly from control and drug control group at (P<0.05)

c values differ significantly from Fl group at (P<0.05)