

January 4, 1971

Dr. Arnold J. Singer, Ph.D.  
Chairman of the Board  
Reed and Carnrick  
Kenilworth, New Jersey 07033

Dear Dr. Singer:

At a recent meeting of investigators interested in cannabis, the proposed program next spring at the Academy of Sciences was mentioned as a public presentation of the available data. We have recently completed the analyses of two studies, and believe the data to be relevant and possibly sufficiently novel to be of interest.

We have established the EEG profile of cannabis as inhaled by experienced users, in both acute single trials and in chronic (daily x 22 days) use. Subjects smoked cigarettes containing the equivalent of 7.5 mg or 22.5 mg THC. The data allows us to classify this compound in relation to the EEG profile classification previously published by us (Ann. Rev. Pharmacol., 9: 241-258, 1969) and by others. Of special interest are the changes in EEG profile with chronic use - changes which are associated with changes in behavior. We would propose the title "EEG Profile of Cannabis", by Max Fink, M.D. and Jan Volavka, M.D.

Our second study is of the effects on immediate memory, and the relation of the changes to task and dose of marijuana. These data differ from those presented recently by Kiplinger, Jones and Tinklenberg. We would propose the title of "Effects of Cannabis on Immediate Memory", by Rhea Dornbush, Ph.D. and Alfred M. Freedman, M.D.

There are two additional issues that are of interest to us that may be discussed at the conference. In our chronic trials, we have noted a decrease in "tolerance" to cannabis, the subjects developing dypphoria after one week's use. We are assessing the possibility that smaller doses may be needed after repeated exposure to achieve euphoria, and the recent reports of persistent tissue levels of cannabinols may be an interesting contribution.

Dr. Singer

-2-

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We have recently received a contract to study chronic cannabis users in the Near East, to assess the evidence for persistent sociological, social, and neurophysiological changes. In working through our tests and sampling techniques, we became involved with the problems of establishing adequate controls for the chronic drug user.

It may be useful to discuss these two issues, the problem of "tolerance" on chronic use, and adequacy of population samples for chronic trials, should the conference wish to review the immediate research issues.

Our programs have been substantially supported by the National Institute of Mental Health and we would be pleased if our data can contribute to the success of the proposed public presentations.

My best wishes for the success of the conference.

Sincerely yours,

Max Fink, M.D.  
Professor of Psychiatry

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