Associated mitral incompetence did not appear to influence post-operative progress in this series, except in the presence of a heavily calcified mitral valve. With one exception *aortic incompetence* was not of sufficient degree to modify the success of the operation. *Tricuspid incompetence* developed for the first time after operation in six patients; except in one case, it did not seriously detract from clinical improvement.

In conclusion, relief of circulatory obstruction at the mitral valve has been shown to be a dominant factor in determining clinical improvement after mitral valvotomy, but enlargement and failure of the right heart consequent on this obstruction, and other factors, including particularly intercurrent emphysema and bronchitis, affect adversely the degree of success achieved by surgical treatment of mitral stenosis.

I thank Dr. William Evans, Dr. Wallace Brigden, Mr. Vernon Thompson, and Mr. Geoffrey Flavell for their help, encouragement, and advice in the preparation of this paper; Professor Dorothy Russell and her staff for the morbid anatomical findings; Mr. John Knight for his patient assistance with mechanical sorting on the Powers Samas machine; the registrars of the cardiac department for their help; and Mr. William Dicks, Mr. Arthur Gallup, Miss Gwen Clarke, and Miss Patricia Archer for technical assistance.

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TEETH OF 5-YEAR-OLD LONDON SCHOOLCHILDREN (1955)

WITH A COMPARISON OF RESULTS OBTAINED FROM 1929 TO 1955

BY

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A survey of the dental condition of 5-year-old children attending London County Council day schools in 1955 was made in continuation of a series begun in 1929 at the request of the Board of Education, and from 1943 until 1951 carried out at two-yearly intervals. As it proved impossible to undertake one in 1953, the latest survey was made only after an interval of four years. References to papers on the earlier work are given at the end of this report.

The schools were scattered throughout the Metropolitan area, and those visited in 1929 were, so far as possible, used for the succeeding surveys. The same probe-and-mirror methods of examination and the same criteria for structure and caries were employed in all cases. These were developed by one of the authors (Mellanby, 1934), who took a prominent part in all the inspections.

A tooth was said to be hypoplasia-free (Hy_0) when its surface was smooth and shiny. Any roughness was graded according to type and degree, differentiation being made between gross hypoplasia (G-Hy) and M-hypoplasia (M-Hy) (King, 1940). The gross type, which is found in relatively few teeth, is the only one recognized by some dental surgeons; M-hypoplasia, on the other hand, is found in the majority of teeth. A tooth was regarded as caries-free when no disease could be diagnosed by the method of examination employed, and a child was considered to be free from caries only if all its teeth (with the exception of the few naturally shed incisors) conformed to this standard. Any history or evidence of extractions or fillings automatically barred it from this category. When the earliest inspections were made in 1929, very few of the children were free from dental disease, and it was decided by the Board of Education (1931), which was responsible for publishing the results, to bracket with such children any who had up to three teeth which were carious to a very slight degree. Even with this addition, however, only 4.7% could be brought into the so-called caries-free category, now referred to as "caries-free and almost caries-free," a classification which has been perpetuated for the other years in order to make comparison with the 1929 findings possible.

In presenting the results of the various investigations, the surface structure of the teeth is expressed both as the percentage incidence of the different grades of hypoplasia and as the average hypoplasia figure (A.H.F.). The latter, which relates only to M-hypoplasia and gives a rough computation of the extent of this type of defect, is obtained by allotting a number to every tooth in each grade (1 for $M\text{-}Hy_1$, 2 for $M\text{-}Hy_2$, and 3 for $M\text{-}Hy_3$) and dividing the sum of the numbers—that is, the total M-hypoplasia figure for any group—by the number of teeth in the group, excluding those showing gross hypoplasia. Caries is expressed as a percentage incidence and as the average caries figure (A.C.F.), which is estimated in a similar way to the A.H.F. The numbers 1, 2, and 3 are allotted to the carious teeth according to their grading, and the total caries figure is divided by the number of teeth in the group. For both A.H.F. and A.C.F. the maximum possible value is 3; therefore the greater the number of teeth with the more severe grades of M-hypoplasia and caries, the nearer the figures approach to this number.

1955 Survey

In this survey the teeth of 1,205 children were inspected. The tables of results are self-explanatory and need little comment.

Surface Structure

The 21,627 teeth which it was possible to examine for surface texture, amounting to about 90% of the full complement, were graded according to type and degree of roughness. The remainder, which could not be graded, consisted of shed incisors, extracted teeth (mainly molars), and teeth which were too carious or too extensively filled for an estimation of their structure to be made.

In Table I are shown the incidence and extent of M-hypoplasia and the incidence of G-hypoplasia in each type of tooth and in all types taken together. The "pattern" approximates to that found in the previous surveys of the series and in others made in residential homes (institutions)

and private schools. The best structure occurs in the lower incisors (only 15.6% of the centrals and 22.0% of the laterals showing any degree of M-hypoplasia) and the worst in the molars, particularly the upper second (89.7% with M-hypoplasia). The upper incisors, especially the centrals, are much more hypoplastic than the lower. It must again be emphasized that there is altogether a much greater incidence of M-hypoplasia than of gross—59.1% compared with 3.1%.

Caries

Incidence and Extent.—Details of caries incidence and extent in 1955 are given in Table II, and again the "pattern" for each type of tooth and for all types together resembles that found in previous years. Teeth extracted because of caries are included in the severe caries group (C_3), although there is no evidence that they were all necessarily in this category; the total percentage of carious teeth is therefore equivalent to the D.M.F. figure per 100 teeth. Least caries, as well as least M-hypoplasia, occurs in the lower incisors (5.2–5.3%), and most, as is also the case with M-hypoplasia, in the molars. There is considerably less disease in the upper first molars (41.7% carious) than in the others; the most affected are the lower second molars (70.2% carious), in spite of the fact that these teeth are the last to erupt. According to the above-mentioned standards, 15.5% of the children examined were caries-free and 21.2% "caries-free and almost caries-free" (see Fig. 1).

Superficial Staining of Teeth.—In 1955, as in our previous surveys, children who had black or dark-brown superficial stains on some, at least, of their teeth had, in general, a lower incidence of caries (20.2%) than children with no stains (29.1%), and much less than those with green stains (39.2%) (see Table VII).

Treatment and Natural Arrest of Caries.—There had been an appreciable amount of treatment prior to the inspection of the children, 16.7% having been filled and 11.1% extracted (see Table VIII). On the other hand, 15.0% of the carious teeth observed showed natural arrest. As recorded in these surveys, arrest is not necessarily the final, typical condition mentioned in textbooks, for the surfaces of the cavities,

TABLE I.—*Surface Structure of Different Types of Teeth* (1955)

Type of Tooth	Total No. of Teeth Examined for Structure	Percentage of Teeth				Total Percentage of Teeth with M-Hypoplasia	Percentage of Teeth with Gross Hypoplasia	A.H.F.*
		Hy_0	M-Hy_1	M-Hy_2	M-Hy_3			
Upper jaw:								
Central incisors ..	2,118	26·4	33·2	27·3	7·3	67·9	5·7	1·17
Lateral ,, ..	2,282	34·9	39·4	17·6	3·2	60·3	4·8	0·89
Canines	2,392	37·5	43·4	14·0	2·4	59·9	2·6	0·81
1st molars	2,157	9·9	34·2	42·7	8·2	85·1	5·1	1·52
2nd ,, ...	2,263	8·9	32·3	47·9	9·5	89·7	1·5	1·59
Total upper jaw ..	11,212	23·8	36·7	29·6	6·0	72·3	3·9	1·19
Lower jaw:								
Central incisors ..	1,883	83·6	14·8	0·8	0·0	15·6	0·8	0·17
Lateral ,, ..	2,336	77·4	20·7	1·2	0·1	22·0	0·6	0·23
Canines	2,399	61·7	30·1	3·7	0·3	34·1	4·2	0·40
1st molars	1,893	22·1	35·4	32·7	6·2	74·3	3·6	1·24
2nd ,, ...	1,904	11·7	34·3	40·7	11·4	86·4	1·9	1·53
Total lower jaw ..	10,415	52·8	27·0	14·7	3·3	44·9	2·2	0·68
Totals	21,627	37·8	32·0	22·4	4·7	59·1	3·1	0·94

* A.H.F. = Total M-hypoplasia figure / Total number of teeth examined for structure (excluding those with gross hypoplasia)

TABLE II.—*Caries* (1955). *Incidence and Extent in Different Types of Teeth*

Type of Tooth	Total No. of Teeth Assessed for Caries (inc. Extractions)	Percentage of Teeth				Total Percentage of Carious Teeth	A.C.F.*
		C_0	C_1	C_2	C_3		
Upper jaw:							
Central incisors ..	2,179	72·2	6·8	12·3	8·7	27·8	0·57
Lateral ,, ..	2,342	82·3	4·9	8·2	4·6	17·7	0·35
Canines	2,410	88·9	3·2	5·3	2·6	11·1	0·22
1st molars	2,410	58·3	10·2	15·6	15·9	41·7	0·89
2nd ,, ...	2,410	41·9	18·4	22·4	17·3	58·1	1·15
Total upper jaw ..	11,751	68·6	8·8	12·8	9·9	31·4	0·64
Lower jaw:							
Central incisors ..	1,887	94·8	2·3	2·5	0·5	5·2	0·09
Lateral ,, ..	2,340	94·7	2·1	2·6	0·6	5·3	0·09
Canines	2,410	91·2	2·4	4·5	1·9	8·8	0·17
1st molars	2,410	37·5	7·3	24·5	30·7	62·5	1·48
2nd ,, ...	2,410	29·8	16·3	19·3	34·5	70·2	1·59
Total lower jaw ..	11,457	68·3	6·3	11·1	14·3	31·7	0·71
Totals	23,208	68·4	7·5	12·0	12·1	31·6	0·68

* A.C.F. = Total caries figure / Total number of teeth (including extractions)

TABLE III.—*Structure–Caries Relationship* (1955)

Grade of Structure	Incisors			Canines			Molars			All Types		
	Total No. Exam.	% Carious	A.C.F.	Total No. Exam.	% Carious	A.C.F.	Total No. Exam.	% Carious	A.C.F.	Total No. Exam.	% Carious	A.C.F.
Hy_0.. ..	4,739	2·3	0·03	2,378	2·0	0·03	1,054	16·2	0·24	8,171	4·0	0·06
M-Hy_1 ..	2,366	14·3	0·24	1,759	10·7	0·19	2,792	33·3	0·53	6,917	21·1	0·34
M-Hy_2 ..	1,023	39·0	0·75	425	32·7	0·63	3,400	67·0	1·30	4,848	58·1	1·12
M-Hy_3 ..	231	74·0	1·77	65	70·8	1·80	725	93·9	2·34	1,021	88·0	2·18
G-Hy ..	260	39·2	0·69	164	18·3	0·32	246	50·4	0·97	670	38·2	0·70

although hard to the probe, were in many cases still uneven and rough. It was rarely found in such young children that the irregularities had been mechanically removed and the surfaces smoothed and polished, a process which might take months or years, according to the positions of the cavities and the nature of the children's food.

Structure–Caries Relationship

In Table III are given the caries incidence and extent of those teeth *whose structure it was possible to assess,* and it is apparent that, whether incisors, canines, and molars are considered separately or together, the amount of caries increases with the severity of M-hypoplasia. For instance, taking all types together, only 4.0% of the non-hypoplastic teeth (Hy_0) are carious, compared with 88.0% of those with severe defects (M-Hy_3). The average caries figures show the same trend. Gross hypoplasia is associated with much less caries (38.2%) than either moderate or severe M-hypoplasia (M-Hy_2, M-Hy_3), but with more than the non-hypoplastic teeth.

The figures just quoted and others in Table III support the theory that, in general, the better the structure of a tooth—that is, the less M-hypoplasia—the greater its resistance to caries. It is, however, obvious that even a non-hypoplastic tooth may become carious if conditions for the initiation of the disease, whatever these may be, are strong and the resistance of the body (and so of the erupted tooth) is low, whereas a tooth with severe hypoplasia may remain free from the disease if the initiating factors are weak and the bodily resistance is high.

Some Comparisons Between the 1955 Results and Those of Previous Years

Freedom from Visible Caries (1929 to 1955)

One of the most striking features of the findings under review is the variation in the percentages of caries-free children and caries-free teeth. As will be seen from Fig. 1, there is a marked contrast between 1929 and the later years. By 1943 the children in the caries-free and almost caries-free group had risen from 4.7 to 24.2% (14.9% caries-free) and by 1947 to 37.5% (28.1%), after which they declined to approximately the 1943 level and remained more or less the same until 1955, in which year there was a further small decrease to 21.2% (although the caries-free group showed a very slight improvement (15.5%) over the 1951 figure (14.8%). The percentage of caries-free *teeth* can be seen from Table IV, by deduction, to follow a similar plan for the six later surveys. Figures for 1929 are not available, as they were not published at the time and the charts were lost during the second world war.

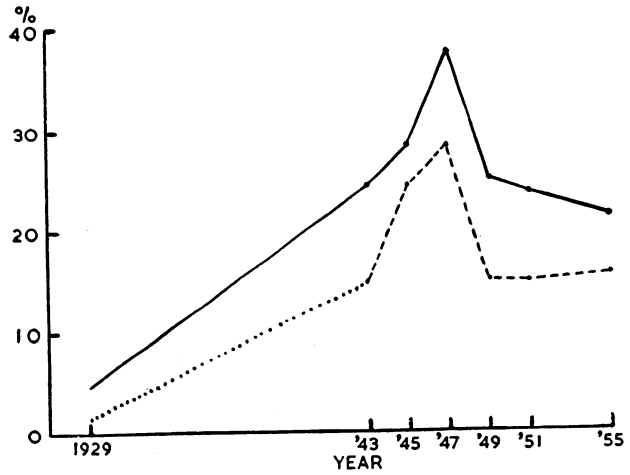

FIG. 1.—Freedom from visible caries (1929–55). - - - - Caries-free *children.* ——— Caries-free+almost caries-free *children.*

TABLE IV.—*Caries* (1943 *to* 1955) *Incidence and Extent*

Year	No. of Children Examined	% Teeth Carious*	% Teeth with Severe Caries (C_3)*	Extent of Caries (A.C.F.)*	Average No. Carious Teeth per Child*	
					All Children	Excluding Children Free from Caries
1943	1,870	30·1	12·6	0·65	5·8	6·8
1945	691	26·5	8·3	0·55	5·1	6·8
1947	1,590	20·3	6·6	0·42	3·9	5·5
1949	692	26·7	8·7	0·54	5·1	6·0
1951	1,395	27·5	7·6	0·56	5·3	6·2
1955	1,205	31·6	12·1	0·68	6·1	7·2

* Inclusive of filled and extracted teeth.

So far as these investigations go, therefore, it seems that 1947 was the peak year as regards improvement in the dental condition of children of the 5-year-old age group in the L.C.C. schools, but whether the peak period was actually in 1947, or whether it occurred between 1945 and that year, or between 1947 and 1949, cannot be stated from the data available.

Similar trends have been found on the Continent, notably in Norway, and in other parts of this country. For example, it has been reported (Staffs County Council, 1954, 1955) that in Staffordshire County Council schools there were few 5-year-old children free from caries in 1930, and that there, too, 1947 appeared to be the peak year, after which the numbers fell sharply again.

It is interesting to note that in our surveys of 1945 and 1950 in residential homes (institutions) and private schools there were fewer caries-free children in 1950 among the private-school children, but rather more among those in the homes.

Caries (1943 to 1955)

Incidence and Extent.—An overall picture of the changes that took place in the incidence and extent of caries between 1943 and 1955 is seen in Figs. 2 and 3 and Table IV. It is clear that in 1947 there was a smaller total amount of decay, and less of each grade, than in any other year, whereas in 1955 there was the largest total incidence, with more severe caries than at any time since 1943. (The larger proportion of C_3 teeth in 1955 may have been due partly to the comparatively high extraction rate observed in that year, since all extracted teeth were counted as C_3.) The children who had some carious teeth in 1955 had a high average incidence, 7.2 teeth per child being carious as compared with the next highest figure of 6.8 in 1943 and 1945 and with the lowest of 5.5 in 1947.

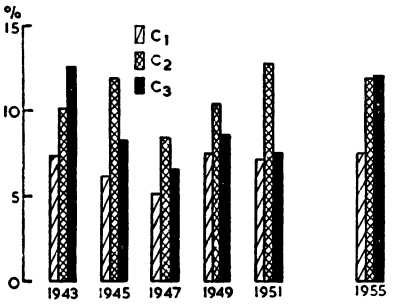

FIG. 2.—Percentage of carious *teeth* (1943–55).

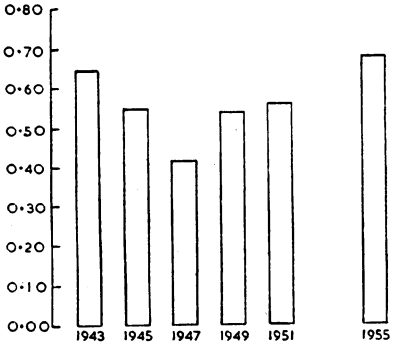

FIG. 3.—Average caries figures (1943–55).

There seems to have been a tendency in more recent years for a relative increase in the amount of caries in the lower jaw as compared with the upper, as is seen in Table V. For instance, in 1943 the percentage of carious upper teeth exceeded that of the lower; in 1949 there was the same amount of disease in each jaw, and in the latest two surveys

the lower jaw showed slightly higher percentages than the upper. Another point perhaps worth mentioning is that in 1955 the percentage of carious teeth in the upper jaw was less, and in the lower jaw greater, than in 1943. The reduction in the case of the upper teeth was largely accounted for by improvement in the central incisors; the increase in the lower jaw was distributed amongst the various types of teeth, but was particularly marked in the molars (see Table VI).

TABLE V.—*Caries in Upper and Lower Teeth Compared* (1943 *to* 1955)

Year	Percentage of Carious Teeth		A.C.F.	
	Upper Jaw	Lower Jaw	Upper Jaw	Lower Jaw
1943	33·2	26·9	0·69	0·62
1945	28·5	24·5	0·57	0·54
1947	21·0	19·5	0·41	0·44
1949	26·7	26·6	0·52	0·57
1951	26·9	28·2	0·51	0·60
1955	31·4	31·7	0·64	0·71

TABLE VI.—*Distribution of Caries* (1943 *and* 1955)

Year	Percentage of Carious Teeth				
	Central Incisors	Lateral Incisors	Canines	1st Molars	2nd Molars
			Upper Jaw		
1943	37·6	20·3	9·5	42·0	56·5
1955	27·8	17·7	11·1	41·7	58·1
			Lower Jaw		
1943	4·9	3·7	6·9	54·0	61·0
1955	5·2	5·3	8·8	62·5	70·2

Superficial Staining of Teeth.—A matter which has proved of great interest in the surveys is the association which seems to exist between caries and certain types of superficial stain found on the teeth. It was reported in the earlier studies and has already been mentioned in this paper in connexion with the 1955 findings. The subject has also been discussed by some other workers, including Pedersen (1946). Black and dark-brown stains have been shown to be related to a smaller, and green to a larger, amount of decay, but the causes of the stains and of their apparent influence on caries seem to be obscure. It may be that the varying metabolism of individual children plays a direct part, or acts indirectly via the saliva, but the whole problem obviously needs further research. The relevant figures for the studies under review are given in Table VII, where it will be seen that, taking the children without stain as the standard for caries, the black or brown stain appears, directly or indirectly, to have had a definite inhibitory effect in each instance, whereas the green stain has apparently had the reverse action.

TABLE VII.—*Caries Related to Superficial Staining of Teeth* (1943 *to* 1955)

Year	Percentage of Carious Teeth in Children with:		
	No Stain	Black or Dark-brown Stain	Green Stain
1943	30·1	19·3	33·4
1945	23·1	15·4	33·0
1947	19·8	12·4	26·0
1949	25·8	16·9	30·0
1951	25·5	14·4	33·6
1955	29·1	20·2	39·2

TABLE VIII.—*Treatment of Caries* (1943 *to* 1955)

Year	Total No. of Carious Teeth (including Extractions)	Treatment			Total Percentage of Carious Teeth Treated
		% Extracted	% Silver Nitrate	% Filled	
1943	10,886	15·7	6·7	2·7	25·0
1945	3,545	9·6	2·8	2·4	14·8
1947	6,245	15·6	2·4	4·4	22·4
1949	3,553	15·3	0·6	3·9	19·8
1951	7,412	13·0	0·1	6·1	19·2
1955	7,326	16·7	2·3	11·1	30·1

Dental Treatment and Natural Arrest.—The amount of dental treatment to which the children had been subjected prior to the various inspections is set out in Table VIII. The extraction figure for 1945 was comparatively low (9.6%); the highest rate (16.7%) was found in 1955, as also was the highest percentage of fillings (11.1% as compared with the next highest of 6.1% and the lowest of 2.4%). Natural arrest of the disease was highest in 1945, when it had occurred in 21.5% of the carious teeth present at the time of inspection. This figure compares with 11.7% in 1943, 14.2% in 1947, and 15.0% in 1955.

Notes on Surface Structure, Post-eruptive Conditions, and Caries

Comparison of the surface structure of the teeth examined over the years reveals that up to 1947 there was a great improvement, but that from this time onwards more M-hypoplasia was seen, although the increase did not appear to be as pronounced as was the increase in caries during the same period.

In all the surveys a positive relationship was found between surface structure and caries in each type of tooth—that is to say, the greater the degree of M-hypoplasia the greater the amount of the disease. The figures for all types of teeth combined, at each inspection, are shown in graphic form in Fig. 4. The actual percentage of carious teeth in any given

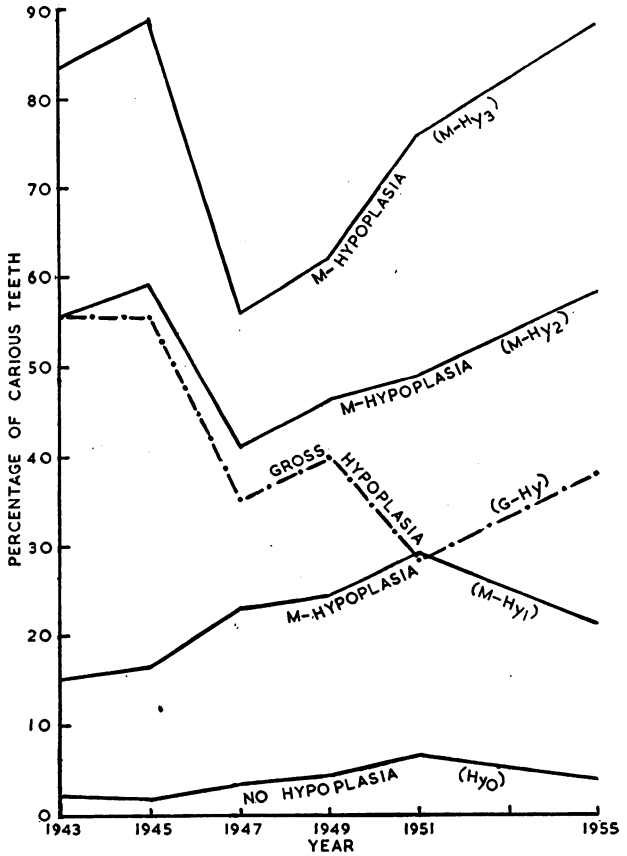

FIG. 4.—Incidence of caries in teeth of different grades of structure (1943–55).

grade of structure varies from survey to survey, but it will be noticed that there is little difference in the case of the teeth of good structure (Hy_0), whereas there is much in those with the more severe grades of M-hypoplasia (M-Hy_2, M-Hy_3) and with G-hypoplasia. These variations may in part be accidental, in the sense that different proportions of teeth were missing in the individual years through exfoliation of incisors and extraction of molars (see Table IX). We believe, however, that they must be related largely to differing post-eruptive influences, some local and others systemic. For instance, the type of food eaten may have

TABLE IX.—*Percentage of Teeth Present at Time of Inspection (1943 to 1955)*

Type of Tooth	1943	1945	1947	1949	1951	1955
Upper jaw:						
Central incisors	90·7	92·6	93·5	92·1	92·2	90·4
Lateral ,,	96·0	98·3	97·3	97·6	97·6	97·2
Canines ..	99·8	99·6	99·7	99·7	99·9	99·8
1st molars ..	90·5	95·0	94·2	92·4	95·1	92·0
2nd ,, ..	92·4	97·5	96·1	95·5	96·2	94·8
Lower jaw:						
Central incisors	83·2	79·4	81·0	76·7	77·1	78·3
Lateral ,,	97·9	98·0	97·9	96·7	97·5	97·1
Canines ..	99·9	99·9	99·9	99·9	100·0	99·7
1st molars ..	85·8	92·4	88·8	86·3	86·7	84·5
2nd ,, ..	86·0	91·7	90·5	86·8	87·5	81·3
All types ..	92·2	94·4	93·9	92·4	93·0	91·2

produced local effects, particularly in the hypoplastic teeth. Systemic influences due to nutritional and metabolic variations may have affected the composition of the saliva and also have altered the resistance of the teeth to caries. It is now well known that, even after development, living teeth are to a limited extent susceptible to changes in the composition of the body fluids. This was shown by Hevesy *et al.* (1937) in their isotope experiments, and more recently emphasized and greatly extended by Sognnaes *et al.* (1955) and by other research workers.

Comments

Is there any reasonable explanation of the rapid improvement in the dental condition of the L.C.C. schoolchildren between 1943 and 1947, as compared with that occurring between 1929 and 1943, and of the increased amount of caries in the later years?

Since there is so much controversy about fluoride, oral hygiene, and sugar, and their possible effects on the problem of caries, a word must be said about them in relation to the children under review.

It is unlikely that fluoride in the water supply played any part, either in the reduction of caries from 1929 up to 1947 or in its subsequent increase, as it has been ascertained that the fluoride content of the drinking-water in the areas from which the children were drawn was low (0.15 to 0.20 p.p.m.) and was constant within those limits for the period covered by the surveys. Nor is the marked improvement in the caries position until 1947 likely to have been due to changes in oral hygiene. There is no evidence of an increased use of the toothbrush, at least during the war and immediate post-war years.

From 1940 supplies of sugar, and from 1942 sweets and chocolates, were controlled in Britain by rationing. There were slight variations in allocations from time to time, but the average supply was very low and more or less constant until after 1947, and indeed continued at a low level until 1951 or after. It seems doubtful, therefore, whether on this basis sugar could have had much bearing either on the progressively lower caries incidence from 1943 to 1947 or on the higher incidence from then until 1951. Although caries continued to increase after 1951, the difference between the incidence in that year and 1955 (during which period sugar and sweets were decontrolled) was not as great as that occurring in the previous four years. It is difficult to see how the presumably greater sugar consumption at this time may have affected the situation; it certainly does not appear that it could have played a major part.

It is our belief that the improvement in dental condition from 1929 to 1947 and the later increase in caries were partly, if not largely, due to nutritional changes that had taken place, especially those affecting the foetus and the young child. The reasons for this view have been fully stated in reports on the earlier surveys, and a brief reference to them will suffice here.

It was a well-known fact prior to the second world war that one of the main defects of the British diet was its poor calcifying quality. When war broke out, necessitating the rationing of foods in short supply, one of the first steps taken by the Government, on the advice of nutritional scientists, was to direct foods with high calcifying properties to those classes needing them most—namely, expectant and nursing mothers and infants. These measures included priority supplies of milk and eggs, and allocations of cod-liver oil, and later (for expectant mothers only) vitamin D and A tablets as an alternative to the oil. It must be emphasized here that vitamin A, as well as D, is necessary for the normal development of bones and teeth and for increasing the resistance of the dental tissues to disease. In addition, the Government decreed that vitamins D and A should be added to all margarine and calcium carbonate to all flour. The addition of the calcium was necessary because the raising of the extraction rate of the flour from the pre-war level of 70–73% to the wartime level of 85%, or even higher, greatly increased the phytate content, and phytate is known to decrease the availability of calcium in the food. The added calcium served to neutralize the phytate effect, and any excess would help to promote or to maintain the calcification of bones and teeth and to assist other physiological functions which required optimal calcium supplies.

In a report on the 1943 survey it was stated: "It is possible that the elimination of dental caries may not be attainable until its immediate cause is known, but even without this knowledge it is probable that a continuation and extension of the present nutritional policy and its more whole-hearted adoption by the public would bring about further improvement in the architecture of teeth and in their subsequent resistance to decay." This forecast was fulfilled when the findings in the 1945 and 1947 surveys were assessed, for, as has been shown, the structure of the teeth continued to improve and the percentages of caries-free children and caries-free teeth continued to increase above the 1943 level.

After 1947 the picture is not so clear. Though the availability of supplies of foods containing calcium and vitamins D and A may have remained at the wartime level, it is not known to what extent they were used by the mothers and young children. There is some circumstantial evidence, however, that the consumption fell as a wider range of food came on the market with the gradual relaxing of controls from 1948 onwards and the final ending of rationing in 1954. If this were so, then it could, in our view, have been a contributory factor to the increased caries susceptibility of the teeth examined in the later surveys, though there must have been many other factors at work, systemic and local.

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The National Society for Mentally Handicapped Children has now appointed as its first general secretary Mr. G. W. LEE, formerly general secretary of the British Council for Rehabilitation. The offices of the National Society for Mentally Handicapped Children are at Kingsway Chambers, 162a, The Strand, London, W.C.2.