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Tips for Transitioning Young Children with Chronic Kidney Disease (CKD) to Solid Food (Weaning)

It may be a challenge to transition a child with CKD from breast milk or infant formula to a solid food diet. Some of the reasons behind this include:

- Uremia and associated taste changes[1, 2]
- Aversions to having food in their mouth due to a history of medical interventions with tubes/devices[2]
- Physiological developmental delays[2]
- Limited appetite[3]
- Fullness from peritoneal dialysis fluid[3]
- Fullness from meeting high calorie and fluid requirements[2]
- Taste alterations due to medications[2]
- Gastrointestinal reflux and associated pain with food consumption[3]
- Delayed gastric emptying and associated fullness[3]
- Constipation and associated fullness[3]
- Metabolic acidosis and concomitant decrease in appetite[5]
- Vomiting post food intake[3]
- Dietary restrictions[5]

Although the transition to a solid food diet may take longer in children with CKD, there are some strategies to promote improved oral diet. These include:

- Treat reflux and delayed gastric emptying medically[3]
- Adjust medication administration (e.g. via tube or change medications)[2, 6]
- Encourage solids at an appropriate age (at 6 months of age for term children, slightly later for premature children)[6]
- Involve speech and language therapy, occupational therapy, a feeding team or feeding psychologist if a child demonstrates struggles with texture or oral advancement (by age 8-10 months)[6, 8]
- Do not force feed[8]
- Promote a positive environment for feeding – make meal and snack time happy and fun[8]
- Model appropriate oral intake, emphasizing enjoyment of food[8]
- Allow all foods with an emphasis on nutrient dense foods; only limit per renal diet restrictions when more than ~2 tablespoons are consumed in a given feeding of a restricted food[6]
- Avoid "grazing" and offer regular meals and snacks – with at least 2 hours between food offerings[8]
- Offer regular meals and snacks even if the child is consuming very little or no food – regular exposure is important![8]
- Gradually increase texture as tolerated[6, 8]
- Some children skip the "baby food" stage and go straight to finger foods[8]
- Encourage pacifier use and mouthing of safe toys to promote oral stimulation[8]
- Encourage positive touch in the mouth and face area including kisses and caresses from parents with firm but gentle touches[8, 9]

continued overleaf...

- Offer a variety of foods[5]
- Depending upon hospital policy, offering overnight tube feeding (rather than during the daytime) may enable the child to feel hungry during the day and thus encourage oral diet. Bolus feeds could be timed so that the feeds emulate meal and snack times, with encouragement to the child to consume oral diet prior to the bolus being given. This enables the child to associate eating solid foods with satiation[6]
- Offer high calorie nutritious foods at meals and snacks to help meet calorie needs[5, 6]
- Offer high calorie oral nutrition supplements as snacks to meet calorie needs and allow ad lib desired solid food intake at meals[6]
- Keep trying! Often the habits set up during CKD / dialysis don't pay off until a child has had a transplant or until they are older. Often, after a transplant, children will rapidly advance their solid diet[9, 10]
- A subset of post-transplanted CKD patients will need a specialized feeding clinic long-term due to significant feeding challenges throughout the course of CKD – time is needed for these children to eventually accept food[10]

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