# Infant and Toddler Feeding Tip Sheet Pediatric Renal Disease

### • PRODUCT CHOICE:

Breastmilk is an ideal option. Bioavailability of the nutrients adapts to the infant. Offer as much volume as is recommended based on the nutrition assessment, allowing some orally and at the breast, if possible. If formula is used, it should ideally be a whey-based formula with a low electrolyte, vitamin A and aluminum content.

#### • MODULARS:

Use modulars to increase kcal and protein content. Ideally, do not concentrate base formula past 24 kcal/oz for infants. Keep macronutrient content in balance and increase caloric density in a step-wise progression. Monitor tolerance (ie: stooling, emesis/reflux, laboratory values etc).

#### • TUBE FEEDING:

Gastrostomy feedings are preferred to nasogastric feeding. Keep feedings as physiological as possible, by providing regularly spaced bolus feeds. Utilize continuous feeds only as needed. Overnight feedings only may be used as an alternative to allow for oral intake during the day.

#### • GI SYMPTOM MANAGEMENT:

GE reflux, delayed gastric emptying, frequent emesis and stooling issues need to be addressed medically and/or with adjustments to the type of formula, amount/type of additives and timing of feedings.

#### • STARTING SOLIDS:

Offer solid food at 6 months of age (adjusted for prematurity if needed). Offer food before formula to allow hunger to encourage intake. Start with either meat or a single grain cereal, add well-pureed vegetables and fruits and continue to increase variety, texture and finger foods over the next months. Try foods one at a time for 3-7 days to assess for allergens. Food teaches the child the mechanics of eating and does not provide significant calories at first. Foods that should wait until age 1 include: fish, shellfish, nuts, milk, honey, and egg whites. Choking hazards may need to wait until at least age 2 and needs for modification (ie: cutting up food) should be assessed. Never provide Karo® syrup or honey to an infant. Avoid salt and sugar, including baby food "desserts." Children should show an interest in food and be able to hold their neck and trunk up without support.

#### • ADJUSTING FEEDING:

- o Growth will determine adequacy of intake and adjustments needed to diet regimen.
- o Eventual feeding structure should include 3 meals and 2-3 healthy snacks.
- Diet needs with kidney disease should be individualized.
  Medication/supplements may be needed.
- o Extra fluid is sometimes needed.

## **FEEDING CONCERNS:**

- o Balance a well-rounded intake with renal diet restrictions. Some foods may need to be limited. A few foods, such as cow's milk, may need to be avoided.
- Speech language pathologists or occupational therapists may need to work with the child if delays or problems with texture present. Many children need to stay in "practice" with a variety of foods so they can adapt to a fuller diet after transplant.
- Typical children may average 10-15 times of interacting with a food before accepting it. This may be more in children with medical issues such as renal disease. Many children have oral-motor trauma. Continue to offer a variety and re-introduce foods periodically.
- Children should still learn good basic nutrition, and avoid eating "junk" foods. Intake often improves post-transplant.

#### • TODDLER FEEDING:

Breastmilk or formula is usually used past age 1 to supplement intake and as a milk replacement. Continue with well-rounded, regular meals and snacks.

Supporting education in the dietary management of rare diseases



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