Cannabinoids modulate food preference and consumption in *Drosophila melanogaster*

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Running title: Cannabinoids affect feeding behavior in flies

Supplementary

Figure S1

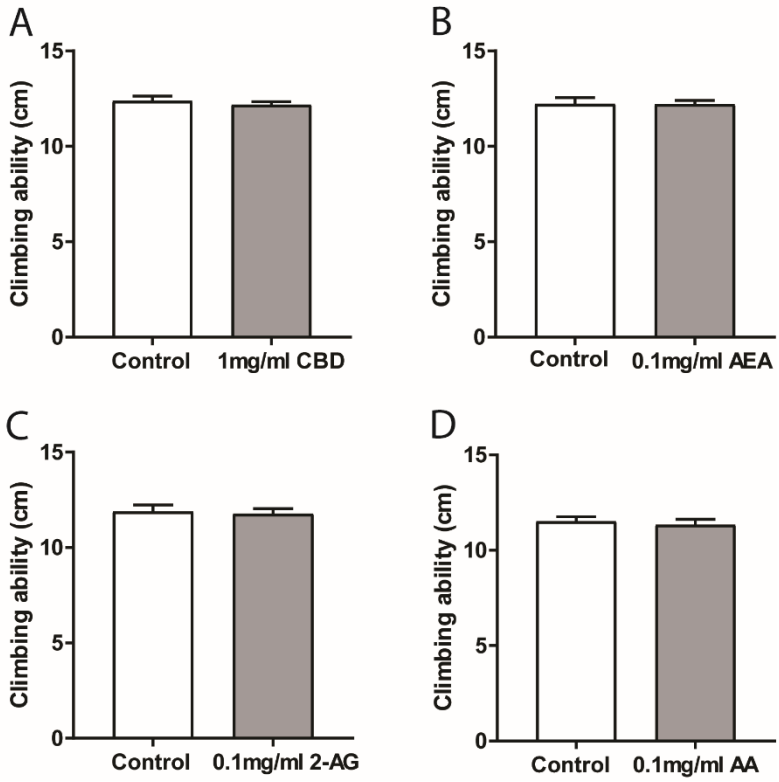

Figure S1. No or negligible effects of cannabinoids on climbing ability of the treated flies. Following two days of treatment with cannabinoids, the climbing ability of the flies was assessed to determine the locomotive behavior. Pre-treatment with 1 mg/ml CBD (**A**), 0.1 mg/ml AEA (**B**), 0.1 mg/ml 2-AG (**C**), 0.1 mg/ml AA (**D**) (n=8-12 vials/group) did not alter the climbing performance. Data are represented as mean ± S.E.M.

Figure S2

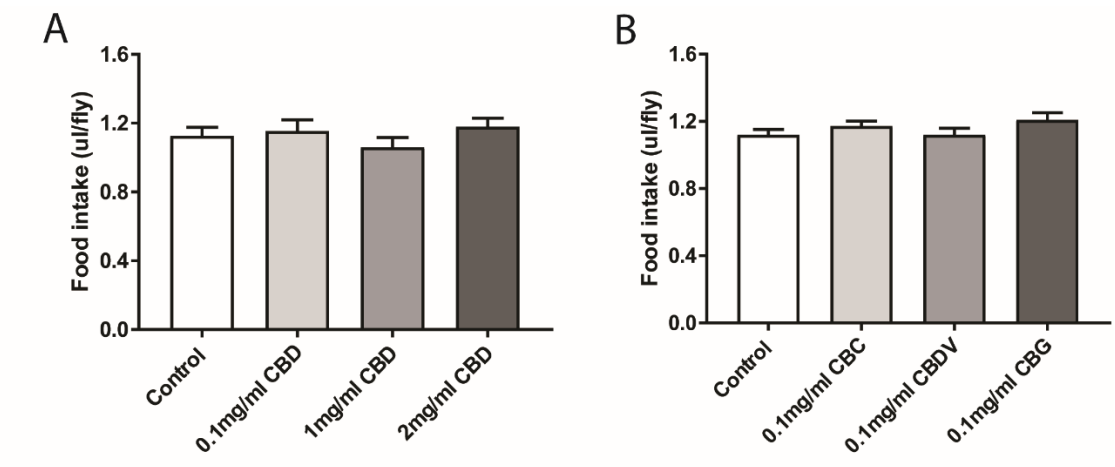

Figure S2. Initial food intake was not altered during the phytocannabinoids training. Flies consumed similar amounts of food containing various concentrations of CBD (0.01, 0.1and 1 mg/ml; n=12-19 vials/group) (**A**), or CBDV, CBC or CBG (0.1 mg/ml; n-32-33 vials/group) (**B**) during two days of the training (day -2 and day -1) as compared to the respective control solutions. Data are represented as mean ± S.E.M.

Figure S3

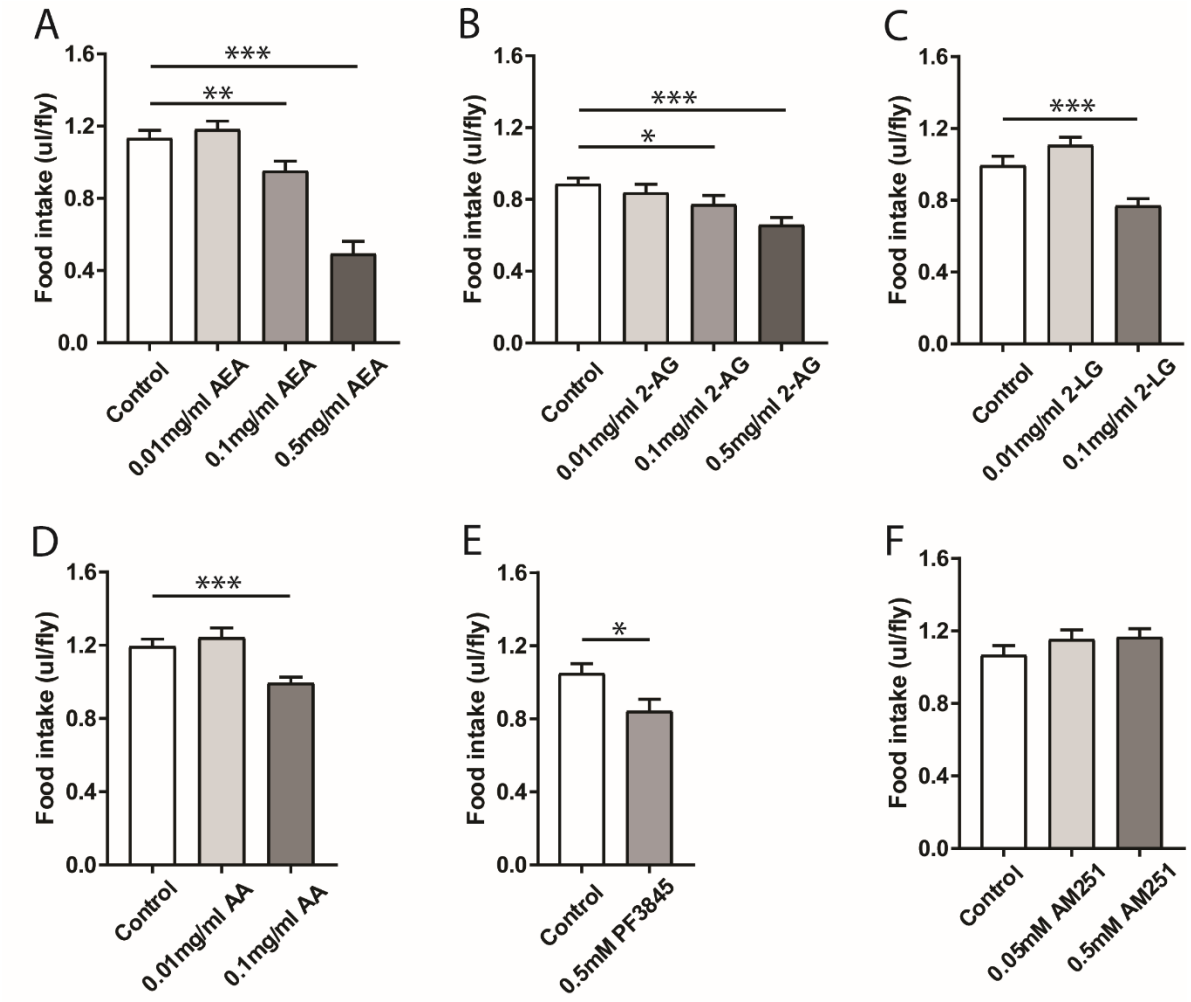

Figure S3. Endocannabinoids-containing food intake decreased during the initial training. The amount of food with AEA (0.1 and 0.5 mg/ml) (**A**), 2-AG (0.1 and 0.5 mg/ml) (**B**), 2-LG (0.1 mg/ml) (**C**), AA (0.1 mg/ml) (**D**) and PF3845 (0.5 mM) (**E**) consumed by the flies during two days of the training (day -2 and day -1) was significantly lower when compared to the respective control solutions (n=10-27). The consumption of food with AM251 (**F**) by the flies did not differ from the control groups (n=18 vials/group). Data are represented as mean ± SEM. One-way ANOVA followed by Dunnett's post-test was applied to determine statistical significance. *p<0.05, **p<0.01, and ***p<0.001.