

the risk of conveying tuberculosis is in direct contradiction to the very large volume of information we possess on the subject. The "application of conditions and methods which will ensure a clean raw milk" is a highly desirable aim, but by no stretch of imagination can it influence the infection of the milk supply from cows suffering from tuberculosis of the udder. Dr. Forbes's view is obviously based upon a later statement: "I am convinced that the tubercle bacillus enters the milk in the vast majority of cases not directly from an infected animal, but indirectly from contamination with dung, etc." It would be most interesting to have the evidence of this conviction, for all the facts are the other way. The point is important because, of course, if this is true, cleanliness would do what Dr. Forbes claims for it. We know that tubercle bacilli do get into the dung and obviously, therefore, some will get into the milk with gross lack of cleanliness. Our facts, however, show this cannot be more than a small factor in the infection. I can illustrate this best by quoting my experience with milk samples collected in Somerset directly at the farms from the mixed milk of all the cows in milk at the farm.

Taking the figures for the years 1931, 1932, and 1933, in thirty-two instances tubercle bacilli were found in the mixed milk. In twenty-six cases the veterinary surgeon at his first visit (with bacteriological assistance) picked out the infecting cow, while in four other cases the cow was detected after selected bacteriological testing. In all thirty cases the cows on slaughter showed extensive tuberculosis infection, together with definite udder tuberculosis. Of the two other cases, in one two aged cows had been sold between the sampling and examination and one was probably the cause of infection; in the other case a markedly tuberculous cow was found and slaughtered, but no udder disease could be found post mortem.

Considering the technical difficulties, a proportion of 94 per cent. traced directly to a cow with udder tuberculosis shows unmistakably that it is to the cow with a tuberculous udder that we must look for the source of tubercle bacilli in our milk supply. This experience can be paralleled by all who keep records of these investigations. Unless all the cows in a herd are free from tuberculosis and kept free no application of clean milk methods will remove the risk of tubercle bacilli in the milk, and nothing but efficient heat treatment of that milk will make the supply safe.—I am, etc.,

Weston-super-Mare, March 26th.

WILLIAM G. SAVAGE.

SIR,—In his letter on "The Milk Question" (March 24th) Dr. W. S. Forbes rocks on seas of controversy, but touches solid ground on two points. As both provide useful anchorage in a stormy voyage they deserve special charting. The first is noted in the words, "The country districts require the greatest consideration, as it is practically impossible to pasteurize all the milk consumed in them." The second reads: "Here is the opportunity of dealing with the whole question which may never occur again, and it must be grasped." As the Great War provided us with that remarkable by-product "daylight saving," so may the threatened devastation of the dairy industry supply the unexpected boon of cleaner and safer milk. Such chance for Government aid may truly "never occur again," but unless the medical profession shows itself as alert and united as the agricultural interests, the children's milk ration will be of very doubtful quality. How, indeed, can it be "pure" under existing conditions? If the Ministry of Agriculture looks out for "cleanliness" the Ministry of Health must be supported by the doctors when it demands "safety" as well. The country school must boil its milk.—I am, etc.,

Peppard Common, March 31st.

ESTHER CARLING.

SIR,—Last November my council instructed me to take a sample of milk from each cow-keeper and send it to the School of Agriculture, Cambridge, for examination every quarter. The following figures may be of interest to your readers as showing what can be done:

Sample	November, 1933		March, 1934	
	Count	Coli	Count	Coli
A	48,000	1/1000	35,200	1/10
B	168,000	1/1000	6,800	Absent
C	68,000	1 c.cm.	141,000	1 c.cm.
D	27,200	1/10	5,600	Absent
E	85,000	1/1000	128,000	"
F	96,000	1/1000	92,000	1/1000
G	81,000	1/1000	127,000	1/1000
H	81,000	Absent	48,000	Absent
I	80,000	1/1000	194,000	"
J	32,000	1/100	3,800	"

—I am, etc.,

St. Neots, Hunts, March 25th.

E. J. CROSS.

SIR,—Dr. W. S. Forbes's letter in the *Journal* of March 24th in a very able way seeks to sum up the situation. Pasteurization *per se* is probably the best way of supplying cities with milk under present conditions. Dr. Forbes deals with epidemics, and points out that evidence from milk is misleading, because diseases come from so many sources. Air-borne germs are difficult to control. Advocates of raw milk are concerned with vitamins, and possibly something more elusive (what it is may some day be discovered), which they claim are destroyed by heat.

It is interesting to note that the child on raw milk is very fit, that chilblains are practically eliminated, and that Dr. E. Sprawson has shown that teeth are less likely to decay owing to better dentine formation. Our experience, through a succession of years, shows that tubercle is not the result of drinking raw milk.—I am, etc.,

A. H. MACDONALD,

Stedney Causeway, E.1,
March 26th.

Chief Medical Officer, Dr. Barnardo's
Homes.

Hypochondriasis

SIR,—Dr. F. Gray's letter in your issue of March 24th (p. 558) raises questions which are of the utmost importance when we come to consider the limits of analytical psychotherapy. The neglect to respect these limits is responsible for much of the odium which has been cast on treatment based on analytical investigation.

It is a little difficult to deal critically with Dr. Gray's letter, as he has mixed the categories which were so clearly defined in Dr. Hutchison's article; but I should like to emphasize the danger and the uselessness of attempting any radical cure in the latter's "general hypochondriac." Has Dr. Gray really ever told a retired colonel that his abdominal discomforts were due to a wish that he had been a general, coupled with his failure in that respect? If he has I trust that he will publish the case in full, with the colonel's replies and reactions. It will hardly have been possible for the colonel to arrive at this conclusion through any analytical procedure, for patients of this age and temperament are usually not analysable, and if they are the results are apt to be disastrous.

Not every elderly hypochondriac, however, has been even a relative failure in life. Many successful people