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gests that black skin may be of value in the tropics for reasons wholly unrelated to solar radiation. It should be remembered in addition that severe sunburn is essentially a disease of this century when 2-week vacations and jet air travel to Florida render it common among the unwary, whereas it is almost unknown among the peasants of Europe today who tan gradually as the summertime approaches.

Although positive evidence for hypervitaminosis D among light-skinned peoples near the equator is lacking today, this is probably because (i) up to now there has been no reason to look for it; (ii) the well-known difficulties of assaying this vitamin; and (iii) of the habit of white men in the tropics of carefully avoiding direct sunlight by wearing clothes and pith helmets, and staying indoors when the sun is high to such an extent that they often are not even sunburned. These cultural substitutes for a black stratum corneum were not available, of course, when the races were evolving. Future confirmation of the hypervitaminosis D theory may come from reports of elevated serum levels of calcium and phosphate, kidney stones, and other symptoms of hypervitaminosis D in white persons living out-of-doors in Java, Kenya, and Peru.

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F. Daniels, Jr., in Handbook of Physiology, D. B. Dill, E. F. Adolph, C. G. Wilbur, Eds. (American Physiological Society, Washington, D.C., 1964), p. 969.
H. F. Blum, Quart. Rev. Biol. 36, 50 (1961).

UFO's: Ideal Space Inhabitants

Markowitz' article, "Physics and metaphysics of unidentified flying objects" (15 Sept., p. 1274), was very helpful and prompts the following thought. Aside from infrequent sightings prior to 1945, UFO's became a source of public concern at a time when exploration of space moved closer to reality. I suggest that man, confronted with stepping into space, finds it intolerable to perceive space as uninhabited. The "sophisticated anxiety" of modern man might be, in part, responsible for populating space with products of intelligent beings.

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Thin-layer gel filtration with Sephadex SUPERFINE

The advantages of both Sephadex gel filtration and thin-layer chromatography can now be utilized with the Sephadex Superfine.

Sephadex Superfine is an important complement to other analytic methods, particularly where only sample quantities of experimental material are available. It is useful also (1) for determining the optimum conditions for column experiments (2) in place of normal Sephadex in gel filtration columns when very high resolution is required (3) as a supporting medium in column electrophoresis and in partition chromatography.



Correlation between the molecular weight of 9 proteins and their migration rate in thin-layer gel filtration on Sephadex Superfine G-100 was investigated to be a separate for the second secon tigated. Measurements from separate experiments were correlated by expression on the common basis of 6 cm. migration by cytochrome c. (Andrews, P., Biochem. J. (1964) 91,222, by permission of the author.)

Sephadex Superfine gels can be applied to glass plates with ordinary TLC equipment. They adhere easily to the plates. Addition of a binder is not necessary

Six types of Sephadex from G-25 to G-200 are available in the SUPERFINE grade. The small particle size of Sephadex Superfine (between 10 and 40 microns) permits preparation of thin layers, even with the more porous gels

The various Sephadex types have the following fractionation ranges.		
Approximate fractionation range Type Polysaccharides Proteins		
Sephadex G-25	100- 5.000	
Sephadex G-50	500 10.000	
Sephadex G-75	1.000 50,000	3.000- 70,000
Sephadex G-100	1.000-100.000	4,000-150,000
Sephadex G-150	1.000-150,000	5,000-400,000
Sephadex G-200	1,000-200,000	5,000-800,000

For additional technical information on Sephadex Superfine, including booklet Thin-Layer Gel Filtration, write to:



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580