

CHILD NUTRITION

[Archived] Eating Behaviour and Its Impact on Psychosocial Child Development Comments on Ramsay, and Liu and Stein

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Introduction

Outside rare and specialist medical contexts, eating behaviour is the only means by which a child's nutritional needs can be met. The link between nutritional needs and their satisfaction by food intake can be compromised if nutritional needs do not motivate behaviour (problems of low appetite or anorexia), if the motor skills needed are not sufficient (problems of oral-motor dysfunction), if other behavioural characteristics interfere with food intake (for example, neophobia) or if the social or physical environment does not support adequate food intake (problems of food supply or adequate care). We can be reasonably confident that if growth in infancy is adversely affected by any of these problems, cognitive development will be too.¹ But we evolved to store energy supplies to cope with the problems of "feast and famine," and energy

intake is only loosely regulated. A second set of problems is associated with excessive fat storage in communities in which energy expenditure is low and palatable foods are readily available; this has become a matter of urgency with rising secular trends in adiposity in childhood.

Ramsay concentrates on how infant characteristics trigger or influence feeding behaviours, mealtime interactions and growth. She places particular emphasis on recent research implicating infants' own low appetite in the etiology of feeding and growth problems. Liu and Stein cover a wide range of topics before focusing principally on obesity and healthy eating. Together, then, the authors deal comprehensively with these issues.

Research and Conclusions

Because they deal with such a wide range of issues, it is impossible to comment on everything they discuss. Let me start with a couple of reservations. Ramsay states that feeding difficulties often result in poor growth and failure to thrive, and that, as reported by their parents, 25 to 28% of infants under six months old, 24% of two-year-olds and 18% of four-year-olds have feeding problems. These figures seem to me principally a testimony to the extraordinary anxiety parents have about feeding and growth in their children, rather than any widespread problem concerning their actual nutritional well-being. As with sleeping problems, what is a problem for the parents may not be a problem for the child. Dahl and colleagues^{2,3} followed up children identified both by parents and by Child Health Centre (CHC) nurses as having feeding problems that had existed for at least a month and were not eliminated by primary help in the CHC. Using this reasonably strict and reasonably objective criterion, 1.4% of infants had feeding problems, and only in those whose problem was "refusal to eat" (0.8%) was growth adversely affected. Liu and Stein discuss the evidence that breastfeeding protects against the development of obesity in later life and refer to a "dose-response relationship" between breastfeeding duration and lower risk of obesity. The language comes from pharmacology, but this is not pharmacology and what we need here is the disciplined attention to causal order found in the best epidemiological thinking, combined with recognition that children are not just passive recipients of what the mother offers: they actively control their food intake in accordance with their own appetite, as Ramsay emphasizes. It is true that the longer infants breastfeed, the less likely they are to become obese, but this may simply be because infants with a lower appetite are satisfied with breast milk for longer and so wean later (and, independently, are less likely to become obese, again because they have a lower appetite).

If I were to pick out a single issue that I think deserves a little additional emphasis, it would be the plight of children with disabilities, especially neurological disabilities. Although it is now well established that malnutrition is common in children with cerebral palsy, there is good reason to think that this problem is not routinely dealt with effectively, or sometimes at all. In the Oxford Feeding Study, which dealt with feeding and nutritional problems in children with neurological impairments (93% of the children had cerebral palsy), feeding problems were very common.⁴ Eighty-nine percent needed help with feeding and 56% choked on food. Prolonged feeding times of more than three hours per day were reported by 28% of parents, and 38% considered their children underweight. Yet the majority of the children (64%) had never had their feeding and nutrition assessed.

A second issue worthy of attention would be the extraordinarily early development of body image problems, which have now been identified even in five-year-olds,⁵ and which are one of the best documented risk factors for the later development of eating disorders.⁶

Implications for Policy and Service Perspectives

Ramsay calls for (1) the development of educational guidelines; and (2) further research, both of which would be valuable. Her proposal to set up multidisciplinary feeding clinics to address more severe feeding difficulties (3) and train experts in the field of feeding disorders (4) seems to me an excellent idea. Severe feeding difficulties call for the combined expertise of speech therapists, developmental psychologists, dieticians and a range of medical specialists, and although there are experts on feeding disorders in these disciplines, the research and clinical progress that would come from multidisciplinary clinics would be highly desirable (think of the progress that specialist pain clinics have brought). The development of a screening instrument for problematic eating behaviour would also be valuable.

Liu and Stein call for a range of measures (1-9) in the healthy eating and exercise areas, motivated principally, I assume, by the need to tackle the rising prevalence of obesity in young people. The suggested measures properly reflect the need to tackle this as a social and political issue rather than as an individual and medical issue, and I would concur with all their recommendations.

As regards key implications, from Ramsay's proposals I would single out the development of specialist feeding clinics to tackle severe feeding difficulties: many of her other proposals could be

tackled in the context of clinics of this kind. The key implication from Liu and Stein would be the development of a wide-ranging approach to tackling obesity in childhood. This will never be dealt with if it is treated only as a medical problem, or even only as a research problem. It is, as their recommendations reflect, a problem we can tackle now, with knowledge we already have.

References

- 1. Corbett SS, Drewett RF. To what extent is failure to thrive in infancy associated with poorer cognitive development? A review and meta-analysis. *Journal of Child Psychology and Psychiatry* 2004;45(3):641-654.
- 2. Dahl M, Sundelin C. Early feeding problems in an affluent society .1. Categories and clinical signs. *Acta Paediatrica Scandinavica* 1986;75(3):370-379.
- 3. Dahl M, Kristiansson B. Early feeding problems in an affluent society .4. Impact on growth up to two years of age. *Acta Paediatrica Scandinavica* 1987;76(6):881-888.
- 4. Sullivan PB, Lambert B, Rose M, Ford-Adams M, Johnson A, Griffiths P. Prevalence and severity of feeding and nutritional problems in children with neurological impairment: Oxford Feeding Study. *Developmental Medicine and Child Neurology* 2000;42(10):674-680.
- 5. Davison KK, Markey CN, Birch LL. Etiology of body dissatisfaction and weight concerns among 5-year-old girls. *Appetite* 2000;35(2):143-151.
- 6. Stice E, Shaw HE. Role of body dissatisfaction in the onset and maintenance of eating pathology: A synthesis of research findings. *Journal of Psychosomatic Research* 2002;53(5):985-993.