

- (a) Contributes to crimes of violence, poverty, disease, and disorganization of homes.

Control

- (a) Federal: Laws--Food & Drug Act, Harrison Law.
 - 1. Organization: U. S. Public Health Service, Anti-Narcotic League.
- (b) International: League of Nations, Health Section
- (c) State: Departments of Health, Hospitals and Clinics.

Tobacco

The use of tobacco should be considered from the standpoint of its effects as:

- (a) Habit forming substance
- (b) An injurious substance
- (c) In its relation to efficiency

Composition of Tobacco

While tobacco as used is the leaves of the plant nicotiana tabacum, our interest from the standpoint of defensive hygiene is in the active principles in the plant which are possible chemical poisons.

Nicotin is the most important of these. In its pure form, it is one of our most powerful, fatal, and rapidly acting poisons. The nicotin content of the various kinds of tobacco vary considerably from 1.3% to 4% for Havana and Maryland, to 6% to 8% for Virginia or Kentucky tobacco.

Tobacco contains many other substances which give it a characteristic flavor. One of them, pyridin, on heating gives rise to substances that are of importance in estimating the physiological effects of tobacco. Two of them are carbon monoxide and furfural.

Combustion of Tobacco

Our interest lies in understanding what is responsible for its charm and its ill effects. There can be no debate about the serious effects of such a powerful poison as nicotin if used in any but the most minute quantity. It is its effects when taken into the body in such amounts and forms as are present in smoking and chewing tobacco that causes much controversy.

The amount of nicotin in the smoke of burning tobacco depends upon the kind and form of tobacco, and the amount of moisture present. This varies from 14% to 33% in cigarettes, to a much higher percentage in cigars and pipes.

It is claimed by some investigators that nicotin is practically destroyed in the process of smoking and that the effects of tobacco are limited to the decomposition products resulting from the pyridin. This does not explain the fact that the same physiological effects are produced by chewing tobacco.