

cent., whereas south of this point the CaCO_3 content is always considerable, reaching a maximum of 17 per cent. in North Carolina. Farther south, judging from inadequate samples, even higher figures are reached: a sand from Flagler Beach, Florida, contains 57 per cent. CaCO_3 .

7. Although on superficial examination the shell fragments seem to be concentrated in the coarser fractions of the sand, in almost all the samples tested the sand averages slightly coarser after the shell material has been leached out by dilute HCl , implying that more of this material exists in a fine than in a coarse state. However, the differences in fineness between the leached and unleached sands are usually so slight that for ordinary purposes no account of the shell material need be taken when the average fineness of a sand is computed.

8. There seems to be a slight tendency for the coarser sands to contain the most CaCO_3 , although this tendency is so slight that its reality might perhaps be questioned.

A more detailed paper is in the course of preparation, and will appear elsewhere in the near future.

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THE SPECIFIC EFFECT OF VITAMIN B ON LACTATION, GROWTH AND WATER METABOLISM¹

IN previous communications it has been demonstrated that when the maternal diet is inadequate in vitamin B there develops, just as in the case of non-lactating rats, a reduction in food intake during lactation,² and, in the absence of specific information, the failure of nursing young on such a dietary régime was attributed entirely to the reduction of the plane of nutrition. We now have conclusive evidence that vitamin B, in addition to stimulating the appetite, exerts its specific beneficial influence on the animal organism, as evidenced by the lactation efficiency index, unrelated to food intake. Such results have become apparent by the introduction of the paired feeding type of experimentation, *i.e.*, lactating females are restricted to the same amount of the daily intake of food and water as the litter mates receiving the vitamin B deficient ration. Keeping the plane of nutrition constant, the effect of vitamin B *per se* on the reduction of infant mortality and growth of nursing young becomes very pronounced. In addition, we are at present finding that vitamin B exerts its specific influence on growth, also that there is a definite relationship between water and food intake in this

¹ Research Paper No. 197, Journal Series, University of Arkansas.

² B. Sure, *J. Biol. Chem.*, 1928, 76, 685; *J. of Nutr.*, 1928, 1, 139.

avitaminosis. An excess of the proportionate amount of water to the reduced food intake, after this deficiency disease has progressed to the more accentuated stages, is detrimental to the organism. These observations will soon appear *in extenso* elsewhere.

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THE ESKIMO WORD "IGLU"

THE article by the Reverend George W. Lay in *SCIENCE* of December 5, last, says that "if one is going to use a phrase or word from a foreign language, it is quite necessary to know the meaning in that language." There is a special reason for applying this principle to the Eskimo word *iglu* (*igloo*, *igdlu*) which crops up with increasing frequency all the way from kindergarten songs through travel tales, school geographies and movie titles to anthropological manuals and text-books on architecture.

Many of the text-book writers and probably all the movie directors think that "*iglu*" is the Eskimo word for snowhouse. But few scholars have known better the language they wrote about than Samuel Kleinschmidt knew the Eskimo of western Greenland. Defining *iglu*, he says:¹ "A house. It appears this word . . . was formed from *ikiva* and therefore the fundamental meaning appears to be something within which to lay or shelter oneself; the house is therefore spoken of as a *shelter from the weather*." (Italics ours.)

This definition was a result of a lifetime spent by Kleinschmidt in Greenland; I have spent ten winters among the Eskimos of Alaska and northern Canada applying myself steadily to the language, and one result is my definition of *iglu* as a *more or less permanent shelter for man or beast*.

Naturally, this very general word is used in any district most often for that type of shelter which is there most common—if *iglu* is in use in that dialect.

Noticing that *iglu* is, in the Smith Sound district of Greenland, most commonly used for houses of earth over a framework of wood, bones or stone, Ekblaw² discusses the difference between *iglus* and snowhouses. Other writers have done the like for other districts

³ A. Gulick, *Amer. J. of Physiol.*, 1922, 59, 483; *ibid.*, 1924, 68, 131; J. C. Drummond, and G. F. Marrian, *Biochem. J.*, 1926, 20, 1229; H. H. Mitchell, and J. R. Beadles, *J. of Nutr.*, 1930, 2, 225.

¹ "Den Grønlandske Ordbog," Copenhagen, 1871.

² "The Material Response of the Polar Eskimo to Their Far Arctic Environment," *Annals of the Association of American Geographers*, Vol. XVII, December, 1927.

where some other form of house is commoner than the snowhouse. These are many, for of an estimated current population of 40,000 in all countries, there are less than 10,000 Eskimos who have seen snowhouses and more than 30,000 who have not. There was probably a similar ratio fifty or a hundred and fifty years ago.

When we write English about Eskimo houses, why not call them houses? Then we can use adjectives or qualifying phrases to indicate which of the many types of Eskimo house it is that we are dealing with—sodhouse, snowhouse, earth-covered log cabin, pile dwelling, or what not.

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TRUTH VERSUS ADVERTISING

THERE appeared large advertisements quite recently in about two hundred and fifty of the largest newspapers throughout the country, in magazines and other media of advertising, proclaiming that I say that a certain tooth paste is made from the most effective agents and is to be preferred, that I agree with a certain "eminent international scientist" who finds this tooth paste is greatest of the thirty-three dentifrices he tested, that I agree with another "distinguished scientist" to the effect that as a cleansing dentifrice this tooth paste has no equal. Some of these advertisements elaborate at length on the fact

that the tooth paste "has the greatest action because of its low surface tension." The same ads carry the statements that I agree with these observations.

In the interest of justice to plain truth and in fairness to myself I hope you will let me state in your columns that I have never made such claims for any dentifrice, in fact my own work doesn't show any great difference in cleansing action between the different soap—abrasive (chalk, etc.) dentifrices. As to the matter of surface tension, I have never seen the work referred to and know nothing of it. It seems plausible that the large amount of soap present would lower the surface tension of the tooth paste-saliva mixture, but if that is the main thing desired why not just use soap?

I have given permission to publish a statement from an earlier publication (1923) based on my work. This statement reads "First, that the resting saliva of the ordinary person, while very slightly acid, is practically neutral; and if its slight acidity has any possible injurious effect, it is insignificant in comparison with that due to decaying food particles. Second, it follows that a dentifrice the chief object of which is to clean the teeth and which is compounded primarily with a view to incorporating in it the most effective cleansing agents, is to be preferred to one which relies primarily upon ingredients put in to effect other objects."

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NEW YORK, N. Y.

SCIENTIFIC BOOKS

Peru from the Air. By LIEUTENANT GEORGE R. JOHNSON, with Text and Notes by Raye R. Platt. New York: The American Geographical Society, 1930, 177 pp., 142 aerial photographs, 11 maps and sketches. Price \$5.00.

To attempt a review of this extremely interesting book, without having visited Peru, is somewhat presumptuous, but after reading the book the reviewer is more than ever convinced that aerial photographs offer the geographer the best available medium for illustrating the physiography of a country, and he now feels that he has a better conception of the topography of Peru than he could possibly acquire by a tour of any reasonable length. Most of the readers of SCIENCE living in the United States have traversed the Allegheny Mountains either by train or by motor, but even if they have ridden over every railroad and motored over every highway in this region they can not begin to have as comprehensive an impression of its topography as they could get by a few flights in an airplane. Perhaps only a small proportion of the

students of geography have had the funds or the inclination for travel by air over the regions they wished to study, but travel rates by air are now about as cheap as by rail and modern airplanes are if anything safer vehicles for travel than automobiles. But even if the geographer can not or is not willing to fly, the camera can record all the features he could have seen and, with proper titles and descriptive notes, the photographs offer him a substitute which is often better than the reality.

This is the second book of this kind published by the American Geographical Society. "The Face of the Earth as seen from the Air," by Willis T. Lee, is already a classic and is in the libraries of most American physiographers. "Peru from the Air" is even better because it gives a comprehensive cross-section of the topography of the region under discussion rather than scattered physiographic types.

The arrangement of the book is unusual. In the first place, the author is really Mr. Platt, and the title might well have been "Peru from the Air, by