From: Smoking & Health Information Section
The Japan Tobacco & Salt Public Corporation
2-1. Toranomon, 2-chome, Minato-ku, Tokyo 107

1980

"SMOKING AND HEALTH ISSUE IN JAPAN"

INTRODUCTON

The manufacture and the sale of cigarettes and other tobacco products, and the sale of salt are under the exclusive control of the Japan Tobacco & Salt Public Corporation (JTS) based on Tobacco Monopoly Law in Japan.

JTS is a quasi-governmental agency under the supervision of the Ministry of

HEALTH WARNING

Following the instruction by the Minister of Finance, all cigarette packages manufactured since 1972 carry a health warning which translates, "For the sake of health, let's be careful about excessive smoking".

Imported cigarettes are required to carry the same warning.

TAR AND NICOTINE

Since 1967, JTS has published annually the result of test determining the tar and nicotine content of domestic cigarettes. The result of the 1980 test is on page 4, and the standard smoking condition is on page 5.

RESEARCH

Research aimed at developing a "safer cigarette" is being mainly conducted by JTS's Central Research Institute. The main projects include the development of new products low in tar and nicotine content, and the development of reconstituted tobacco, flavors and filters for cigarettes.

Since 1957, the contracted research on smoking and health by JTS has been conducted. The budget for this program is 150 million yen for Fiscal Year 1980. List of research projects conducted by JTS is on page 7- 12.

Meanwhile, the Bi&olgical Research Center was established in 1973 as an institute attached to the Central Research Institute.

Finance.

ADVERTISING

Since 1969, JTS has employed self-imposed controls on cigarette advertising, as follows:

- Main advertising policies emphasize the better smoking manners, namely the "Smokin' Clean Campaign".
- 2) Advertisements on T.V. and radio are limited to the introduction of new brands.
 - 3) No advertisements for cigarettes should appear in any publications whose readers are likely to be women and/or youth.

CONSUMPTION

According to a JTS annual nationwide survey, which coverd 13,000 adults in 1979, 73.1% of the male population smokes, compared with 15.4% of the female. In 1979, the average number of cigarettes smoked per day was 24.2 for men and 16.0 for women.

Cigarette consumption in FY 1979 totaled 307 billion cigarettes, and it increased slightly compared with 1978.

ANTI-SMOKING MOVEMENT

Though there have been a few anti-smoking groups in Japan, a strong movement to hate tobacco smoke occurred in recent years, aiming at protection of nonsmokers' rights.

The group for establishment of nonsmokers' rights to hate tobacco smoke sued Japan National Railway, Government and JTS in last April, and it is at issue.

RESTRICTION

Smoking is prohibited by law in a number of public places such as theaters, concert halls, museums, cinemas, buses, streetcars, subways, on the viewpoint of prevention aginst fires, since previous time.

In recent years, bullet train between Tokyo and Hakata has a no-smoking car and domestic airlines have nonsmokers' seats. Also, in the staion yard, smoking is restricted for two hours in morning and evening.

On the other hand, smoking in waiting-rooms of national hospitals and sanatoriums is restricted based on the request of the Ministry of Health and Welfare.

A law enacted by the Diet in 1900 prohibits cigarette smoking by minors. It has three major provisions:1) minors (those under 20 years of age) are prohibited either from smoking or posessing any kind of smoking apparatus, 2) parents or gurdians are liable to fine if they fail to stop their children from smoking, and 3) anyone selling cigarettes or smoking apparatus to minors is liable to fine.

VIEW CONCERNING SMOKING AND HEALTH

In 1971, the Government Monopoly Enterprise Council, which has been set up for the purpose of giving advice to the Minister of Finance of JTS's management, reported the findings of a Special Committee. This report contained "View on the Effects of Smoking on Health" (see page 6).

NICOTINE AND TAR CONTENT (1980)

Brand	Туре	Nicotine	Tar
		mg/cig.	mg/cig
Tender	FK	0.3	6 8
Just	FK	0.3	8
Current	FL	0.6	13
Partner	FL	0.7	10
Komorebi	FK	0 -8	15
Cabin 85	FK	0.8	15
Luna	FL	0.8	15
Mild Seven	CFL	0.9	14
Bcho -	FR	0.9	15
Miyabi	F90am	0.9	16
Cherry	FL	1.0	16
Wakaba	FL	1.0	17
Mini-Star	F mini	1.1	13
Marlboro	FL	1.1	16
Seven Stars	CFL	1.1	. 16
Golden Bat	R	1.1	17
Uruma	FL	1.1	17
Cebin	PSK	ī.ī	. 18
Joker	F 120mm	1.1	18
Clinaci	R	1.1	19
Mi-ne	CFL	1,2	16
Violet	FL	1.2	17
Old Splendor	FK	1.2	18 .
Promenade	FK	1.2	18
Sometime	FKM	1.2	18
Astor	FK	1.2	19
Hi-lite	FL	1,2	19
li-Tone	FL	1.3	18
ralk	FSK	1.3	18
Epson	FK	1.3	18
lope (10)	FR	1.3	18
Mr. Slim	FSK	1.3	20
fr. Slim menthol	FSKM	1.3	20
Benson & Hedge's	FK	1.5	19
lope (20)	FL.	1.5	20
Peace(20)	FL	2.0	23
Pasce(10)	R	2.1	25

1.05

15.9

Sales Weighted Average Value

HK01327098

STANDARD SMOKING CONDITION

Item	Standard smoking condition
Puff duration (sec)	2+0.1
Puff interval (sec)	58 <u>+</u> 1
Puff volume (ml)	35 <u>+</u> 0.3
Butt length	For plain cigarettes: 30mm
	For filter-tipped cigarettes of tip
•	overvrap less than 27mm : 30mm
	For filter-tipped cigarettes of tip
,	overwrap greater than or equal to
	27mm : tip overwrap + 3mm
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Report by the Special Committee

"View on the Effects of Smoking on Health" (Provisional Translation)

It has been pointed out, statistically and epidemiologically, that a considerable number of heavy smokers are among the deaths caused by lung cancer, and similar findings have also been made for such heart ailment as angina pectoris and myocardial infarction.

On the other hand, from the pathological point of view, there still remains a need for further study to clarify the relationship between smoking and the incidence of lung cancer. There are also various questions that await further examination to explain a direct and causal connection between smoking and any change in the blood vessels.

Under such circumstances, although the fact that public anxiety over the possible harmful effects of smoking is growing with the rapid increase in lung cancer and heart defects in recent years cannot be ignored, there are yet lemological and pathological findings that do not agree, and, it the clinical viewpoint is added to these existing inconsistencies, there is no simple and final conclusion to the problem of smoking and health.

In dealing with this problem, it is hoped that a comprehensive examination of the matter will be made considering it from the psychological viewpoint and taking into consideration how deeply and widely rooted the habit of smoking is among the Japanese people.

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Factors related to the proliferative pictures of the alveolar and bronchiolar epithelia
Aichi Medical College
Tauchi, H.

Mass survey for lung cancer by sputum cytology Tohoku University, School of Medicine Nakada, T.

Carcinogenic process of lung cnacer using a successful canine experimental model
Tokyo Medical College
Hayata, Y.

Studies on the histogenesis of lung cancer Keio University, School Of Medicine Kageyama, K.

Sequential cytologic study of the development of squemous cell carcinoma induced in subcutaneously implanted bronchial autograft of dog
Hamamatsu medical Center
Kobayashi,N.

Experimental studies on relationship between pulmonary fibrosis and bronchial epithelia in rat.

Chiba University, School of Medicine

Hayashi,Y.

Effect of cigarette smoke on respiratory epithlium in mice Chiba University, School of Medicine Ide, G.

Effect of cigarette smoke condensates on metabolism of chemical carcinogens
Chiba University, School of Medicine
Yamane, Y.

Genetic and environmental factors related to pulmonary carcinogenesis Tohoku University, School of Medicine Sato, H.

Morphorogical changes in the bronchial alveolar system of mice following continuous exposure of nitrogen dioxide

The Center for Adult Disease, Osaka
Hattori, S.

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Osaka University, School of Medicine
Kitamura, H.

Thromboplastic and fibrinolytic activity related to smoking habit and lung cancer

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Tanaka, K.

Host immune response against autologous and allogeneic cell lines from human lung cancer
Tokushima University, School of Medicine
Inoue, G.

Immunological studies on cigarette smokers Hiroshima University, School of Medicine Nishimoto, Y. Physico-chemical studies on the smoking habit and lung cancer:

Pulmonary deposition of particulate matter in relation to
the particle size

National Institute of Industrial Health
kawai, K..

Biological effect of gaseous components in cigarette smoke:

Effect of carbon monoxide and nitrogen dioxide exposure on biological function

National Institute of Industrial Health

Kawai, K.

Studies on chronic bronchopulmonary disease in relation to pulmonary deposition of constituents of tobacco smoke

Tokyo Metropolitan Institute of Gerontology
Ohta, K

Development of a rapid in <u>vitro</u> carcinogenesis bioassay with mammalian cells Cancer Institute
Takayama, S.

Detoxification of polycyclic hydrocarbons contained in tobacco smoke Cancer Institute
Takayama, S.

Inhalation bioassay of cigarette smoke in hamster The Institute of Environmental Toxicology Shirasu, Y.

Studies on mutagenicity of cigarette smoke condensates Tokyo University, Institute of Medical Science Matsushima, T. Effect of nicotine on the induction of drug metabolizing enzymes
Nara Medical University
Kurogochi, Y.

Experimental stydies on pathological effects of smoking on cardiovascular disease
Shimane National Medical School
Yamori, Y.

Effect of nicotine and smoking on autonomic nervous system and peripheral circulatory function

Kyoto University, School of Medicine

Immura, H.

Studies on cardiovascular and microvascular effects of smoking Institute of Public Health Asano, M.

Studies on antagonistic substances against cardiovascular and microvascular effects of smoking
Tokyo University, Faculty of Agriculture
Suzuki, A.

Clinical Investigation on the role of smoking in the pathogenesis of pulmonary disease

Juntendo University, Medical School

Homma, H.

Clinical investigation on the effects of smoking on respiratory function Kyoto University, School of Medicine Torizuka,K.

Studies on genetic factors in choronic obstructive pulmonary disease Funto University. School of Medicine

Effects of nicotine on cardiovascular and gastrointestinal systems with special reference to transmitter release Kyoto University, School of Medicine Fujiwara, M.

Studies on biological effects of smoking in rhesus monkey Central Institute for Experimental Animals Yanagita, T.

Psychopharmacological effects of smoking: Smoking behavior in rhesus monkey

Central Institute for Experimental Animals

Yanagita, T.

Effect of maternal smoking during pregnancy on fetal growth Kansai Medical School Sawaragi, I.

Effect of smoking on feto-placental function Kobe University, School of Medicine Tojo, S.

Effect of passive smoking on non-smoker Kobe University, School of Medicine Matsukura, S.

Epidemiological studies on the effect of passive smoking on children Medical College of Miyazaki Tsunetoshi,Y.

Effects of smoking on indoor air pollution Institute of Public Health Matsushita,H. Regulation of carcinogenic hydrocarbon metabolism in human lung Tohoku University, School of Medicine Watanabe, M.

Study on relationship between the types of lung cancer and smoking Chiba University, School of Medicine Katsuki, H.

Effec of smoking on bronchial clearance mechanism Shinshu University, School of Medicine . Kusama, S.

Effect of smoking on Microcirculatory system of organ Osaka University, School of Medicine Abe, H.

Epidemiological and pathological study of cardiovascular diseases Shimane Medical University Fukase, M.

Effect of smoking on ultrastructure and function of blood vessel Keio University, School of Medicine Toyoshima, S.

Neuropharmacological study on effects of nicotine and its related compounds on gastric function

Kohchi Medical University

Ohsumi, Y.

Study on Psychological effect of smoking Hohsei University Chiba, Y.

RESEARCH NEEDS

- 1. Passive Smoking Particularly the role of polonium-210
- 2. Nicotine/Tar Ratio First to determine the acceptable level of micotine.
- 3. The effects of low-yield cigarettes.
- 4. Homgenized Leaf Curing Perfect the technology and prepare sufficient samples for long-term inhalation.