

11th October 1978

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B.A.T BOARD PLANNING

INNOVATION IN PRODUCTS AND PROCESSES

Supplementary Paper for Planning Meeting only

In the last few years a development outside the tobacco industry has occurred which may have far reaching effects for the industry in the long term. In 1975 a material was isolated from the brain of a pig which was called ENKEPHALIN and it had morphine-like agonist activity. Following this morphine analogues have been found with much greater activity than morphine. Etorphine, for example, is 5,000 - 10,000 times more potent and is effective at dose levels as low as 0.0001 gm. It is possible that other endogenous materials may exist in the brain, including nicotine-like agonists. That is there may be an endogenous polypeptide (endonictine) whose sequence of amino acid residues resembles nicotine. If this is shown to be correct there are implications important for the tobacco industry. Nicotine analogues may be more easily found. Nicotine-type materials may be made which act on the central nervous system alone (i.e. "nicotine" without side effects). Some benefits from smoking may be made available without cigarettes or tobacco. Bio feedback techniques may train subjects in adjustment of endonictine levels or merely to existing levels and simpler pharmacological aids may adjust the levels directly.

Professor W.D.M.Paton (now on the Hunter Committee) among others, and the pharmaceutical companies are aware of these possibilities.

It is sensible to assume therefore that, in the shorter term, alternatives to nicotine will now be found and in the longer term alternatives to smoking but that is not to say the habit will be entirely replaced or short lived.

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