

Producer of non-tobacco Free says: Let 'em smoke cocoa

The quest for tobacco substitutes continues. This time, cocoa.

A company in Los Gatos, Calif., International Brands, Inc., is attempting to succeed where such as Vanguard and the British brands with tobacco substitutes failed. International Brands has introduced a tobacco substitute brand called Free, said by Lee J. Danna, the company's board chairman, to be "the most significant advance ever made toward producing a truly satisfying tobacco-free smoke for millions of Americans."

Emphasis must be on the words *tobacco free*. The British brands that did not do well in 1977 used a blend of tobacco and substitutes. But Free, true to its name, has no tobacco. It is manufactured by using the tender outer layer of the cocoa bean.

Danna notes that cocoa is one of the most widely-used flavors in the world. "It is not new to the tobacco industry. Cocoa is found in most cigarette brands and, in fact, one of America's largest cigarette makers holds a patent utilizing cocoa and tobacco leaf as a mix."

He adds: "We've succeeded in taking this concept one step further by eliminating tobacco and substituting the outer layer of the cocoa bean as the main ingredient of our product. Then, we have enriched it with tobacco-like flavors and applied a unique flaking process so that Free actually approaches the taste and behavior of a tobacco cigarette."

"At the same time, Free has a distinctive yet mild aroma which,

according to our research, does not leave the usual stale after-effects of cigarette butts. Most important, Free contains absolutely no nicotine, the habit-forming drug found in cigarettes."

Danna indicates that his company sees two groups of smokers who will be particularly attracted to "Free."

"The first group includes health-conscious smokers who want to completely eliminate or, at least, reduce their tobacco cigarette consumption. The second group in-

cludes active people who like sports and other kinds of recreation but who find smoking conventional cigarettes detrimental to their full enjoyment of these activities."

Unlike cigarettes, packs of Free are not required to carry the Surgeon General's warning to smokers, since tobacco has been totally removed from the finished product.

However, Free will most likely be competitively priced with the more familiar cigarette brands

Continued on page 33

The manufacturer of Free points out that each cigarette contains no nicotine, as this comparison shows.

The average analytical composition (on a moisture-free basis) of fermented tobacco (ready to be incorporated into a smoking product) and of cocoa shells is given in the following table:

	Cigarette Tobacco ^{1,2} (Virginia)	Cocoa Husks ^{3,4}
Ash	13	8
Cellulose and Lignin	10 (12-19)	15
Carbohydrates, Soluble	20	17
Starch	4	3
Pentosan	2	7
Pectin	6	8
Polyphenols	3	7
Resins and Waxes	8	9
Organic Acids	19 (2-5)	1
Protein	11	16
Nicotine	1	0
Theobromine	0	1

1. Ullmanns Encyklopadie Der Technischen Chemie (Ed. W. Foerst), 3rd Ed., Vol. 16, p. 641, Urban & Schwarzenberg, Munchen-Berline, 1965.
2. C. Wehmer, "Die Pflanzenstoffe," 2nd Ed., Vol. 2, p. 1111-1117, G. Fischer, Jena, 1931.
3. N.W. Kempf, "The Technology of Chocolate," p. 31-32. The Manufacturing Publishing Co., New York, 1964.
4. E.M. Chatt, "Cocoa," Vol. III, p. 143, 150-153. Interscience Publishers, New York 1953.

NOTE: The numbers in parentheses are Virginia stem tobacco.

Tobacco International

FREE—from page 28

sold in America.

Free is being manufactured by International Brands at the firm's corporate headquarters in Los Gatos. It is called the only production facility of its kind in operation anywhere in the United States apart from the major tobacco cigarette industry centered in Virginia, Kentucky, and North Carolina.

Free is now available in all 50 states at retail smoke shops. During the coming months, nationwide distribution will be expanded to include supermarkets, drug stores, liquor stores, vending machines, and other outlets that normally carry smoking products.

The company previously conducted research programs with California smokers in Modesto and Monterey County, using test market versions of Free made in West Germany.

Research on the product began in 1972 when Rosen Enterprises, Inc. (now Tobacco Concepts, Inc., of Cherry Hill, N.J.) conducted the first tests of a non-tobacco smoke.

During the course of the next two years, Whitehall Products, Inc., of Helmetta, N.J. a tobacco company that Danna headed at the time, and International Flavors and Fragrances, New York, joined the research effort.

Unable to manufacture an acceptable product at reasonable cost, Rosen Enterprises ceased work on the project early in 1975. Later that year, Danna, as chief executive officer of International Brands, initiated a new research program.

Early in 1976, the company sought assistance from Heinrich Borgwaldt in West Germany, internationally-known tobacco ingredients manufacturers with an extensive research capability, where two critical breakthroughs were made that enabled the product to be more suitably developed and economically produced for the consumer market.

First of all, Borgwaldt claimed it had eliminated the offensive

taste and aroma emitted by previous versions of the product by uniformly extracting butterfat oil from the cocoa bean's outer shell. Second, the cocoa substance was aesthetically modified to assume the form and appearance of cigarette tobacco, through a patented process called Heiboflake. In addition, further flavoring refinements were made, enabling Free to simulate the taste sensation of conventional cigarettes.

Danna puts the total cost of more than five years of research and development at \$7 million.

International Brands is an affiliate of Peter Stokkebye International, Ltd., an importer of cigars, lighters, pipes, and pipe tobacco. Besides their corporate headquarters in Los Gatos, the companies maintain other facilities in De Witt, N.Y.; Gelsted, Denmark; and Hamburg, West Germany.

CONTROLLED POROSITY Porous Plug's Controlled Porosity Wrap

Porous plug wrap, developed by Dexter specifically for low-tar cigarettes, offers CONTROLLED POROSITY. We make it via our proprietary *long fiber nonwovens* process which closely controls the size and frequency of the pores in the wrap material. Result: porous plug wrap with unmatched consistency in porosity levels. Dexter porous plug wraps are also unmatched in running performance on your rod making systems. Available in porous, superporous and heatseal versions. All carefully designed to give you the best run for your money in porous plug wrap. For information, write to Dexter.

DEXTER Specialty Nonwovens

C.H. DEXTER DIVISION, The Dexter Corporation
One Elm Street, Windsor Locks, Connecticut 06096
Tel: (203) 623-9801 • Cable: DEXSTAR • TWX: 710 420 0593

DEXTER SPECIALTY NONWOVENS WORLDWIDE:
C.H. Dexter Limited, London • Dexter International S.A.,
Brussels • Dexter Materials Limited, Rexdale, Ontario,
Canada • Dexter Far East, Inc., Tokyo •
C.H. Dexter, Crow's Nest (Sydney), Australia.