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Solubilization

Sir,

Solubilization might be a useful new word if used to mean the process of making soluble or more soluble. Glasgow, Hamilton, and Sass-Kortsak (1973) do not define the term but use it as though they mean solubility or possibly sometimes solution. How did they measure '% lipid solubilized' (Fig. 2)? Will the authors kindly say what they mean?

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REFERENCE

Glasgow, J. F. T., Hamilton, J. R., and Sass-Kortsak, A. (1973). Fat absorption in congenital obstructive liver disease. *Archives of Disease in Childhood*, **48**, 601.

We showed Dr. Evans's letter to Dr. Glasgow, who replied:

We are grateful to Dr. P. R. Evans for the opportunity of clarifying our use of the term 'solubilization'.

Much of the fat resulting from the hydrolysis of dietary lipid is itself insoluble in water. Bile salts form micelles with these insoluble lipids thereby rendering them water soluble. It is this *process* of rendering insoluble hydrolysed fat soluble in water which we have termed 'solubilization of lipid'.

In our studies small bowel contents aspirated after a fatty meal were separated by means of ultracentrifugation into a supernatant (lipid) phase and a clear infranatant (aqueous) phase. The fat in the aqueous phase represents the fat which has been rendered soluble in water, i.e. solubilized.

In our article, 'Fat absorption in congenital obstructive liver disease', we compared the concentration of fat in the aqueous phase (solubilized fat) with that in the aspirated juice as a whole (i.e. total lipid) and used this as an indication of the degree to which lipid had been solubilized. The '% lipid solubilized' is therefore the concentration of fat in the aqueous phase compared to that in the juice as a whole related to 100.

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Fingerprints in childhood coeliac disease

Sir,

The association of fingerprint ridge atrophy with intestinal villous atrophy in coeliac patients was first reported by David, Ajdukiewicz, and Read in 1970; according to these authors, changes in fingerprints were found in most of adult coeliac patients and in the few untreated children they studied. Others have questioned these findings both in adults, and more particularly, in children (McCrae *et al.*, 1971; Mylotte *et al.*, 1972).

13 coeliac children with ages ranging from 2 to 16 years were submitted to intestinal biopsy. These children were divided into two groups, according to whether previously diagnosed (Group I, 9 children) or newly diagnosed (Group II, 4 children) as coeliacs. In Group I, 6 children were on an unrestricted diet and the biopsy in all except one showed subtotal villous atrophy, the only exception showing a partial villous atrophy. 1 child was on a low gluten but not strictly gluten-free diet and had a partial villous atrophy. 2 other children were on a strict gluten-free diet and had normal intestinal mucosa. In Group II, all 4 children had a flat mucosa with subtotal villous atrophy.

Fingerprints were obtained in each patient from the thumb, middle, and little fingers of the right hand. For each print in a coeliac child prints were obtained from 2 control children of the same age. Particular care was put in taking the print of the little finger, the most frequently affected in coeliac patients according to David *et al.* (1970). In taking the prints, the fingertips were first cleaned with ether, blotted with a lead pencil, and the print obtained on transparent sellotape which in turn was stuck on a white cardboard.

Normal fingerprints were obtained from all coeliac children, which is in agreement with the findings of McCrae *et al.* (1971), Mylotte *et al.* (1972), and David, Ajdukiewicz, and Read (1973).

We conclude that fingerprinting is of no diagnostic value in childhood coeliac disease.

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