wasteful. Moreover, if haematological and clinical improvement does not occur within two weeks it can be assumed that the disorder is not due to deficiency of folic acid and that continued administration of the vitamin is contraindicated.

Summary

An account is given of the results of treatment with folic acid of (a) 16 cases of pernicious anaemia, (b) 5 cases of refractory megaloblastic anaemia, (c) 10 cases of the sprue syndrome, (d) 3 cases of subacute combined degeneration of the cord, (e) 5 cases of aplastic and hypoplastic anaemia, (f) 9 cases of leucopenia, (g) 9 cases of thrombocytopenia, and (h) 5 cases of ulcerative colitis.

A haemopoietic response was obtained only in the cases in which the bone marrow was megaloblastic—i.e., cases in groups a, b, and c.

No therapeutic changes were obtained in cases of aplastic anaemia, leucopenia, or thrombocytopenia.

In the sprue syndrome folic acid controlled the diarrhoea and produced general clinical improvement in adult patients suffering from tropical sprue and idiopathic steatorrhoea. Folic acid by itself seldom restored the blood level or blood picture to normal. In none of the cases of coeliac disease was any haematological or clinical improvement noted.

The clinical and sigmoidoscopic appearances in 5 cases of idiopathic ulcerative colitis were unaffected by folic acid therapy.

The rationale of the action of folic acid and the principles underlying its therapeutic administration are discussed.

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The New Health Club, in which the late Sir William Arbuthnot Lane was a prominent figure, revived its activities after wartime dormancy on March 19 with a tea-time *causerie* at which Sir Albert Howard, for many years imperial economic botanist to the Government of India, gave an address on "Soil, Food, and Health." Sir Albert Howard has had a large experience of the food habits of primitive peoples which enable them to withstand some of the ills besetting civilization. He admitted that in a community such as ours it was not possible to revert to an entirely primitive dietary; the easiest thing to concentrate upon, he said, was bread. It was possible even in London to obtain properly grown wheat—"properly grown" meaning the cultivation of the soil having regard to its natural properties and without dependence on artificial manures. Such wheat, roughly ground and made into bread or porridge, gave a perfect food quite different from anything ordinarily obtainable in the shops. It was now open for anyone to take out a licence to buy properly grown wheat from the farmer, mill it on his own premises, and make his own bread. A breakfast cup of roughly ground wheat soaked in milk and eaten raw was extraordinarily satisfying, and beginning the day with such a meal he himself could go on happily without troubling about food until evening. It was not quantity that mattered, but absence of sophistication. He hoped to see in England a new type of bakery in which something quite different from ordinary flour was used, the wheat going in at one end and being ground out roughly, with no separation of bran. If the product was put straight into bread the improvement in quality obtained was almost unbelievable.

THE PHYSICAL HEALTH OF CHILDREN ATTENDING DAY NURSERIES

A REPORT TO THE DAY NURSERIES COMMITTEE OF THE MEDICAL WOMEN'S FEDERATION

BY

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PART I

Aim and Method of Investigation

In 1944-5 an investigation was made under the auspices of the Medical Women's Federation to obtain data concerning the effect of life in wartime day nurseries on the physical health of children under 5 years old. The investigation was made in two parts. In the first part a comparison was made of children attending day nurseries and children attending welfare centres, and the records were based on the results of a single examination of each child by 73 medical officers in different parts of the country in the course of their normal work. The results of this section of the investigation have been published already (*Journal*, Aug. 17, 1946, p. 217).

The present report describes the results of the second part of the investigation, carried out by me; this has been a comparison over a period of twelve months in 1944-5 of a group of children attending Ministry of Health wartime day nurseries in Birmingham with a control group of children living in their own homes. Periodic examinations of the children in both groups were made during the survey.

Selection of Clinical Material

The nursery group of children was composed of the entire population of eight Ministry of Health wartime day nurseries in different parts of the city; thus various social and economic groups were represented. The nurseries were open from 7 a.m. to 7 p.m. for 5½ to 6 days a week, and nearly all the children spent their whole day in the nursery, as their mothers were mostly engaged on full-time war work. Each nursery was under the care of a fully trained nurse with a staff of trained and student nursery nurses and nursery assistants, and a certificated or non-certificated nursery teacher. The approved complement of staff, excluding domestic staff, was one nurse to four children, but owing to the wartime conditions this was not always attained. Each nursery accommodated from 48-60 children aged 0-5 years (one nursery accommodated 80 children). The premises ranged from specially constructed one-story buildings of a semi-permanent character to converted old houses or portions of the premises of infant welfare centres. The children were provided with three full meals or two meals and mid-morning lunch every day. These meals, which were generous and well planned, were provided without the surrender of any of the children's own ration coupons, which were thus still available for their use at home. The rationed food which could be obtained for children attending nurseries was thus nearly double that available to children having all their meals at home—i.e., they could have twice the quantity of meat, butter, bacon, eggs, cheese, etc. An isolation room was provided in each nursery, and all children were examined each morning on arrival by a senior member of the staff, admission being refused to children obviously ill and those with infectious skin diseases. Children with colds could not, however, be excluded as a routine measure. A child-welfare medical officer was available on call for any sick child, and routine medical inspections of all the children were periodically made. A medical certificate of fitness was necessary before admission or readmission to a nursery.

The control group of children was composed of those living at home and attending no nursery school or class for young children. They were classified into eight subgroups, each drawn from the same residential area as one of the eight nurseries chosen for the survey. The children were selected at random from the health visitors' official lists of all those under 5 living

in the district. Apart from choosing children to give an age distribution similar to that in the corresponding nursery, the children in the home group were picked entirely at random to ensure a representative sample of all types of population in the district. The selected children were then visited at home by health visitors from the nearest infant welfare centre, the purpose of the survey was explained to the mothers, and a request was made that they would bring their children to the centres periodically for examination. Subsequently appointments were given by post. Naturally a considerable number of the children were already attending the centres, but it is a tribute to the efforts and eloquence of the health visitors that such a good response was obtained from mothers who had never previously made use of the facilities of the welfare centres. To allow for the inevitable defaulting 40% more children were selected in the home group than attended the nurseries.

Comparability of Nursery and Home Groups.—Every effort was made, as explained above, to ensure that the children in the home group had, so far as possible, similar social and economic backgrounds to those of the nursery group. It was recognized, however, that many factors affected the attendances and influenced the economic status of children in both home and nursery groups. Thus there was a distinctly higher proportion of illegitimate children and children from homes broken up by desertion, separation, or death in the nursery group than in the home group. In the nurseries 8% were illegitimate and 4.6% from broken homes; in the home group 1.8% were illegitimate and 1.4% from broken homes. In estimating the importance of this fact it must be remembered that the infant mortality rate among illegitimate babies in Birmingham approximates to the rate for legitimate babies, and in one recent year was actually lower. There are special arrangements for the care of illegitimate children in the city, and the morbidity rate among them may be reasonably assumed to show similar results. Whether economic status was higher among day nursery families or among families of the home group is not known. Economic need was certainly one cause leading mothers to seek paid work and place their children in nurseries, and the family income was markedly increased by the mother's whole-time earnings. On the other hand, the home group contained all those families with more than two young children, who were thus not eligible for admission to the nurseries and whose mothers were unable, therefore, to seek whole-time paid work; and it is notorious that as the number of children increases so does the incidence of poverty. The extra allowance of foodstuffs of animal origin available to children attending day nurseries must also be taken into account when considering economic status and nutrition in the two groups. Repeated attendances were more likely in the home group if a child was ailing, and also if a mother was over-anxious. A strong financial inducement existed for mothers of nursery children to ensure their regular attendance; but, on the other hand, mothers of nursery children were instructed not to bring them if they had coughs, bronchitis, etc., and there were no such injunctions for children of the home group.

No definite conclusions can be drawn from these points as it is impossible to assess the relative effects of all these factors on the results of the survey.

Method of Observation and Examination

Every child was examined at intervals of eight weeks. The investigation lasted 12 months (November–October) and the majority of the children attended for the first time in November and December. Replacements were made in each group throughout the year—to maintain numbers as far as possible. Each nursery was visited on the same day as the corresponding welfare centre. All the examinations were carried out by me. At each visit a full physical examination was made with the child stripped, and a full history taken of previous illnesses. The history was obtained direct from the mother in the home group and usually indirectly from the mother through the matron in the nursery group. Any account of infectious fevers was verified by reference to private doctor or hospital or by full inquiry into the clinical features of the illness. All

physical findings were recorded, including normal ones. Lastly, each child was weighed on checked scales of the pan-and-weights type. The numerical details of the investigation are given in Table I.

TABLE I.—Numerical Details of Investigation

	Nurseries	Home Group	Total No.
Total number of children in survey	557	641	1,198
Boys	275	302	
Girls	282	339	
Total number of examinations ..	1,734	1,516	3,250
Boys	857	709	1,566
Girls	877	807	1,684
Total examined twice or more ..	432	409	841
Total examined once only ..	1,25 (22.4%)	232 (36.2%)	357
(a) Average examinations per child	3.1	2.4	
(b) Excluding single examinations	3.7	3.1	
Age distribution of examinations of children in survey			
(1) Under 1 year { 0–6 mths. ..	49 (2.8%)	58 (3.8%)	
{ 6–12 „ ..	149 (8.5%)	186 (12.3%)	
(2) 1–2 years { 12–18 mths. ..	186 (10.7%)	203 (13.4%)	
{ 18–24 „ ..	204 (11.8%)	252 (16.7%)	
(3) 2–3 „	431 (24.9%)	328 (21.6%)	
(4) 3–4 „	379 (21.9%)	293 (19.3%)	
(5) 4–5 „	336 (19.4%)	196 (12.9%)	

Physical Findings : Comparison between Nursery and Home Groups

In the following tables the percentage figures are based, except where otherwise stated, on the total number of examinations made in each group. The data on infectious fevers, however, are based on the total number of examinations only of children attending more than once, since data for infectious fevers were obtained from histories of illnesses between the current and previous examinations. With this exception all figures are based on the results of 1,734 examinations of 557 nursery children and 1,516 examinations of 641 home children.

1. General Condition

The clinical impression of general condition was recorded at each examination in one of four grades: (a) *Very good*—where nutrition, growth, and posture were excellent and no signs of respiratory tract or other infection were present, beyond perhaps a very slight head cold. (b) *Good*—where nutrition, growth, and posture were satisfactory but not outstanding, or where signs of respiratory tract or other infection of more than slight degree were present. (c) *Fair*—where nutrition, posture, or growth was considerably subnormal (due to present or past disease) or where fairly severe respiratory or other infections were present. (d) *Poor*—where growth and nutrition were grossly subnormal, or with signs of severe past or present infection or other disease.

Results.—Table II compares the percentages in nursery and home groups of examinations where the general condition was recorded as good or very good; thus for a child attending on three occasions the general condition was recorded three times.

For all ages together, boys and girls of the home group had a higher percentage whose general condition was very good or good, the difference between nursery and home groups being significant for both boys and girls. The children were subdivided into age groups. Under 2 years of age the girls in the home group had a higher percentage whose condition was very good or good, and the differences from the nursery group were significant in all four age subdivisions. The boys under 2 years old in the home group had a higher percentage in the very good or good category, the difference from the boys under 2 in the nursery group being significant in two of the four age subdivisions. Over 2 years old there were no significant differences between home and nursery groups, but in four out of six age subdivisions (boys and girls) the nursery group had a slightly higher percentage of examinations of children in good or very good condition.

TABLE II.—Percentages of Examinations where General Condition was Very Good or Good

Age	Group	Boys	Girls
		%	%
0-6 months	Nursery	86.3	73.1
	Home	80.8	100.0
	Difference	5.5 ± 10.8	-26.9 ± 8.6*
6-12 "	Nursery	82.8	76.0
	Home	96.2	96.3
	Difference	-13.4 ± 5.0*	-20.3 ± 4.9*
12-18 "	Nursery	71.7	77.4
	Home	94.6	89.3
	Difference	-22.9 ± 5.2*	-11.9 ± 5.5*
18-24 "	Nursery	90.3	79.1
	Home	96.0	93.0
	Difference	-5.7 ± 3.5	-13.9 ± 4.4*
2-3 years	Nursery	88.0	84.6
	Home	89.1	86.4
	Difference	-1.1 ± 3.3	-1.8 ± 3.7*
3-4 "	Nursery	85.3	83.0
	Home	81.6	81.4
	Difference	3.7 ± 4.3	1.6 ± 4.0
4-5 "	Nursery	82.7	91.4
	Home	78.7	84.3
	Difference	4.0 ± 5.2	7.1 ± 4.0
All ages	Nursery	84.2	82.8
	Home	89.1	88.4
	Difference	-4.7 ± 1.7*	-5.6 ± 1.7*

* Significant differences.

2. Condition of Tonsils

Tonsillar enlargement was recorded as of slight, moderate, and gross degrees. In addition the incidence of tonsillectomy was recorded. Acute or subacute tonsillitis was not included in this section, which refers only to chronic conditions.

Results (Table III).—(a) The incidence of slight and moderate tonsillar enlargement was at all ages considerably higher in the nursery group than in the home group, among both boys and girls. (b) The incidence of gross tonsillar enlargement was also significantly higher in the nursery group than in the home group, for all ages together, among boys and girls. (All degrees of tonsillar enlargement together were more than twice as frequent in the nursery boys than in the home group. Among girls they were nearly four times more frequent in the nursery

TABLE III.—Percentages of Examinations where Tonsillar Enlargement was Found

Age		Boys		Girls	
		Slight and Moderate	Gross	Slight and Moderate	Gross
0-6 months	Nursery	0	0	7.7	0
	Home	0	0	0	0
	Difference	0	0	7.7 ± 4.8	0
6-12 months	Nursery	15.8	0	9.3	0
	Home	2.5	0	0.9	0
	Difference	13.3 ± 4.7*	0	8.4 ± 3.1*	0
12-18 months	Nursery	28.3	5.4	20.4	3.2
	Home	10.0	0.9	5.4	0
	Difference	18.3 ± 5.5*	4.5 ± 2.4	15.0 ± 4.9*	3.2 ± 1.8
18-24 months	Nursery	26.5	13.2	35.8	5.8
	Home	16.3	7.0	1.6	0
	Difference	10.2 ± 5.7	13.2 ± 3.2*	28.8 ± 5.2*	4.2 ± 2.4
2-3 years	Nursery	35.6	11.6	35.3	8.4
	Home	21.8	5.5	8.0	3.1
	Difference	13.8 ± 4.7*	6.1 ± 2.9*	27.3 ± 4.4*	5.3 ± 2.5*
3-4 years	Nursery	30.4	9.8	35.1	14.9
	Home	17.6	12.0	16.2	5.4
	Difference	12.5 ± 5.0*	-2.2 ± 3.6	18.9 ± 4.6*	9.5 ± 3.2*
4-5 years	Nursery	30.3	15.0	29.1	7.9
	Home	28.8	11.3	7.8	4.3
	Difference	1.5 ± 6.1	3.7 ± 4.6	21.3 ± 4.9*	3.6 ± 3.0
All ages	Nursery	29.0	10.2	29.6	7.9
	Home	15.8	4.8	7.6	2.6
	Difference	13.2 ± 2.1*	5.4 ± 1.4*	22.0 ± 1.9*	5.3 ± 1.1*

* Significant differences.

group than in the home group.) (c) The incidence of tonsillectomy was higher in the nursery group. No child under 2 years old in either group had had the tonsils removed. Between 2 and 5 years of age 5.1% of the boys and 2% of the girls in the nursery group had had the tonsils removed; in the home group the figures were 0.8% for boys and 0.9% for girls. The difference was significant for the boys, but the difference for the girls might have arisen by chance.

3. Enlargement of Cervical Glands

This was recorded as (a) slight or moderate, and (b) gross. The former category included all glands distinctly palpable at the angle of the jaw, and in the majority of cases only the anterior cervical group of glands was involved. All results refer to chronic enlargements, those cases occurring, for example, during a subacute infection being excluded.

Results (Table IV).—There was a much higher percentage of enlarged cervical glands in the nursery group, among both boys and girls. (a) For slight and moderate degrees of enlargement there were significantly higher rates in the nursery group for all ages together (0-5) and in 5 out of 7 of the individual age groups, both for boys and girls. (b) For gross degrees of

TABLE IV.—Percentages of Examinations where Cervical Gland Enlargement was Present

Age		Boys		Girls	
		Slight and Moderate	Gross	Slight and Moderate	Gross
0-6 months	Nursery	9.1	0	0	0
	Home	3.8	0	0	0
	Difference	5.3 ± 7.0	0	0	0
6-12 months	Nursery	30.3	1.3	12.0	1.3
	Home	6.3	0	4.7	0.9
	Difference	24.0 ± 6.2*	1.3	7.3 ± 4.0	0.4
12-18 months	Nursery	50.0	7.6	40.9	6.5
	Home	15.5	3.6	11.8	0
	Difference	34.5 ± 6.5*	4.0 ± 3.2	29.1 ± 6.5*	6.5 ± 2.6*
18-24 months	Nursery	50.6	6.0	58.3	3.3
	Home	30.9	0.8	13.2	2.3
	Difference	19.7 ± 6.9*	5.2 ± 2.4*	45.1 ± 6.0*	1.0
2-3 years	Nursery	55.7	7.4	52.6	3.3
	Home	26.7	6.7	20.4	3.7
	Difference	29.0 ± 5.1*	0.7 ± 2.7	32.2 ± 5.1*	-0.4 ± 1.9
3-4 years	Nursery	47.3	12.5	46.4	10.3
	Home	28.0	8.0	24.0	2.4
	Difference	19.3 ± 5.7*	4.5 ± 3.6	22.4 ± 5.0*	7.9 ± 2.6*
4-5 years	Nursery	57.4	10.8	50.3	4.6
	Home	45.0	7.5	17.4	4.3
	Difference	12.4 ± 6.7	3.3 ± 4.0	32.9 ± 5.9*	0.3 ± 2.6
All ages	Nursery	49.6	8.4	45.3	5.2
	Home	24.8	4.5	15.6	2.4
	Difference	24.8 ± 2.5*	3.9 ± 1.3*	29.7 ± 2.3*	2.8 ± 0.9*

* Significant differences.

enlargement there was a significantly higher rate among nursery boys and girls at all ages combined (0-5); but (c) the proportion of grossly enlarged glands to all enlarged glands was slightly greater in the home group. In the nursery group 13.8% of all boys with enlarged glands and 10.3% of all girls with enlarged glands were recorded as having glands grossly enlarged; the corresponding figures for the home group were 15.4% for boys and 13.3% for girls. Cervical gland enlargement was, however, about 2½ times as common in the nursery group as in the home group.

4. Nasopharyngeal Infections

These were recorded in two categories: (a) subacute and acute; (b) chronic. The former included cases of subacute coryza, laryngitis, nasopharyngitis, etc., actually observed at examination; the latter included cases of chronic nasal discharge, sinusitis, adenoid enlargement, etc., in which the chronic nature of the condition was confirmed either by repeated examination or by definite history.

Results (Tables V and VI).—(a) Subacute and acute nasopharyngeal infections.—For all ages together (0–5) there was a higher incidence in the nursery group, but the difference was significant only among boys, that for girls being within the limits of chance occurrence. **(b) Chronic nasopharyngeal infections.**—The incidence was eight times as great in the nursery

developed mouth-breathing tended to do so at a slightly earlier age in the nursery group than in the home group.

5. Bronchitis

Only those showing physical signs of bronchitis at examination were included. As was expected the highest incidence was in infants under 2 years old.

Results (Table VII).—For all ages together (0–5) the incidence was about twice as large in the nursery group, the difference between nursery and home groups being statistically significant for both boys and girls.

TABLE V.—Percentage of Examinations where Nasopharyngeal Infections were Recorded

Age		Boys		Girls	
		Subacute and Acute	Chronic	Subacute and Acute	Chronic
0–6 months	Nursery	13.6	0	3.8	0
	Home	7.7	0	6.3	0
	Difference	5.9 ± 8.8		2.5 ± 5.9	
6–12 months	Nursery	14.4	18.4	14.7	2.6
	Home	8.9	2.5	9.3	0.9
	Difference	5.5 ± 5.2	15.9 ± 4.8*	5.4 ± 4.8	1.7 ± 1.9
12–18 months	Nursery	18.5	27.2	24.7	20.4
	Home	12.7	4.5	12.9	3.2
	Difference	5.8 ± 5.1	22.7 ± 5.0*	11.8 ± 5.7*	17.2 ± 4.7*
18–24 months	Nursery	20.5	44.6	14.2	30.8
	Home	13.0	0.8	13.2	2.3
	Difference	7.5 ± 5.2	43.8 ± 5.5*	1.0 ± 4.4	28.5 ± 4.6*
2–3 years	Nursery	17.2	23.2	18.0	18.6
	Home	10.3	5.5	12.3	3.1
	Difference	6.9 ± 3.6	17.7 ± 3.7*	5.7 ± 3.8	15.5 ± 3.4*
3–4 years	Nursery	10.9	22.8	10.8	15.9
	Home	8.0	0.8	11.4	2.4
	Difference	2.9 ± 3.4	22.0 ± 4.0*	−0.6 ± 3.3	13.5 ± 3.1*
4–5 years	Nursery	12.4	12.9	4.6	7.3
	Home	10.0	2.5	6.1	0
	Difference	2.4 ± 4.3	10.4 ± 4.0*	−1.5 ± 2.8	7.3 ± 2.6*
All ages	Nursery	15.0	22.6	13.6	16.0
	Home	10.4	2.8	10.8	2.0
	Difference	4.6 ± 1.7	19.8 ± 1.7*	2.8 ± 1.6	14.0 ± 1.4*

* Significant differences.

TABLE VI.—Percentage of Examinations where Mouth-breathing was Recorded

Age		Boys		Girls	
0–6 months	Nursery	5.6		3.8	
	Home	0		0	
	Difference	5.6 ± 4.2		3.8 ± 3.4	
6–12 "	Nursery	9.2		1.3	
	Home	3.8		0	
	Difference	5.4 ± 3.4		1.3 ± 1.2	
12–18 "	Nursery	19.6		7.5	
	Home	3.6		1.1	
	Difference	16.0 ± 4.4*		6.4 ± 3.0*	
18–24 "	Nursery	33.8		21.7	
	Home	8.9		1.6	
	Difference	24.9 ± 5.6*		20.1 ± 4.0*	
2–3 years ..	Nursery	32.5		21.4	
	Home	15.2		3.7	
	Difference	17.3 ± 4.5*		17.7 ± 3.6*	
3–4 " ..	Nursery	32.1		25.8	
	Home	9.6		9.0	
	Difference	22.5 ± 4.9*		16.8 ± 4.1*	
4–5 " ..	Nursery	30.8		19.2	
	Home	15.0		7.0	
	Difference	15.8 ± 5.9*		12.2 ± 4.3*	
All ages ..	Nursery	28.5		18.3	
	Home	9.5		4.1	
	Difference	19.0 ± 2.4*		14.2 ± 1.6*	

* Significant differences.

group as it was in the home group, among both boys and girls. No child under 6 months old in either group was found to have chronic nasopharyngeal infections. **(c) Mouth-breathing.**—Only chronic and confirmed mouth-breathers were included in this category. For all ages together (0–5 years) the incidence of mouth-breathing was three or four times higher in the nursery group than in the home group, for both boys and girls. The age of maximal incidence for boys was 18–24 months in the nurseries and 2–3 years in the home group, for girls it was 3–4 years in both groups—suggesting that children who

TABLE VII.—Percentage of Examinations where Bronchitis was Found

Age		Boys		Girls	
0–6 months	Nursery	13.6		26.9	
	Home	3.8		3.1	
	Difference	9.8 ± 8.0		23.8 ± 9.1*	
6–12 "	Nursery	19.7		8.0	
	Home	8.9		8.4	
	Difference	10.8 ± 5.6		−0.4 ± 4.1	
12–18 "	Nursery	9.9		7.5	
	Home	1.8		3.2	
	Difference	8.1 ± 3.2*		4.3 ± 3.3	
18–24 "	Nursery	14.4		10.0	
	Home	2.4		3.1	
	Difference	12.0 ± 3.7*		6.9 ± 3.1*	
2–3 years ..	Nursery	5.1		7.9	
	Home	4.8		2.5	
	Difference	0.3 ± 2.2		5.4 ± 2.4*	
3–4 " ..	Nursery	4.9		0.5	
	Home	2.6		1.8	
	Difference	2.3 ± 2.2		−1.3	
4–5 " ..	Nursery	1.1		0.7	
	Home	0		0.9	
	Difference	1.1		−0.2	
All ages ..	Nursery	7.1		5.8	
	Home	3.4		3.1	
	Difference	3.7 ± 1.1*		2.7 ± 1.1*	

* Significant differences.

[Part II, with references, will appear in our next issue.]

The Medical Advisory Committee (Scotland), chairman Sir John Fraser, has now submitted its report on laboratory services to the Secretary of State (H.M. Stationery Office, 2d.). In considering whether the laboratory service should cover all branches of laboratory medicine or exclude public health work, the committee chose the former course. Certain allied services would be incorporated in the laboratory service, in particular a specialist service for conducting medico-legal necropsies and a service for the bacteriological examination of milk, food, and water supplies. "The service we recommend would be a national one, under central administration, with a regional grouping of laboratories centred on the four university medical schools with appropriate arrangements for Inverness and the Northern Counties. Each regional group of laboratories would represent a self-contained section of the service, but this would not exclude inter-regional co-operation and mutual assistance where necessary, and the whole-time members of the professional and technical staffs of the service would be interchangeable among laboratories." It is assumed that the Director of Health for Scotland will administer the service. In the first place as many as possible existing laboratory resources will be utilized. A central laboratory organization would be centred in the university medical school, teaching hospitals, and public health department; and district laboratories would be established in association with either a general or infectious diseases hospital. As regards the training of staff the committee recommend that there should be a period of five years' postgraduate training before recognition as a specialist in laboratory medicine is granted. In the medical schools aspirants to this branch might be encouraged to take courses for combined degrees in medicine and honours science. The first year of training should be spent as house-physician and house-surgeon, six months of this year possibly being spent in an infectious diseases hospital. The committee points out that in certain parts of Scotland laboratory services must be mobile; laboratory officers should visit outlying districts when required; and it recommends that mobile units be established at various centres.