

that our measurements were obtained under closed cell conditions in which there was no possibility of contamination by daylight entering at the blanket's edge. Our measurements also showed that of the 74% of light transmitted by our samples, approximately 46% was scattered light which, due to its angle of incidence with the infant's skin, would be less effective than that normally incident at 90 degrees. Our findings lead us to concur with Dr Stutchfield and colleagues that thermal blankets will significantly reduce the effective irradiance of a phototherapy source.

Commercial phototherapy units vary widely in their outputs in the 420–480 nm range, and these outputs are generally suboptimal.^{1,2} Many of these older phototherapy units are still in use. We suggest the use of more modern light sources, which do reliably achieve the recommended minimum irradiance of 1 mW/cm², together with the avoidance of bubble plastic and other heat shields, whenever bilirubin concentrations are approaching exchange transfusion levels in very low birthweight babies. Heat and evaporative losses can be reduced instead by humidification.³

References

- 1 Stutchfield PR, Modi N, Weindling AM. Phototherapy and the use of heat shields in very low birthweight infants. *Arch Dis Child* 1988;**63**:552–4.
- 2 Modi N, Keay AJ. Phototherapy for neonatal hyperbilirubinaemia: the importance of dose. *Arch Dis Child* 1983;**58**:406–9.
- 3 Harpin VA, Rutter N. Humidification of incubators. *Arch Dis Child* 1985;**60**:219–24.

S C BAYLISS and M J MOSELEY
Departments of Physics and Ophthalmology,
University of Leicester

B HOBBS and D A CURNOCK
Department of Neonatal
Medicine and Surgery,
City Hospital, Nottingham

Diarrhoea due to breast milk: case of fucose intolerance?

Sir,

We read with interest the report by Barfoot *et al.*¹ Firstly, we would question whether five watery stools a day in a normally growing breast fed baby is abnormal. If the pressure from the parents to do something was so great that a formula change was necessary, however, we accept that Pregestimil, and subsequently SMA, at least benefited the parents.

Secondly, the authors recommend that 'sugar chromatography should be carried out on the stools of all infants with unexplained diarrhoea before changes are made in the diet.' We suggest this is impracticable, for the following reasons. The stool obtained must be liquid, and must be frozen within 15 minutes of leaving the rectum; this

presents difficulties within a routine clinical setting, such as a district general hospital in England. In addition, the test may not be available at all centres. If the suggestion were followed to the letter, even the best organised laboratory would be inundated with tests.

It is true that in the patient described, using only the result of a test for stool reducing substances (Clintest tablets) could have resulted in the mistaken diagnosis of lactose intolerance. The appropriate lesson from this report is that the diagnosis of lactose intolerance in a breast fed baby should not be accepted without question. It is of physiological interest that loose stools in breast fed babies may be due to oligosaccharides and their breakdown products, but the stool consistency tends to improve with time, and should not in general be taken as an indication to stop breast feeding.

Reference

- 1 Barfoot RA, McEnery G, Ersser RS, Seakins JW. Diarrhoea due to breast milk: case of fucose intolerance? *Arch Dis Child* 1988;**63**:311.

Q W SPENDER
Division of Clinical Nutrition,
Hospital for Sick Children
Toronto,
Ontario,
Canada M5G 1X8

Diarrhoea due to breast milk: case of fucose intolerance

Sir,

I was interested to read the case report from Barfoot *et al* on fucose as a possible cause of diarrhoea in a breast fed baby. The authors finish by saying 'This type of intolerance to human milk is rare, and we could find no previously published reports'. Just 10 years ago in the same journal Whyte *et al* published a short report on exactly the same finding.² They went further than the current authors in identifying oligosaccharides including particularly fucosyl lactose in the stools of 85% of healthy breast fed infants.

Barfoot *et al* offer no supportive evidence for their contention that their finding represents intolerance. It is common for healthy breast fed babies to have loose stools, and five a day is not that rare. As this baby was said to be gaining weight satisfactorily it could be argued that they did this baby a disservice by changing her to artificial feeds. Perhaps if they had read Whyte's paper this baby's mother would have been allowed to continue breast feeding and the effort involved in publishing their report avoided.

References

- 1 Barfoot RA, McEnery G, Ersser RS, Seakins JW. Diarrhoea due to breast milk: case of fucose intolerance? *Arch Dis Child* 1988;**63**:311.
- 2 Whyte RK, Homer R, Pennock CA. Faecal excretion of