

4. TRADITIONAL SUPPLEMENTATION PRACTICES

Certain cultures appear to withhold supplementation for almost a year and to have the infant rely exclusively on breastmilk for as long as is biologically possible. If cultures were ranked on a continuum from "non-supplementing" to "heavily supplementing", the traditional child-feeding practices of Kinanbwa would, in contrast, fall far toward the heavy supplementing pole. We have already seen the manner in which, even before the infant is breastfed, he is exposed to oral intake of purgative substances. But in addition, virtually right from the earliest weeks of life, village custom mandates that he be given a variety of foods to supplement the on-demand breastmilk which constitutes the principal element in his diet.

The supplementing process can best be viewed as a gradual movement toward adult food, most commonly and colloquially referred to as manjé chodyé (literally "cooking-pot food"). Between breastmilk and cooking-pot food, there are two intervening phases. The first one is the phase of manjé dous ("sweet food"), to be followed by a subsequent period of manjé sél ("salt food").

4.1. Manjé Dous

"Sweet food" is a generic term used by villagers to refer to sugared paps and porridges prepared by dissolving one of a variety of locally prepared flours (especially those prepared from plantain or arrowroot) in a water or milk base. Such mixtures are generally referred to as labouyi, a term which may be used somewhat synonymously with the phrase "sweet food."

There is some interhousehold variation with respect to the timing of the introduction of these cereal based porridges. But they continue to be the major food supplement of young children in the first months of their

lives. Some mothers begin giving these porridges within the first month after birth. And all mothers will have begun by the onset of the child's third month. It is recognized by everyone that milk-based labouyi are better than water based ones. But during the early weeks when the child's insides are believed to be still in the process of cleaning out, the women will use water even when milk is available. Later on the preference will be for porridges prepared with cow's milk, water being used only when milk is not available.

Probably the most commonly used traditional porridge is labouyi farin banan, made with the flour of dried and grated plantain. A green plantain will be peeled, cut up and left to dry in the sun. When fully desiccated the pieces will be ground to a powder and turned into a porridge. This is believed to be highly nutritious. Even more popular is porridge made from arrowroot. But this latter must be purchased. Labouyi will also be made from traditional grains, especially corn and millet, and from grated sweet potato. But these are seen as being substantially less nutritious than arrowroot or plantain porridges. Rice based gruels are seen as being of intermediate quality. What emerges from this is a pattern of clear preferences and of clear notions that some substances are more nutritious than others. The presence of such discriminations reveals an accurate approach to nutrition, though a modern nutrition specialist may question the villagers ranking of certain items.

Village mothers try to vary the content of the supplementing gruels at least weekly. Enough flour will be ground or purchased to last for several days or a week. But a different gruel will be prepared the following week, recognizing the tendency of children to reject and even vomit up the supplements when the same item is served day after day.

Once the supplementing with the manjé dous has begun, the child will be fed labouyi at least twice a day and generally more. The limiting factor, especially in recent years, may be, not the availability of the food itself, but the availability of fuel. The preparation of these gruels entails lighting a fire, and as the availability of fuel continues to decrease and its price increase, the practice of lighting a separate fire just for the neonate's gruel becomes less and less feasible.

A great deal of care is taken in the preparation of these paps. A small special kettle (the aluminum bom, distinct from the cast iron chodyé which serves as the major cooking pot) will be set aside and used exclusively for the preparation of the infant's labouyi. Water will be carefully boiled and covered for use in these porridges. And in most cases the preparation will be done using charcoal rather than firewood. Charcoal cooking is more expensive, and entails the use of a cast iron brazier rather than the traditional three stones used with firewood. But it is viewed as being "cleaner" than firewood, and because it makes less smoke, it leaves less of a taste in the item being cooked. That is, villagers are aware that there are hygienic and less hygienic ways of preparing food, and custom imposes the application of the highest local standards when dealing with the preparation of neonatal food supplements. In such matters the people of Kinanbwa are, in their practice, as likely to depart from local ideals as people of any human culture, of course. But the presence of the hygienic awareness is itself an important pre-existing raw material of potential use to designers of nutrition programs.

With respect to the content of these gruels, a pattern which was already present during the first research period had become even stronger by 1980: the pattern to consider store-bought powders and preparations, not only as nutritionally superior to home prepared mixtures, but also as manifestations of greater concern and solicitude on the part of the mother. This pattern has an impact on the use of powdered milk, which will be

discussed separately below. But prestige considerations also come into play with respect to the purchase of bases for gruels. Thus part of the preference toward arrowroot as perhaps the favorite labouyi base may stem from the fact that arrowroot must be purchased. And mothers who purchase pre-ground grain bases (such as rice and corn) appear to be a bit more demonstrative of their maternal solicitude than mothers who prepare the bases by themselves desiccating and grinding them. The highest prestige child-supplementing behavior is to buy imported preparations such as Gerber cereals and oatmeal. Some mothers, rather than disposing of the empty Gerber jars, will line them up and prominently display them on some table visible to visitors. And it is common to hear conversations concerning child care in which one of the participating mothers will at some point make pained but unequivocal allusion to the amount of money which she is forced to spend on the feeding of her child. In short, the shift toward increasingly frequent use of store-bought "sweet foods" has not only been behavioral in character. There has been a simultaneous strengthening of an evaluative tendency which assigns higher marks for parental solicitude to those mothers participating in this shift.

It must be noted that admiration of things store-bought is modified by experience. One formerly popular store-bought food in the village was Maizena, a corn-based powder. Many village mothers began noting, however, an apparent association between this food and worms in their children's feces. The result was a turn from Maizena. But in the absence of such clearly negative experiences, it is assumed that store-bought supplements are both biologically and socially superior to village-made supplements.

In addition to the gruels, which are viewed as the most important supplement to breastmilk in the early months of life, children will also be given different types of sugar water and teas. Teas will be made not only from cinnamon, but also from citrus leaves, soursop leaves, and others. Though these sweetened teas are believed to have some nutritional

effects, they are not considered in the same light as the more important labouyi. It would appear that the use of these teas is growing in importance with the increasing importance of bottles. The labouyi is generally spoon fed to the child, whereas sugared waters and teas are administered through a bottle. As will be seen below, the baby bottle, though formerly not part of the traditional pre-delivery trousseau, has now become a central element in the equipment prepared for the reception of the child. This has been accompanied by a simultaneous growth of the importance of teas, though these continue to be viewed as secondary supplements to the primary labouyi supplements.

The perceived importance of water in the feeding of the child, however, is quite high in the village and deserves some brief discussion. Water itself and water based foods, are seen as being particularly important during the first weeks of life. We have already discussed the manner in which villagers, though recognizing the nutritional qualities of cows' milk, will intentionally prefer water-based paps during the first weeks of life in order to assist with what they believe to be the necessary purgation of the child's stomach and intestines. But village belief, in a chemically inaccurate but medically adaptive fashion, attributes special purgative qualities to boiled water. Thus the water that is used as the base for early supplementing gruels, and the water that will be directly given to the child as a drink, is boiled. Growing fuel scarcity may be leading to a shortening of the boiling process itself to a point that reduces its microbe-killing efficacy, but the boiling is still considered essential.

But this boiling of water takes on an added significance as well in light of the nutritional role which local belief attributes in general to water. It is firmly and apparently universally believed that the nourishing and growth-inducing properties of food are weakened or undermined if the individual does not drink water after each meal. This principle applies most heavily to the eating of meals by adults and older children.

But villagers also appear to apply the same principle to the feeding of young infants. Water, often sweetened, will frequently be proffered to the infant after the feeding of a labouyi, much in the same way that other household members will invariably drink a glass of water after their own meals. The effect of the meal is otherwise believed to be diluted.

Stated somewhat differently, village food beliefs construe the consumption of water not only in terms of water's thirst slaking powers. Boiled water is also believed to help finish the intestine-purging function begun by the lok and the starch pap fed to the neonate in the first days of life. But in addition, for all household members, water is believed to be a necessary post-meal internal solvent without which the food itself will not be able to have its intended nutritional effects. Thus neonates and infants will be constantly proffered water, and one can judge as highly adaptive those hygienic practices—including use of boiling of the water, use of special kettle, use of smoke-free charcoal rather than smoky firewood, and frequent cleaning of the bottle in which the water (or tea) will be delivered to the child—with which village custom surrounds the preparation of water for infants.

A final point to be made in discussing the manjé dous phase of the child supplementing practices of Kinanbwa concerns the type of sugar which is used. Most sweetening of adult foods is done with brown sugar or with rapadou (locally extracted unrefined sugar), these being substantially less expensive than refined white sugar. This latter is given to adults only on special occasions. But for the sweetening of infant water and teas (as well as for the sweetening of the above-mentioned gruels), village custom calls for the use of white sugar, as being lighter and freer of possible contamination. Thus the white-sugar is merely one more element in the same neonate-protecting complex which underlies the water-boiling mentioned above.

To sum up the preceding section, village women continue to believe that the best food for the child is the mother's breastmilk, but simultaneously supplement this food, usually from the first month of life, with a series of paps and porridges lumped under the general label of labouyi. Milk-based labouyi are known to induce growth more effectively than water-based ones, but the latter will be chosen in the early weeks of life because of the believed purgative effects of boiled water. (The same intentional return to water-based paps may occur when the child shows symptoms of intestinal problems or even for other illnesses.) The use of white sugar as a general sweetener for most foods consumed in this period has led to the practice of calling all such paps and sweetened drinks as manjé dous ("sweet foods"). And whereas such sweet foods will be given on occasion to adults (especially when they are ill) on the whole they are viewed as being manjé ti-moun (baby food) and their major importance in the rural Haitian diet consists in their status as the principal supplement to breastmilk during the first months of life.

4.2. The Shift to Manjé Sel

The next stage in the feeding of the child will be the gradual introduction of solids of the type cooked in the family pot. The transition to these solids will be very gradual, at first being a minor supplement for the daily labouyi, which themselves are supplements to breastmilk.

As in so many other processes, the sequence of events is fairly commonly adhered to, but the timing will vary from mother to mother. In general, the onset of sitting in the child, which occurs as early as the fourth month in some village children, will be a signal that the child is ready for the introduction of solid foods. The introduction of these solids, however, is not done at first by taking food directly from the family cooking pot. Rather the mother will select foods of the type that are prepared there but will cook them in a special way for the child,

frequently by using a milk base. The generic germ used in the village for this intermediate type of food -- between the pap and the family cooking pot -- is manjé sel, literally "salt food". Cooking-pot food is, technically speaking, manjé sel. But the villagers tend to use this phrase also as a pre-cooking-pot food fed to infants.

The earliest solids are generally cornmeal or white rice, prepared with milk. The principal difference between this manjé sel, and the earlier administered manjé dous which may have also been prepared with the same ingredients, consist less in the absence of sugar and presence of salt, than in the absence of a grinding process which converts the grain first into a powder. For the first time the infant is eating foods in a quasi-solid form. And this manjé sel stage of also characterized by the absence of city-purchased conspicuous consumption alternatives. That is, the display element in infant feeding tends to focus on the earliest months of life. But eventually mothers turn to the no-nonsense task of preparing the child for eventual weaning and participation in the family cooking pot.

Once the child has begun to eat this specially prepared cornmeal and rice, the mother will begin slowly adding other elements taken directly from the family pot, such as bean sauce and the different types of meat sauces that are prepared in the village. The infant will also be encouraged to tackle small bits of boiled mashed plantain.

During these months the mother and the other caretakers assigned to the child will be monitoring the physical growth and behavioral development of the child. It is recognized that at this stage children begin manifesting their own individual personalities. At one extreme are those children who simply reject solid foods and who are even reluctant to eat labouyi, maintaining a strong attachment to the mother's breast. At the other extreme are those children who eagerly accept the solid food proffered for them and who begin showing a preference to these foods over the earlier paps. It is believed that these latter children

grow much more reapidly and will have a much quicker and easier weaning experience.

The village women would find it strange that outsiders would tell them to begin observing their children. On the contrary, villagers are clearly aware of the behavioral sequences through which children go from helplessness to walking, for example, and have notions as to which achievements should occur in which month of life. Difference between children in this regard will generally be attributed less to nutritional or organic differences, than to pre-existing personality tendencies in the children themselves. Slow developing children, for example, may be described as being inherently parésé (lazy).

But the developments themselves will be used as signals for the appropriateness of giving the child even heavier doses of manjé sel and for cutting back on the porridges. The process seems to entail a playoff between "sweet food" and "salt food". We found little evidence that there was intentional phasing out of breast feeding, though such phasing out is occurring by virtue of the fact that now more of the child's hunger cries are met by other types of foods.

The villagers are aware, not only of behavioral developments in children, but also of differences between children in terms of their physical growth rates. Concern with physical growth is a salient element in local biological folk-theory, and local explanatory schemes attribute causal growth-inducing power to factors alien to modern biological theory. For example, the crying of infants is believed to be a necessary element in their physical growth. The bones and general body structure of the infant are believed to be stretched and expanded by its wailing, and children who cry little are believed to manifest slower growth patterns. There may be a paradoxical and indirect causal link which gives some validity to this particular folk theory. The frequency with which a child is fed, and to some degree the amount which he is fed, will bear a close

relationship to the insistence with which he makes his hunger known. In this way it may in fact be the case that children who cry more frequently grow more rapidly. They may get fed more frequently.

Another widespread folk-theory attribute growth-inducing power to mud and dust. Young children who play naked in the mud may not necessarily lack clothing. In the words of the villagers, labou rinmin grandi timoun (mud is good at helping children grow). The same is said of jwet té ("playing on the ground"). It is felt that children should be allowed to have virtually their entire body covered for brief periods of time with mud and/or dust. The ideal time is early or mid afternoon, just before the late afternoon bath that is given daily to all children. (No villager would allow children to remain muddy or dusty for more than brief periods of time).

The actual growth spurts themselves are believed to occur only when the child is sleeping. The large amounts of sleep that infants and young children need are directly related to this. Unseen to the eyes of people, Bon-Dyé Himself makes children sleep more than adults and secretly adds tiny increments to their size. This process lasts all the way to adolescence. Try as one might, one can never see the exact moment in which the child grows.

But the growth of children is also believed by many to occur more strongly on certain days of the week. For reasons which no informant could explain, it is believed by many that Saturdays and Mondays are the days on which boys grow. Young girls, in contrast, have their growth spurts concentrated on Fridays. An analyst need not ascribe to the validity of the villagers' model of human growth to be nonetheless impressed by the explicit salience given to the physical development of the child in local folk biological theory.

But despite these local theories concerning growth, villagers are fully aware that the major determinant of the growth of an infant is the amount of food that the infant consumes. Village notions emphasize the rapidity with which the infant accepts manjé sel as perhaps the best indicator of its future growth. But there is a tendency in the village, in discussing why some infants eat less than others, to attribute differences to pre-existing preferences and personality differences in the infants themselves, rather than to differential food availability or differences in feeding practices between different mothers. Villagers will admit that there are important differences in their own practices and that of moun lavil ("city people") and express convictions as to the better nutritional outcomes of their own practices. But there is a strong tendency to deemphasize the importance of village-internal economic or behavioral differences as they may impact on infant feeding, and a corresponding tendency to place great emphasis on the preferences of the individual infant as the cause of differential food consumption and ultimate growth rate. When pushed, women will admit that not all village mothers care for their children the same way. But the prevailing verbalized model is one which places a great deal of causal responsibility on the infant itself for its own nutritional status.

Such an emphasis on the personality of the child is logically compatible with other propositions which one hears concerning the personality of the child even before it has exited from the womb. And the dynamic which generate this emphasis with respect to differential growth -- the perhaps merciful denial function which is being served in an environment where so much malnutrition is caused by sheer scarcity factors -- are not at all surprising. But whatever its origin or possible adaptive functions, this explanatory tendency to lay so much of the burden for suboptimal growth on the feeding preferences of the infant is one behavior pattern on which designers of nutrition intervention programs will want to focus their attention.

But the attention should entail openness to unsuspected logic. Villagers are aware that the most dangerous time for children is during the post-weaning period itself. It is during this latter period that certain children will begin to fall seriously behind others in terms of their growth. But the lag will affect principally those children who have not taken well to the manjé sel during their second semester of life, those children who have continued to show reluctance or outright rejection toward the rice and strained bean sauce proffered to them in small quantities. But for this very reason the manjé sel period is important. Those children who have taken well to these specially prepared solids will in fact have a much easier transition to the family cooking pot, and the more closely one examines the matter, the less irrational does the belief in the nutritional importance of child preference begin to appear. It may very well be that, even if food availability were to remain constant, children who for one reason or another took less readily to solid food will in fact suffer greater nutritional traumas during the immediate post-weaning period, and that at least some of the acute malnutrition that shows up on surveys may in fact be attributable to the child-preference variables that play such a prominent role in village explanatory schemes.

The manjé sel phase of breastfeeding is the context for yet another important shift in child care: the introduction of the child to drinking water that has not been boiled. Once children have started to sit and crawl, it is believed that they may safely be introduced to the same water that other household members drink. In fact during this period parents may be particularly insistent in teaching the child to drink substantial quantities of water after each meal of manjé sel. Informants say that at the onset of eating manjé sel, children are eager to drink great quantities of water. But this infant preference is perhaps created, or at least buttressed, by urging from caretakers, who will try to teach the child the earlier-mentioned rule that any adult villager knows, namely that a meal pap fê anyin pou ou ("won't do you any good") unless you drink

water immediately following the meal. Thus this period is the occasion for heavy exposure by the infant to possible water-borne illnesses from which customary water boiling practices had up till now given him at least some protection.

Finally the introduction of solids during the manjé sel period is also accompanied by a phase-out of spoonfeeding and a gradual teaching of the child to feed himself. A plate of food will be placed in front of the child and he will be expected to begin eating with his hands, and will continue to do so through most of his childhood. It is only later that children begin experimenting with the spoon, and even after spoon eating has been mastered most children continue to consume most of their meals with their hands. (The use of the knife and the fork is virtually unknown in the village, even among adults.)

If the manjé sel period has been successful, at its termination the breastfed child will already have begun to eat small quantities of food directly from the family cooking pot. This final transition to the consumption of genuine manjé chodyé is ideally something that will occur, not after weaning, but before.

To sum up, as is true in many, if not most human cultures, the children of Kinanbwa make their way to the family cooking pot in a two-stage preparatory period. The first stage, the "sweet food" period, is characterized by the spoonfeeding of a variety of sugared paps and gruels. The second period, the "salt food" period, is characterized by the slow introduction to unsweetened solids of the type that will later be consumed from the family cooking pot. The display behavior that surrounds the purchase of special store-bought "sweet foods" virtually ceases in the "salt food" phase, as children begin receiving direct training in the consumption of the foods which other family members eat. The timing of the introduction of solids is closely linked to certain behavioral developments in the child, especially sitting and crawling. And

experienced mothers take careful note of the willingness with which the child takes to the solid foods, as the best indicator of the ease with which the child will make the transition to the family cooking pot and avoid the post-weaning growth lag which is known to affect children attached exclusively to the breast.