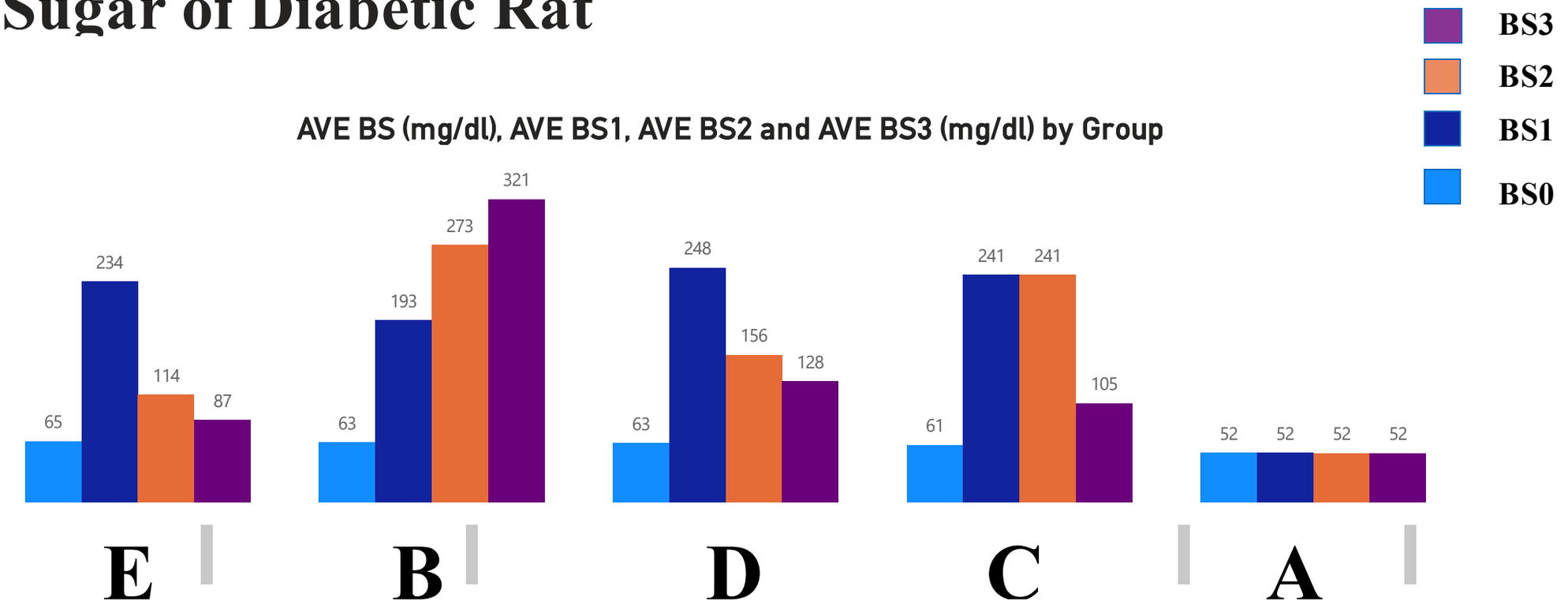
# CHAPTER 4
## RESULTS

**Figure 1: Table showing Blood Sugar level, Body Weight and Liver weight difference in 15 Albino Rats grouped in 5 different cages for 2 weeks**

| Group | Sum of WTBE4 (g) | Sum of WTAFT(g) | Sum of LVR WT(g) | Sum of BS0 mg/dl | Sum of BS1 mg/dl | Sum of BS2 mg/dl | Sum of BS3 mg/dl |
|---|---|---|---|---|---|---|---|
| AI | 60.00 | 106 | 5.11 | 51 | 50 | 50 | 50 |
| AII | 62.00 | 77 | 4.16 | 54 | 54 | 53 | 53 |
| AIII | 62.00 | 106 | 4.79 | 52 | 53 | 52 | 52 |
| BI | 101.40 | 94 | 6.76 | 56 | 225 | 298 | 330 |
| BII | 102.00 | 97 | 7.10 | 73 | 220 | 300 | 329 |
| BIII | 104.00 | 99 | 6.55 | 61 | 134 | 220 | 305 |
| CI | 78.00 | 137 | 5.77 | 57 | 230 | 186 | 112 |
| CII | 72.00 | 152 | 6.66 | 63 | 250 | 132 | 98 |
| CIII | 77.80 | 125 | 6.59 | 62 | 243 | 111 | 105 |
| DI | 87.00 | 72 | 6.68 | 65 | 240 | 227 | 129 |
| DII | 87.50 | 77 | 6.81 | 64 | 258 | 119 | 130 |
| DIII | 82.90 | 79 | 6.28 | 59 | 247 | 122 | 125 |
| EI | 97.00 | 134 | 5.70 | 72 | 257 | 105 | 89 |
| EII | 93.00 | 136 | 7.23 | 59 | 245 | 116 | 85 |
| EIII | 91.50 | 152 | 6.05 | 63 | 200 | 121 | 87 |

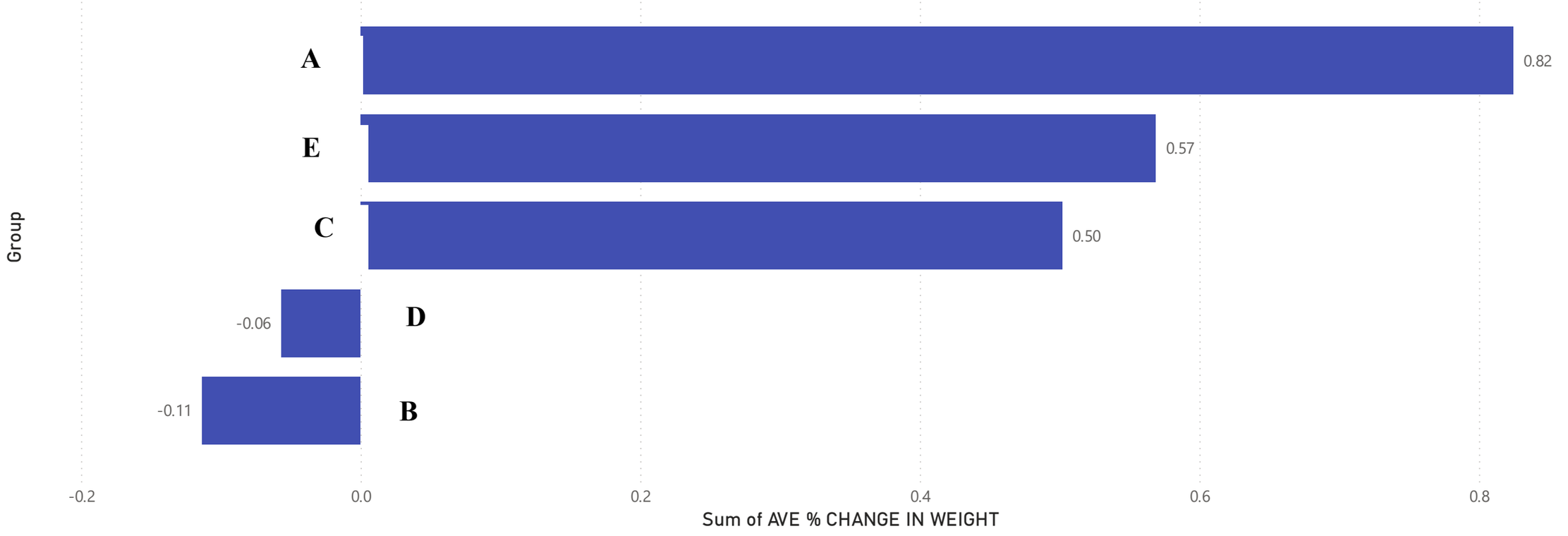
**A = CONTROL GROUP (Normal rat without treatment or feed with streptozotocin)**
**B = DIABETIC CONTROL GROUP (Feed with streptozotocin without treatment)**
**C = POSITIVE CONTROL GROUP (Feed with streptozotocin and also treated with C. Purpureus)**
**D = LOW DOSE TREATMENT GROUP (Feed with streptozotocin and treated with low dose of C. Purpureus)**
**E = HIGH DOSE TREATMENT GROUP (Feed with streptozotocin and treated with high dose C. Purpureus)**

# Figure 2: To investigate the effect of C. PURPUREUS on Blood Sugar of Diabetic Rat



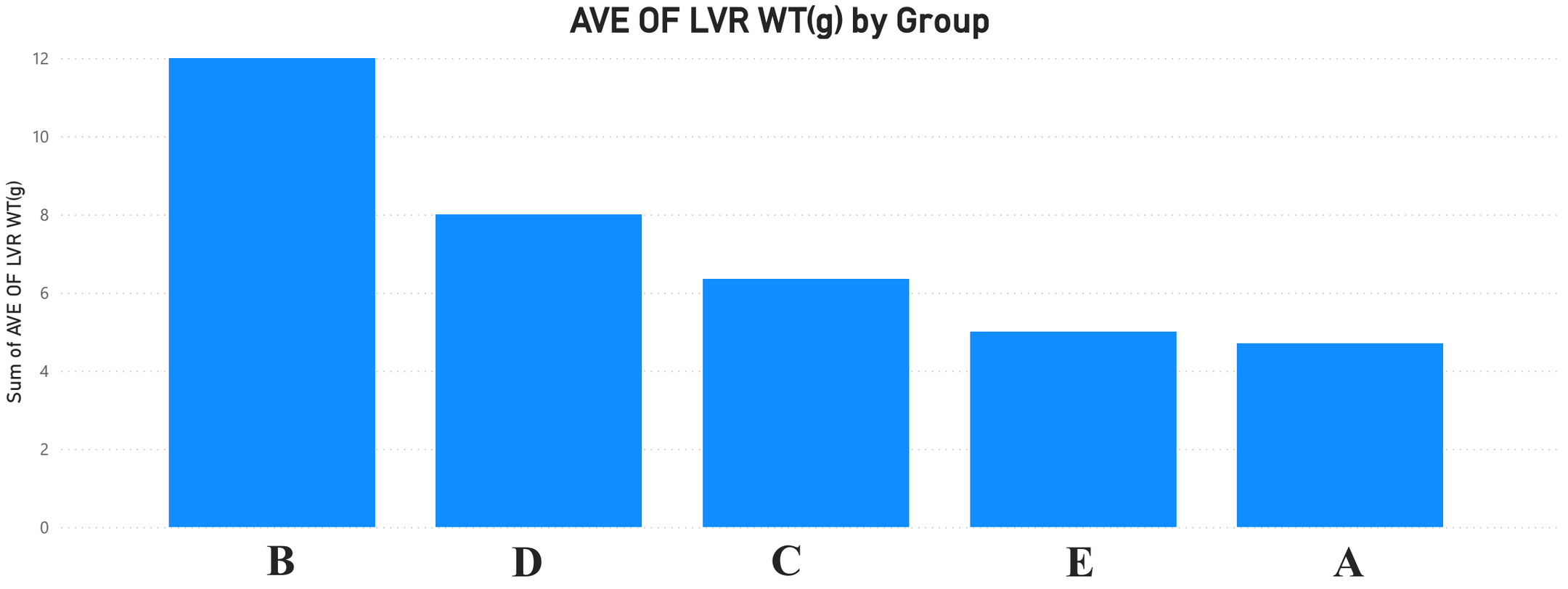

**Before we administered the extract, all the rats in all the experimental groups had normal blood glucose levels). Blood glucose levels in all groups increased after streptozotocin administration, exceeding those in the normal control group that did not receive streptozotocin. All treatment groups had lower blood glucose levels when compared to the diabetic control group. Administration of C. PURPUREUS at low dose(D group) and moderate dose (C group) progressively reduced blood glucose levels slightly, while high dose group (E group) blood sugar reduced drastically. The diabetic control group (B group) blood glucose levels continued to rise over the course of the experiment, whereas the normal control group (A group ) blood glucose levels remained within normal limits.**

# Figure 3: To investigate the effect of C. PURPUREUS on the Body weight of Diabetic rat




**Diabetic control group (B group) and the low dose group (D group) lost 11.32% and 5.6% of their body weight after the end of the experiment, while the positive control (C group) and the high dose group (E group) lost 2.13% and 1.98% body weight respectively. The control group (A group) gained 78.97% body weight**

# Figure 4: To investigate the effect of C. PURPUREUS on the weight of Liver in Diabetic Rat




**The control group (A group) had a liver weight of 4.68g , the high dose group had a slight heavier liver 5g while the positive control group (C group) and low dose group (D group) significantly increased 6.34g and 8g respectively. The diabetic control group (B group) had a massive increase in liver weight 12g compared to the control group (A group)**