CF Care Center Providers,

We are pleased to announce that behavior and nutrition handouts described in Table III “Routine monitoring and care recommendations for the infant diagnosed with cystic fibrosis” in the CF Foundation Evidenced-Based Guidelines for Management of Infants with Cystic Fibrosis were published in The Journal of Pediatrics December supplement (JPediatr 2009;155(6);S73-93). These guidelines are also available in the Resource section of Port CF. The central purpose of these handouts is to provide parents of children with CF (ages 4 months to just after 2 years) with basic nutrition and behavior management information and recommendations. They are to be used in conjunction with face to face discussion with parents or family members. We anticipate that the handouts will also provide parents with a sense of validation that these challenges are a normal part of development for all children.

We hope that parents will find the information in the handouts helpful in reinforcing discussions in clinic as they work to ensure their child with CF receives appropriate nutrition. While these resources will not be sufficient alone, they will provide them with anticipatory guidance about nutrition and mealtime behavior management. The handouts will also set the stage for parents to discuss nutrition and mealtime behavior concerns with the CF team perhaps earlier than they would have in the past.

**Feeding Your 4 to 7 Month Old: Starting Solid Foods**

**Purpose:** To highlight the importance of offering a variety of foods at this young age.

**Topics addressed:**

1. Importance of starting solid food.
2. How to know your baby is ready for solid food.
3. How to best serve solid foods.
4. How to best manage early solid food refusal.
5. Recommended serving sizes for milk/formula and baby cereal.
6. Giving attention to eating and not giving attention for not eating.
Starting solid foods is very important for your baby’s development and health.

WHAT CAN EATING SOLID FOODS DO FOR MY BABY?

1. Eating new foods will add to the calories he gets in breast milk or formula. Eating new foods will help him get closer to eating the calories needed for good nutrition and growth. The goal is for your baby to grow well.

2. Eating solid foods gives your baby the chance to practice important skills including moving the tongue, using the gums, and swallowing.

3. Starting a wide range of solid foods over a long time helps your baby to eat a variety of foods and flavors as he gets older. This makes your job easier in the long run!

HOW DO I KNOW IF MY BABY IS READY FOR SOLID FOOD?

Around 4 to 6 months most babies are able to hold their head, keep food in their mouth, and sit up with some help. This means they are ready. When he is ready for the highchair, have him sit at the table. This is a great time to have your baby start eating dinner with the rest of the family.

WHERE DO I START?

Give solid food when your baby shows signs of hunger, such as when he is ready for a bottle. It is easier to feed your baby solid foods when he is calm. If your baby is too hungry, you may need to give a few ounces of breast milk or formula before offering solids. It is hard to learn a new skill, like eating solid foods, when a baby is really fussy.

Rice cereal is a common and good first food. It is high in iron, which is important for babies. Strained meats make a good second food to try. They are high in iron and calories. Babies can eat a variety of pureed foods, as well. Slowly adding a variety of strained fruits, vegetables and meats will help with a balanced diet and good eating habits. Try one food at a time to make sure that your baby does not develop a rash or have diarrhea. Call your doctor if you think your baby may have a rash or diarrhea because of food.

There are no clear rules about what order foods need to be started as long as your baby can swallow safely. Ask your CF dietitian how to get started.

WHAT DO I DO IF MY BABY REFUSES TO EAT SOLID FOOD?

Stay calm! The main goal during the first few weeks of eating solid foods is to allow your baby to practice the new eating skills. These skills are keeping the food in the mouth, working food toward the back of the mouth, and swallowing. Your baby needs to overcome the reflex (which is out of his control) to push anything other than liquids out of his mouth. Infants as young as 6 months of age are able to show interest (or lack of interest) in food and eating. Some behaviors that show lack of interest are:

- Swatting at the spoon
- Turning head away from food
- Tightening lips when the spoon comes near the mouth
- Spitting out food that enters mouth
- Crying

Keep it up! It is very important to remain calm and keep offering foods when your baby does any of the things listed above. During the first few weeks of learning to eat solids, your baby may only eat a few tablespoons of food at each meal. This is okay. Remember, your baby is getting most of his nutrition and calories from breast milk or infant formula. Babies will make faces when trying a new food. This is a natural reaction. When your baby makes faces it does not always mean that he does not like the food. It just means that it is new! Very small amounts of new food should be given. You may have to give foods 8 to 10 times before your baby starts to like it.

Expect messes! Older infants want to feed themselves. At this age, making messes is a part of learning to eat. A baby needs to learn to move food around in his mouth, and grip and pinch with his hands in order to eat on his own. This may include spitting food out, as well as making messy art on the highchair tray or on his body. Remember, this is a normal part of your baby learning to eat!

WHAT DOES MY BABY NEED TO EAT AND DRINK IN ORDER TO GROW?

You will work with your CF dietitian to make a plan as to how many calories your baby will need to grow. Most babies are born knowing when they are hungry and full. Your baby will not eat more food than other babies at this
age, no matter how hard you try! Here are some daily amounts and suggested serving sizes for all children, including those with CF. You can also offer strained/pureed foods, one teaspoon at a time.

<table>
<thead>
<tr>
<th>Food Group</th>
<th>Food</th>
<th>Daily Amounts</th>
<th>Suggested Serving Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milk</td>
<td>Breast milk</td>
<td>On demand</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Formula</td>
<td>4–6 feedings</td>
<td>6–8 ounces</td>
</tr>
<tr>
<td>Grain</td>
<td>Iron-fortified baby cereal</td>
<td>2</td>
<td>1–2 tbsp</td>
</tr>
</tbody>
</table>

The trick is to look for ways to add more calories in his formula and foods without adding more food for him to eat. You will work with your CF dietitian and learn how to add calories to food. Here are a few:

1. Mix your baby’s cereal with high-calorie breast milk or formula in a bowl. You can ask your CF dietitian how to make high-calorie formula.

2. Add oils (olive, canola, or safflower), butter, or margarine to fruits and vegetables (1 teaspoon to a ½ cup or 4 ounces). With time your baby will get used to the taste of the oil and butter. This is an easy way to add more calories.

3. Check food labels to find the baby food with the highest calories. It is very important that your baby gets food high in calories.

**PREPARING FOR THE FUTURE**

Parents are in charge of starting high-calorie foods and making mealtime enjoyable. Because babies who have CF need more calories than those without CF, parents often feel a great pressure to feed their baby more. They often feel frustrated by normal infant mealtime behaviors. Try the ideas below to prevent big mealtime problems:

1. Give most of your attention to your infant when he accepts a bite and swallows food.

2. Give less attention when he spits out food or shows other ways of “saying no” to eating, such as turning his head or tightening up his lips.

3. Praising your baby when he eats makes mealtime more enjoyable. Talk to your infant and praise him saying “Good bite!” “That’s my big boy, trying new vegetables.”

4. Show him that you are excited (e.g., clapping, smiling) when he tries, and eats new foods. This will keep him excited about eating and make mealtime more fun!

5. It is normal for a baby to refuse a food or make a mess by spitting out foods. This is true in the early stages of feeding. Since infants love any response from parents, it is important to not respond (do not say anything to your baby and try not to get angry) when the baby refuses food or spits it out. Even talking about this behavior by saying, “Oh you don’t like your peas” can give your baby the attention that he loves. He may be more likely to spit food out in the future to get your attention. It is better to say nothing and calmly keep on feeding him. Remember, give all your attention to the behavior that you want to see more of.

6. It is important not to force-feed your baby. This can make mealtimes stressful and your baby will not be excited to eat. Save your energy and give lots of praise for good eating!

**TALK WITH YOUR CF CENTER**

Be sure to talk to your CF center dietitian at every visit about your baby’s eating. Your CF dietitian can help you make decisions about food choices, how to add calories, getting your baby to eat, and making mealtime fun. The earlier you ask the better. Good eating habits start at a young age and last a lifetime. If your child does not eat well for two or three days, you should talk with your CF care center or your primary care doctor.