borns or infants up to eighteen months of age. The sera studied were taken from umbilical blood, infants up to the age of eighteen months, and adults in the pregnant and non-pregnant state, as controls. These sera were used as diluents for titration of two immune anti-*Rh* sera (titres 1 : 256, 1 : 64), and anti-*A* serum (titre 1 : 256,000) and an anti-*B* serum (titre 1 : 2,048).

The results of titration with these various sera are tabulated below. A serum was considered to be 'enhancing' when in titration it reacted like mature serum. By the term 'non-enhancing' sera, we refer to sera which reacted in a manner similar to saline as diluent.

Age	Number of sera examined	Number of 'non-enhancing' sera	Number of 'enhancing' sera
Umbilical blood	40	37	3
1–6 months	11	11	
6–18 months	4		4
17–40 years	13		13
Pregnant women	12		12

In one case the serum of a child aged three months gave higher titres than those obtained with saline as diluent, but much lower than the titre obtained with mature serum. In the beginning of this study, three sera from umbilical blood gave titres similar to those of mature sera.

The results reported above indicate that human serum at birth and during the first six months of life lacks that serum factor which confers upon it the ability to enhance the action of immune antibodies. Unless the human placenta, in certain conditions, is permeable to this serum factor from the mother's blood, it does not seem likely that the development of erythroblastosis fœtalis after delivery is due to the neo-natal formation of this serum factor.

Our findings confirm the observations made by Boorman, Dodd and Morgan[1] insofar as the ability of *mature* sera to enhance the action of immune antibodies is concerned. The identical enhancement of human sera in respect of immune anti-*Rh*, as well as anti-*A* and anti-*B*, would seem to be in disagreement with the view that the 'conglutination-test' is due to a special antibody (glutinin)[2,3].

A detailed account of the work reported here will be published elsewhere.

We are indebted to Prof. B. Zondek for his interest and to our colleagues of the Pediatric Department for their kind supply of blood specimens.

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The Thyroid and Tuberculosis

BARRY'S recent communication[1] on the resemblance of the chemical constitution of thyroxine to that of diploicin which was isolated by Nolan[2] from the lichen *Buella canescens*, and which, according to Burger and associates[3], possesses tuberculostatic activity *in vitro*, has induced us to give the following summary concerning the influence exerted by thyroxine and hypothyroidism on the course of experimental tuberculosis in the guinea pig.

Thyroidectomized guinea pigs are more susceptible to tuberculous infection than are the controls, while those injected with 30 micrograms of thyroxine, twice a week, are more resistant against tuberculosis.

In the course of the same month in which tuberculous inoculation took place, deaths occurred in 30 per cent thyroidectomized, 5 per cent controls, and in none of those which had received thyroxine injections. During the third month, mortality was as high as 75 per cent in thyroidless animals, 60 per cent in the controls, and only 15 per cent of the hyperthyroid animals. During the seventh month, the only survivors were 15 per cent of the animals treated with thyroxine, while all thyroidectomized and control animals had succumbed.

Resistance against tuberculous infection was greater in the animals in which thyroxine treatment had been instituted one month before their inoculation with bacilli.

The thyroidectomized animals were given calcium and parathyroid hormone in order to prevent the disturbances due to thyroid deficiency.

Pathological anatomical studies of the organs revealed lesions the characteristics of which depended on the time of survival. The animals with longer survival periods had developed caseous lesions to a larger extent than had those which had died early, the lesions being of a congestive type.

The greater resistance toward tuberculous infection of the animals injected with thyroxine appears to be due either to tuberculostatic activity, or to greater immunity, for example, increase of alexines as observed by Fassin[4], of opsonic index and of micro- and macrophagocitary activities as demonstrated by Marbé[5] and Asher[6].

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Uranium in Urine

DURING some work in this Research Department on compounds of uranium, as a safety precaution, we commenced to analyse the urine of personnel concerned, using a fluorimetric method. In the preparation of fluorimetric standards, known amounts of uranyl nitrate were added to samples of urine from persons not engaged on the work with uranium. To our surprise we found uranium to be present in some of the 'blank' urine samples. It was found that analysts who had recently been engaged in the determination of sodium as sodium uranyl magnesium acetate[1] voided traces of uranium in their urine, the element being detected for some weeks after the analyst ceased to be using 'sodium reagent'. Out of 14 analysts examined between January 28, 1944 and February 1, 1944, six (Nos. 1–6 below) who had been in contact with magnesium uranyl acetate solution during the past two months had urine containing 2–10 μgm. per litre of uranium, eight (Nos. 7–14) who had not been in such recent contact with uranium salts varied from 'not detected' to 4 μgm. per litre. The table gives the experimental figures, expressed as μgm. uranium per litre.

Analyst	January 28	January 29	January 31	February 1
1			4	10
2		10	4	4
3	6			6
4	6			6
5			10	6
6			10	6
7	<2			
8	2			
9			2	4
10			2	
11			2	4
12			2	
13		2		
14	<2			

The fluorescence was compared visually, against standards equivalent to 2·6 or 10 μgm. per litre, 2 μgm. per litre being the limit of detection by the method used.

Careful examination by the works medical officer failed to detect any deviation from normal health in analysts 1–6, but we think it should be made known how readily this element may be absorbed. In the case under discussion, the reagents used by the analysts were an aqueous solution containing 43 gm. uranyl acetate per litre in addition to magnesium acetate and acetic acid, and also an alcoholic solution, made by saturating alcohol with (almost insoluble) sodium magnesium uranyl acetate. We are inclined to think that it may be the second of these solutions which is more likely to penetrate the skin.

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"Conditions of Survival"

IN common, I imagine, with many readers of *Nature*, I was extremely disturbed by the editorials of September 28 and October 5 on "Conditions of Survival". We have long been accustomed to have in these editorials of *Nature*, sober and constructive examination of the social implications of science. It is all the more surprising to find ill-considered intrusions into political topics, the effect of which—whatever the intention—is to increase the divisions in a world where unity is the essential condition for survival.

I do not wish to dwell on the main topics—the control of atomic energy and U.N.R.R.A.—because events in the intervening period have already falsified the worst fears that were raised in the editorial. Since it was written, the Scientific Committee of the Atomic Energy Commission—of which the Soviet Union is a member—has issued a unanimous report declaring that the control of atomic energy is possible. The question at issue now is not the refusal by the Soviet Union to surrender national sovereignty but that of the United States to accept the prohibition of the atomic bomb and its insistence on attaching to the Lilienthal report the political condition of the abolition of the veto. As Prof. Blackett has ably pointed out[1], the veto is the only guarantee that a security organisation can function without producing the war which it is its object to prevent.

At the same time, in other spheres, the picture is far from being as black as it was painted. There are increasing signs of greater international co-operation as witnessed by the Stalin interview, the proceedings at the Peace Conference and the setting up at Copenhagen of the World Food Board under the presidency of Sir John Orr.

In this atmosphere it is all the more regrettable that *Nature* editorials should contain statements which are not only unfounded but highly injurious to the cause of peace. The editorial of September 28 states that "in deference to the U.S.S.R., Great Britain and America have abandoned the principles involved in the Atlantic Charter". Now in the first place the principles have not been abandoned: the difficulties in realizing them in practice are being slowly but surely overcome. These difficulties can no more be attributed to the U.S.S.R. than to the other allies: they are inherent in the situation at the end of the War. Wide divergencies of policy about the best means of effectively preventing the resurgence of fascism and of aiding the reconstruction of the devastated countries are bound to exist and will need the utmost good will and good faith to overcome.

These divergencies, however, are quite distinct from the moral antagonism stressed throughout both editorials. It is not a fact that "the aims and values of Soviet Russia are not those of Western