TETRAHYDROCURCUMIN (TC) FEEDING INCREASES THE LIFE SPAN OF GENETICALLY CONTAMINATED C57BL MALE MICE

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In order to confirm our preliminary observation on the life prolonging effect of TC feeding, C57BL male mice purchased from Harlan-Spraque Dawley were divided into three groups. Group 1 received control pellets (MF, Oriental), and groups 2 and 3 received the same pellets containing TC (0.1% or 0.2% respectively). The study started at the age of 8 months. Later the mice were reported to have been genetically contaminated (no details have been informed). Results: Average body weights at corresponding ages were not statistically different between group one and the two experimental groups (groups 2 and 3)($P>0.05$, F test). Average life spans (days, mean ± SD,n) were 818.6 ± 160.5 (54), 870.0 ± 176.8 (50) and 912.2 ± 155.9 (52) and ten percent longest survivals were 1066.0 ± 26.5 (5), 1137.8 ± 57.2 (5) and 1174.4 ± 39.6 (5) in groups 1,2 and 3 respectively. Values in group 3 were significantly different from corresponding values of group 1 for average life spans ($P<0.01$) as well as 10% longest survivals ($P<0.05$). Conclusion: Despite a drawback of the incidentally induced genetic contamination which may possibly cause a heterogeneity of mouse groups, the dose dependent increase in life spans as well as 10 percent longest survivals of mice fed with TC supports our earlier observation that TC feeding can prolong the life span of male mice. Further, the absence of differences in body weight among different groups excludes the possible contribution of unintended dietary restriction to the life span extension in TC fed mice.