Children with feeding problems

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Feeding problems are not uncommon in children with neurodevelopmental delay or disorder and indeed, may be a diagnostic factor in some cases (Kron 1970). In Hewett's (1969) study of 180 families with handicapped children, 21 mothers stated that feeding was the biggest problem with their child.

The difficulties may be present from birth and may cause a complexity of problems apart from the obvious one of nutrition. Profound anxiety and depression can occur in mothers who experience difficulty in feeding their babies with consequent disturbance of the mother–child relationship (Gunther 1955).

The close physical contact between the mother and child during feeding is an important factor in development of visual and auditory perception. During the first few weeks the child shows visual preference for the human face and with his mother's voice close to his ear the young child begins to listen to the sound patterns of his native language. Weir found differences between the utterances of 4-month-olds who had been exposed to different languages (Japanese, Arabic, English) showing that auditory discrimination has developed considerably by this age. If the mother is tense and anxious as she feeds her child, she is less likely to hold him and talk in the ideal way so that the foundations of speech retardation may be laid here. It can also be speculated that social and emotional development are likely to be affected. Problems may arise in other family members when feeding is unduly prolonged in the handicapped child.

In addition, failure to cope with solid foods and a balanced diet results in serious dental decay and, in some cases, malnutrition. It has been pointed out (Leamy 1953) that in cerebral palsied children a vicious circle seems to be set up where children eat less because of feeding problems and, as a consequence, develop low food demands.

The most frequent problem lies in the physical inability to take in food. Briefly, the normal feeding pattern develops in the following way:

1. At birth the child takes in liquid nourishment by suckling. This reflex,
upon which survival depends, is well developed and associated with swallowing. The upper gum pad and back of the tongue are used to grasp the nipple. A wave motion of the tongue from front to back, together with jaw elevation squirts milk into the oropharynx. Swallowing takes place at this stage with the gum pads apart.

2 Solid foods may be introduced around 4 months and the child gradually learns to use his lips and tongue to take food from a spoon. By the end of the first year, chewing has developed through the primitive vertical movement to protrusive and lateral organization so that the child can now enjoy a varied diet.

3 Concurrent with the level of these activities, are the manual skills important for independence. The normal child brings his hands together at 3 months and soon begins to rest them on his bottle. Finger feeding is mastered as hand and eye coordinate and the child should feed himself with a spoon by 18 months. Motivation is also an important factor and there will be variations with social and cultural influences.

4 Adult swallowing gradually replaces the infantile pattern and here the teeth are together and the lips play little part.

Children with neurodevelopmental problems may have disorders of movement which disturb the basic mechanisms of feeding. Early primitive reflexes often persist so that normal voluntary movements do not develop. The child may, therefore, continue to suckle strongly so that weaning to solids may be difficult. An exaggerated bite reflex and oversensitive gag reflex will prevent normal biting and chewing.

In addition, difficulties in maintaining posture of the trunk, and head control will also affect feeding efficiency. Poor muscle tone or involuntary movements of the tongue, lips and palate will cause problems in controlling food in the mouth.

Parent guidance is, therefore, essential where there are such problems, as is advice and support for those concerned with the everyday care such as houseparents, nursery nurses and frequently, voluntary untrained helpers. If this help is given in the early stages, some anxiety and family tensions may be prevented. It is further essential that the advice should be continuing and changing with the specific needs of the child and family. Reappraisal and regular reassessment will ensure that the child receives treatment appropriate to his present situation.

Direct treatment in the conventional sense is frequently not indicated in cerebral palsy and the indications are for very specific handling and management techniques. The aims of these are to reduce abnormal patterns of move-
ment and increase more normal ones, thus enabling the child to develop to his maximum potential. Management includes the supply of correctly designed furniture and selection of toys and equipment to promote physical and intellectual development. In addition, specific ways of carrying or assisting standing and walking will be used. This means that therapy is not an event taking place at specific times but is a continuing part of the child’s life. The parents are the coordinators of treatment and the physiotherapist, occupational and speech therapists work through them. Feeding training is an obvious example where parents and therapists coordinate and cooperate to help the child.

Assessment, prior to training, must be made so that information is geared to the present condition and any change can be measured later. The speech therapist will assess the mechanisms of feeding as a contribution to the team assessment of the whole child.

An outline assessment procedure will be helpful here to enable other disciplines to be aware of the feeding problems (Miller 1972):
It will be noted whether the child is completely or partially independent in feeding or needs total assistance. Each area is observed, as the child eats and drinks to see whether the difficulty arises in the lips, tongue, chewing or swallowing. Sitting and head control and any equipment and utensils used are noted. Careful questioning of the mother is also essential to obtain her picture of the feeding situation. It is also highly significant to note the nature and consistency of food the child usually manages.

Following this appraisal, suggestions will be made and in general, these aim to develop feeding as normally as possible.

Utensils are specially chosen to facilitate eating and to develop movement. For example, the size and type of spoon is important. A child with a strong bite reflex will require an unbreakable plastic spoon as metal will be uncomfortable and may increase his biting. The spoon handle may need to be long if an adult is to assist the child’s grasp.

Dishes with straight sides are often used so that food is not easily pushed over the edge and these are often placed on non-slip mats.

Cups with two large handles are frequently recommended to give the child a symmetrical, stable posture for drinking.

Various ways may be suggested to stimulate mouth movements or assist closure of lips. The overall aim is always to encourage as much independence as possible in the child, whilst maintaining motivation and preventing excessive frustration.

Suggestions on specific foods will also be made. Many children are kept on liquid and sloppy diets as they cannot easily manage lumpy or dry foods.
However, this will not encourage chewing and mature swallowing, and new textures must be introduced gradually, to improve mouth movements. As the child becomes used to rougher foods, his mouth will be less sensitive and there will be less choking and gagging. Biting and chewing can only develop if there is something to chew and parents must be encouraged to persevere even when this is difficult.

Games and activities will also be suggested to develop better hand to mouth movements and hand–eye coordination. Children may be encouraged in groups to wash their faces and clean their teeth, both of which constitute useful prefeeding training. Teeth cleaning, in particular, is an important activity, not only for the promotion of oral hygiene, but to increase the child's awareness of his mouth and its movements.

Programmes for feeding must obviously be devised for the individual child and with close cooperation between parents, therapists and other helpers. It is vital that this help is made available wherever there is a problem and that parents should demand assistance. At present, there is a shortage of literature giving practical advice and frequently therapy is inadequate. However, the situation shows signs of improvement with a few booklets available and a recent working party, established to investigate the problem and needs (Harkness & Sandys 1973, Ryan 1976, Miller 1973).

REFERENCES


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