INTRODUCTION

The head-mouth orientation movements of the baby at the breast of the mother have long been known. One of the first to describe such a behaviour pattern was Pepys (1667). He noticed that, if the cheek is touched with a person's finger, the head turns toward the stimulated side, and the opened

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mouth tries to grasp the finger. A careful description of this behaviour was published by Kussmaul (1859). He stated, that five hours after birth a baby moved his head from side to side spontaneously. It was also noted that upon touching the cheek the head turned toward the finger and the baby began sucking. Other reports bearing on this by Preyer (1881), Haggström (1919), Popper (1926), Pratt, Nelson and Sun (1930) and Balyassinakova and Model (1932). More recently it has been studied by Stirnimann (1937), Gentry and Aldrich (1948), Prechtl and Schleidt (1950), Andre-Thomas and Dargassies (1952), Peiper and Thomas (1953) and Prechtl (1953b).

Even though these various descriptions exist, little is known about the development of this behaviour pattern and its underlying physiological mechanisms. However, two facts concerning its threshold are commonly accepted. If the baby is hungry the threshold of the head movement is lowered, and if the baby is drowsy and sleepy the threshold seems to rise. Also generally agreed upon is the fact that this whole complex of infant feeding behaviour later disappears, the searching movements of the head and the typical grasp movement of the lips being the first elements of the complex to drop out. The disappearence of the behaviour is thought to be effected by the integration of new functional complexes during the development of the central nervous system (see Prechtl 1956a).

Confusion has arisen in the literature because various investigators considered different aspects of the behaviour. As a result various names have been assigned to the movements. For example, Pratt a.o. (1930) uses “search reflex”, Gamper (1926) “Einstellautomatismus”, Stirnimann (1937) “Einstellreaktion”, Gentry and Aldrich (1948) “rooting reflex”, Prechtl and Schleidt (1950) “Suchautomatie” (rhythmisches Brustsuchen), resp. “Oraler Einstellmechanismus” and Andre-Thomas (1952) “réactions des points cardinaux”. Difficulties occur because (1) different stages of development are not clearly distinguished by the observers, and (2) — as already mentioned — different components of the movements have been compared. One group of investigators for example paid more attention to the turning of the head, while another group concentrated on the movements of the lips aroused by the touch.

The behaviour patterns of the normal newborn infant associated with feeding are completely developed at birth. For our descriptive purpose the total feeding behaviour may be divided into the following four components:

1. Side-to-side movements of the head or a single directed turning movement which provides an opportunity for the mouth to come into contact with the nipple of the breast.