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SALT FLUORIDATION

(Item proposed by the Government of Mexico)

In spite of the efforts made all over the world to solve the problems of oral health, these problems are so great that it is urgently necessary to give them priority and to find ways to solve them that are more effective and consistent with the present situation. So limited is the impact of traditional dental services that even institutions that most provide them, like social security institutions, are also affected by these problems, as is shown by a study done in a Latin American social security institute (Table 1). Accordingly, Mexico takes the liberty to present to this Meeting two propositions which it regards as important in addressing the problem:

- i) oral diseases, particularly dental caries, must be prevented by measures of collective benefit; and
- ii) a study must be made of the oral health of the Mexican population to detect the variables involved in its improvement, in order to implement oral health systems that will defeat any diseases that arise before they can inflict serious damage.

In regard to the first proposition, while dental caries certainly poses no serious mortality problem, the available epidemiological information indicates that more than 90 per cent of the population suffers from it, and its economic importance derives from the labor and student absenteeism that it causes (Table 2).

Dental caries also affects the personal and family economy, for studies done in our country indicate that the treatment of a single tooth costs an average of Mex.\$500.00 pesos. This cost is for institutional care in the establishments of the health sector, and the figure is much higher in private dental practice (Table 3). Moreover, on the basis of the average Mexican personal income, less than 7 per cent of the population can afford private dental care.

The effectiveness of fluoride in preventing dental caries has been demonstrated all over the world, but its topical application has been very limited compared with the more extensive results obtained by adding fluoride to drinking water and salt (Table 4).

Highly recommendable as this measure is, however, it does not lend itself to general application everywhere, particularly in countries that have not yet reached high levels of development. Mexico, while striving to improve its standard of living, is still such a country, and, aware of the many studies done in different countries which have demonstrated the utility of salt as a vehicle for fluoride, is giving priority to salt fluoridation as a temporary substitutive measure. The research done demonstrates the existence even now of the requisite infrastructure for attaining a coverage of at least 80 per cent of the population in the first year of the fluoridation program.

In Mexico there already is a precedent for table salt fluoridation, a product having been compounded in 1972 which contained 20 mg potassium iodate/kg, 0.80 per cent sodium aluminosilicate (an antihumectant), and 0.20 per cent sodium fluoride.

Moreover, in 1974 a presidential decree made compulsory the iodization of all salt produced for human consumption. This measure has demonstrated its usefulness, and we think that a similar provision could be enacted for fluoride. Indeed, a draft of a decree for fluoridation of table salt in the country is already under study.

Mexico also feels that it will shortly be able to offer the Organization's other Member Countries its technical cooperation and experience in this area, which may prove valuable in preventing the problem of dental caries, which has the highest frequency in the world.

In regard to the second point, it is essential to obtain a scientific diagnosis of the oral health of the population by carrying out an analytical epidemiological analysis to identify the variables involved in the health-disease process and so permit the reorientation of programs for oral health measures both in the institutions of the health sector and in private practice, and a reorientation of curricula and continuing education in professional development. The infrastructure for the conduct of these studies already exists, for personnel have already been trained in oral epidemiology, there are health services almost everywhere in the country, and interinstitutional coordination is proceeding effectively.

The General Dental Care Administration of the Secretariat for Health and Welfare of Mexico has drawn up an appropriate protocol consistent with the actual situation in the country.

In our view, only with an accurate diagnosis of the actual oral health situation is it possible to provide services that meet the demand and to identify the problems that are not apparent in it, which can give us the parameters for the evaluation of dental care programs. Only in this way can we guarantee that the services provided are adequate and necessary to solve the existing problems.

Finally, we wish to mention an important point: that oral health cannot be divorced from the health of the whole organism, and we cannot hope to attain health for all so long as the problems of health are not addressed as those of the whole human being.

Accordingly, the Mexican Government requests that this Council give appropriate priority to dental care programs.

TABLE 1

DENTAL SERVICES AND PROPORTION PROVIDED FOR EACH
INSURED BY A SOCIAL SECURITY INSTITUTION IN
LATIN AMERICA IN 1978

Service	Total	Proportion per insured
Fillings	50,864	0.06
Prophylaxis	14,617	0.02
Extractions	9,890	0.01
Surgery	1,560	0.002
Endodontia	1,679	0.002
Others	24,609	0.03

TABLE 2

GENERAL FIGURES ON DENTAL CARIES IN MEXICO

General prevalence	90%
In persons older than 3 years	6 teeth untreated
Approximate total number of untreated teeth	400,000,000

Note: Moreover, these figures do not cover all the problems caused by periodontopathies, malocclusions and lesions of the bone and mucosa.

TABLE 3

APPROXIMATE COST OF BASIC DENTAL
SERVICES, 1978

Service and Quantity	Approximate Cost (US\$)		
	Low	Average	High
Fillings	(5.00 each)	(10.00 each)	(15.00 each)
400,000,000	2,000,000,000	4,000,000,000	6,000,000,000
Extractions	(1.00 each)	(2.00 each)	(5.00 each)
90,000,000	90,000,000	180,000,000	450,000,000
Total	2,090,000,000	4,180,000,000	6,450,000,000

TABLE 4

THEORETICAL OCCURRENCE OF CARIOUS TEETH IF FLUORIDE HAD BEEN APPLIED
SYSTEMICALLY OR TOPICALLY TO TEETH IN THE MEXICAN POPULATION, 1978

Actual number of cariou teeth without use of fluoride	Fluoride Use		Number of teeth that would have been kept sound by use of fluoride	Number of teeth that would have turned cariou with use of fluoride
	Vehicle	% reduction		
400,000,000	fluoridation of the drinking water supply or salt	65	260,000,000	140,000,000
400,000,000	school drinking water	40	160,000,000	240,000,000
400,000,000	mouth washes 0.2% NaF weekly SnF 9% semi-annually SnF	25	100,000,000	300,000,000
400,000,000	tooth brushing 0.1% F daily	20	80,000,000	320,000,000