

**YUMI**



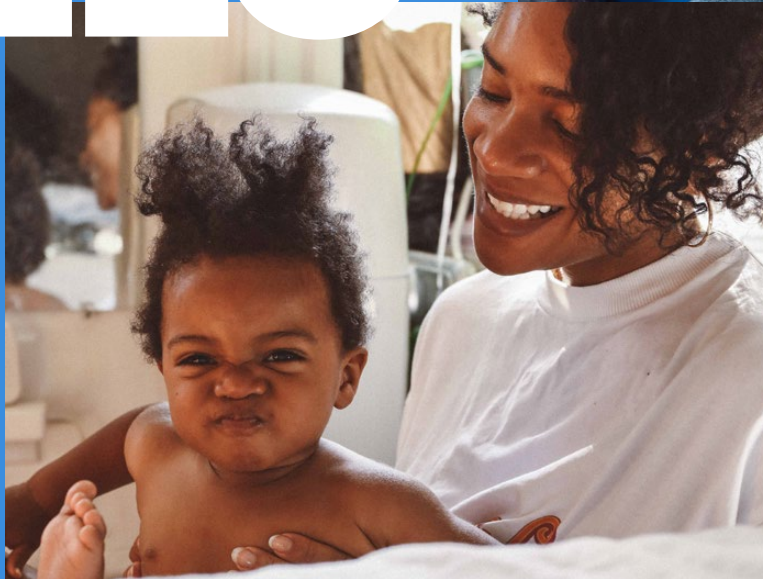
# **STARTING SOLIDS**

**A practical guide to your  
baby's first bites**



# HELLO

You're ready to introduce your babe to the wonderful world of solids!



It's a pretty exciting milestone. Their tiny taste buds are about to embark on a journey that will last their entire life. It's too bad there's no manual for this. Oh wait, there is - this one. We got you. We reached out to our community of nerds, including pediatricians and dietitians, and distilled their best advice right here.

We started YUMI, a childhood nutrition service, because of this window. A child's first 1,000 days is widely recognized as the most important period in a human's life for nutrition and development. But it doesn't have to be scary. You have a lot more control than you realize.

Let's raise a healthier generation together!

**Angela & Evelyn**  
Founders of Yumi





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## The one number you should know

### First things first, we need to do some myth busting.

You may have heard the expression: food under one is just for fun. Not true.

A child's first thousand days, from the moment of conception of age 2, is actually the **MOST** critical window for nutrition and development. As adults, we tend to think that we're the ones who need to watch our diets. We believe kids have their whole lives to worry about what they eat. Well, it turns out the exact opposite is true, particularly during the first 1,000 days.<sup>1</sup>

### So, what happens in the first 1,000 days?

In a word, everything. Nutrition fuels growth. Remember those giant horsepills you or your partner took during pregnancy? You took them because you and your baby need extra nutrition during this key window. Folate, for example, is critical during pregnancy to prevent neural tube defects.

### Your child's needs don't disappear upon birth, but continue through their 2nd birthday.

Certain nutrients play an outsized role during

this window. And some are more important based on your child's stage of development. For instance, your child is born with a certain amount of iron at birth - that iron supply naturally depletes by 6 months, a time when many babies are transitioning to solids.

Given iron's key role in brain development, it's important to focus on foods high in iron during this time.

The science behind the 1,000 days is so compelling it is widely recognized by the medical community and the World Health Organization. There are thousands of papers related to the topic. We even quit respectable jobs to create a service centered on the 1,000 days - that would be Yumi.

### Takeaway

Food under one is not just for fun; the first 1,000 days of a human's life are actually the **MOST** important for nutrition and development.







# NUTRIENT HIGHLIGHTS FOR THE 1000

**Iron** is an essential mineral that is found in every red blood cell. It helps carry oxygen to the brain, making it vital for the brain.

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**Calcium** is a key mineral for the formation of strong bones and teeth. In infants, calcium is especially vital for building bone density.

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**Folate** helps support an infant's rapidly growing cells and tissues as well as overall blood health and brain health.

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**Protein** is broken down into amino acids and then becomes all kinds of tissue, such as bones and muscles.

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**Fatty Acids Alpha-linolenic acid**, an essential omega-3 fatty acid, plays a critical role in cell membrane formation and brain health.

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**Zinc**, this mineral is relied upon by many processes in the body, including ones that impact growth, metabolism and immunity.

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**Vitamin D** is best known for building strong, healthy bones, and promoting good sleep.

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**Vitamin A** supports vision, helps break down free radicals, promotes cell production, and helps keep skin cells firm and healthy.



# READY SET NOM



**Many children start solids around the 6-month mark.** Some start as early as 4 months, but either way, the most of their nutrition comes from breastmilk or formula until 12 months.

**Please don't feel pressured to rush.**

From 0 to 4 months, a baby's digestive tract is not developed enough to handle complex foods. Meanwhile, some studies suggest a link between introducing solids before 3 months and an increased risk for metabolic disorders.<sup>2</sup> During these earlier months, babies exhibit a natural extrusion reflex, whereby their tongue naturally pushes out any solids. In other words, there's no need to rush!

If anything, take cues from your child.

They may not be speaking, but they will show you signs of readiness.



Is your child ready?

# READY OR NOT?

6 common signs that bebe is ready

## 1 HEAD CONTROL

Your baby exhibits good head control and can hold their neck steady on their own.

1

## 2 HIGH CHAIR-READY

Can sit in a high chair, feeding seat, or other infant-type seat.

2

3

## 3 KEEP FOODS IN

They keep food in their mouths rather than push it out with their tongue, also known as the extrusion reflex.

4

## 4 ABLE TO SWALLOW

They can move the food from the front of their mouths to the back and swallow it, instead of letting it dribble out of their mouth.

## 5 WEIGHT GAIN

As a general rule, your baby has roughly doubled their birth weight, according to the American Academy of Pediatrics.

5





# GETTING STARTED

## The fundamentals

Initially, your child will likely still get most of their nutrition from breast milk or formula. **So don't be too upset if your first attempts at feeding end up on the floor. Embrace the mess.**

During this initial period, your infant is exploring the world of taste and textures. It will be a slow, experimental process. Start with just a few bites and allow your child to experiment with how it feels in their mouth. Don't force them to finish anything especially if they are turning away.

Many pediatricians will recommend focusing on veggies as the first foods, since humans are already

predisposed to loving sweets.

### How much food?

In the first week, try offering solid food to your baby once or twice a day. Start small, such as 1-2 teaspoons in total. Don't be surprised if your baby doesn't even finish that. Babies will only eat when they're hungry and stop as soon as they feel full. Fullness cues can include turning away from the spoon, pushing the spoon away, not opening their mouth, throwing food, or disengaging from mealtime.

According to the AAP, **infants aged 6-12 months need about 50 calories**

**per pound**, for a total of about 850 calories a day. It is recommended that by the time your baby is eight months they are consuming approximately 1/2 cup of vegetables and 1/2 cup of fruit per day.<sup>3</sup> You don't need to hyper-focus on counting calories, but pay attention to your baby's cues.

### Myth Busting - Rice Cereal?

You may hear that a baby's first food has to be a form of rice cereal. There is no evidence to support this. Refined white rice cereal is highly processed and quickly converts into glucose, making it a less healthy option than many other nutrient-dense options. Rice is also very efficient at pulling heavy metals, like arsenic, out of the soil, which is why several rice-centric baby foods have tested positive for arsenic.





# THE SETUP



## TAKEAWAY

Start small and don't put too much pressure on the moment. Make sure to set you and your baby up for success by giving a little bit of breastmilk or formula beforehand and optimizing for comfort, such as seating your baby in their high chair and using a soft-tipped spoon.

### 1. Find a comfy spot.

Put your baby either in a high chair, infant seat, or even your lap. Just make sure your baby is upright so they can swallow properly without choking.

### 2. Don't start with a hangry baby.

They will quickly grow frustrated when they can't get enough food down as fast as they would like. You know what it's like to be hangry - don't set yourself up for failure. Remember, they're still learning how to eat something other than liquid. Eating solids at this point is more about practice and exposure than getting calories.

Use a soft-tipped spoon. Make it easy on their **tiny mouths and gums.**

### 3. Watch for their cues.

Only offer them the food after they've shown some interest in eating it. Once they open their mouth slowly guide the spoon into their mouth.

### 4. Make sure to be encouraging and positive.

They may be very eager for every bite or only interested in a couple. Follow their cues and go for as long as they like and stop when they lose interest. Let them listen to their own senses - they are learning how to taste, touch, and transition to a new feeding paradigm all at the same time.

### 5. Start with a very small amount.

Start with half a spoonful, and gradually increase. This will give your baby time to learn how to swallow something other than liquid.

### 6. Be upbeat.

Make sure to be encouraging and positive. You may feel silly, but say things like "Yum, yum, isn't that delicious?"



# SIGNS YOUR BABY IS FULL

How much they eat will be dependent on how active they are and how fast they are growing. As babies age, they will also go through growth spurts. Some days they'll seem ravenous while other days they won't be very interested - so don't panic if their appetite fluctuates.

As we become adults and are exposed to external influences, we have difficulty maintaining our innate ability

to self-regulate our eating based on hunger and fullness cues.

When your baby is hungry, feed them and when they are full, stop.

A healthy relationship with food starts early. Never make your baby eat just one more bite of food if they are full. Trust that your baby knows how to eat to their natural appetite.

## Cues to look for:

- Leaning back
- Keeping lips pursed closed
- Turning head away
- Actively pushing food out
- Playing with food
- Pushing the spoon away
- Small whimpers
- Sudden arching







# 10X

**It can take 10 tries  
or more for a child to  
adopt a new flavor**

## BE PERSISTENT

### The art of patience

When introducing new foods to your baby, don't be surprised if they make funny faces. These faces are a normal reaction to all the new tastes and sensations that eating brings. These faces are not a sign of dislike but a sign of discovery. If you offer the food and they open their mouth, they want more. If they refuse, restart that food and bring it back in a couple of days.

This period of solid food introduction and complementary eating is an excellent time to develop a child's palate and reduce picky eating in the future. The key is to expose your child to a wide variety of flavors and textures and repeat these exposures many times during the first 6-12 months of life. Neophobia and food preferences peak at 20 months of age

and are more difficult to adjust in toddlerhood. Studies suggest that food preferences are largely set between 3 and 4.<sup>4</sup>

Never give up, and keep trying. Sometimes, it takes repeated exposures to get them to accept and embrace a new food. Studies have shown that it can take up to 10 times or more before a baby will accept a new flavor! Bitter flavors like vegetables tend to be especially disliked and may need even more time and/or exposure until preferences are developed.

#### **PRO TIP**

Another trick if your child seems fussy is to pair new foods with something familiar and liked. Infants will consume more of a food if they have a familiar flavor and texture.



# WHAT'S ACTUALLY HEALTHY?



The basics of healthy feeding



## Variety

Exposure to a variety of flavors and real food is critical during this stage, as taste preferences are set during these early years. Beyond healthy produce, try unique herbs and spices, like curry, to expand their palate.



**See the Difference**  
Both purees are made from organic mangoes. The left was processed to be shelf stable for 2 years.

## Avoid Heavy Processed Foods

Many packaged products are processed to be on the shelf for years. Some have preservatives, additives. Heavy processing usually involves exposing foods to high temperatures for extended periods, which can denature water-soluble vitamins.



## Limit the Sweet Stuff

In general, limit the sweet stuff for babies. Heavy exposure to sugars - even fructose- can increase their risk for obesity and metabolic disorders in the future. Before their first birthday, just say no to processed sugars. Also, fiber helps slow down the absorption of sugar, so it's smart to look for a balanced fiber-to-sugar ratio. You're setting them up to reach for veggies over candy.

## Nutrient Density

Breast-fed infants and young children need complementary foods with a very high nutrient density, especially at ages 6–12 months.<sup>4</sup> The FDA has identified 12 key minerals needed daily: calcium, chloride, copper, iodine, iron, magnesium, manganese, molybdenum, phosphorus, potassium, selenium, and zinc. Our bodies don't produce most necessary vitamins, so we obtain them from food or the environment.



# THE NOT SO SWEET STUFF



HEAVY ON THE VEGGIE

The flavors children are exposed to in the first 1,000 days have a profound impact on the flavors they will crave later in life.

Kids today, especially young children, are consuming more sugar in liquid form than ever before. They are also consuming different types of sugar that can disrupt healthy growth and development. The science is stunning. According to Dr. Michael Goran, a leading expert on childhood nutrition, sugar has both near and long-term effects on a child's metabolic and neural health.

building a tower of blocks at age two, writing an essay for a college application at age seventeen, or taking standardized tests in the classroom at any age," he writes in his book, *Sugarproof: The Hidden Dangers of Sugar That Are Putting Your Child's Health at Risk and What You Can Do.*<sup>5</sup>



Dr. Michael Goran is a YUMI advisor and Professor of Pediatrics at the Keck School of Medicine at USC. A renowned expert in early childhood metabolic issues, he is also the Director of USC's Childhood Obesity Research Center and the author of *Sugarproof: The Hidden Dangers of Sugar That Are Putting Your Child's Health at Risk and What You Can Do.*

"Too much sugar impairs children's abilities to excel at their tasks, whether it's





# OH POOP

Poops are about to get more interesting

As you introduce solid foods to your baby you will notice their stools change. They will become more solid, change in color, and have a much stronger odor. Green vegetables like spinach or peas may turn their stool green while beets may turn it a red hue. Undigested bits of food may also be present like the casing of peas or seeds in raspberries. All this is very normal.

You may also notice that your baby's bowel movements become less regular, and they may even get a little constipated. This too is normal. To help ease sluggish elimination, you can try increasing the amount of water in their purees or give them a little water to drink.

Between 6-8 months, we recommend offering small sips of water with meals in an open cup, limiting the total amount to 1-2 oz per day. Babies should not drink water until about 6 months old, or until they start eating solids. You do not want to replace breast milk or formula as their main source of nutrition. Pureed prunes can also help move things along.



## **GREENISH BLACK**

Common for newborn's first poop. When older, green poo can be from foods high in iron.



## **YELLOW BROWN**

Common for formula-fed babies.



## **MUSTARD YELLOW**

Common for exclusively breastfed babies.



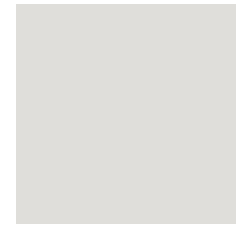
## **GREENISH BLACK II**

Common for babies transitioning to solids. May reflect foods they are eating.



## **BLACK**

Black for older babies - not newborns - may be a sign of something more serious.



## **WHITE OR GREY**

Not normal, could be a sign of a liver issue.

# POOP PANTONE

Know what the colors means



## **RED**

Poop may appear more red after red foods, but blood in stools could be some constipation or something more serious.



# THE 411 ON BLW

## What is BLW?

Baby-led weaning is a technique coined by Gill Rapley, author of *Baby-Led Weaning Helping Your Baby to Love Good Food*. The practice, also described as “self-feeding,” is a way of introducing babies to solid foods that allows them to feed themselves. No spoons. Just hand to face. Food to floor.

This practice starts at 6 months and is all about discovery and enjoyment. The baby sits with the family at mealtime and makes a mess. Messes aside, many parents believe the Rapley Method has its advantages:

- Allows babies to explore texture, taste, color, and smell on their own
- Encourages confidence and independence
- Helps with hand-eye coordination and chewing skills
- Believed to make mealtime battles less likely to occur

## To BLW or Not?

According to baby-led weaning devotees, all babies can begin to feed themselves around 6 months, they simply have to be given the opportunity. Deciding on whether baby-led weaning is right for your family is a personal choice. Many parents we know use a blend of purees and baby-led weaning compatible foods. With purees, it can be easier to cram more nutrition in a single bite, but it’s also great to encourage your kids to explore their pincer grasp and find joy in food in its many forms.

Your comfort as a new parent is paramount. Remember our babies read our cues about food and mealtime. The most common concern is around choking. However, as with any solid foods, you should never leave your baby unattended or alone with food.

According to Rapley, “Choking is no more likely with baby-led weaning than with the conventional method of introducing solids. Allowing babies to control what goes into their mouths may help them learn to eat safely.” She further explains the difference between choking and gagging; however, as a new parent, both can be terrifying. If you’re more comfortable starting with purees, you have options.

**Is it right for you  
and your baby?**





## How to Get Started?

Sit your baby upright, facing the table. Make sure your baby is able to sit steadily and can use their hands and arms freely.

Offer your baby food, rather than give it to them – put it in front of them, or let them take it from your hand, so that the decision is theirs.

Some great soft finger foods to start with include avocado, banana, soft-baked sweet potato, or scrambled eggs. The food should be soft enough that you can easily squish it between your fingers and pea-sized for pincer grasp development.

Include your baby in your meal times whenever you can. And don't rush them! Allow them the opportunity to explore. Baby-led weaning should be messy! It's experimental! It also requires extreme patience.

Always check with your pediatrician if you have any concerns or questions.





# WHAT'S NOT ON THE MENU

## First foods to avoid in year one

In general, there are many foods your baby can eat and explore. As mentioned, exposure to a wide variety of healthy foods is critical during the first thousand days. But there are some things to avoid, especially before a baby's first birthday.

### **Choking Hazards**

Foods that are choking hazards, such as hot dogs, non-cut grapes, candy, popcorn, etc.

### **Juice**

No juice for children under 1, according to the AAP. Early juice intake is linked to future metabolic issues and a preference for sugar.<sup>6</sup>

### **Honey**

There is a small chance honey will contain *Clostridium botulinum*, which can lead to a potentially fatal infection. It is recommended to wait until at least 1 year of age to introduce honey when an infant's digestive system is more developed.

### **Cow's Milk**

The AAP recommends avoiding cow's milk until at least 1 year of age due to the difficulty digesting the protein and fat.

### **Highly Processed Foods**

Avoid foods that are highly refined, high in added sugar, salt, and additives. The general rule is to avoid added salt introduction until 1.



# A WORD ON ALLERGENS

The science is evolving



For many years, parents received instruction from friends, family members, and even doctors to avoid introducing allergens for the first few years of life.

There's new evidence that introducing allergens into an infant's diet at 6 months of age, starting with small doses – may actually help prevent allergies.<sup>7</sup>

There are 9 common allergens that are considered: tree nuts, peanuts, sesame, milk, soy, gluten, shellfish, eggs, and fish.

Of course, every family needs to assess their comfort level with allergen introduction and should speak to their pediatrician, especially if there is a family history of food allergies.

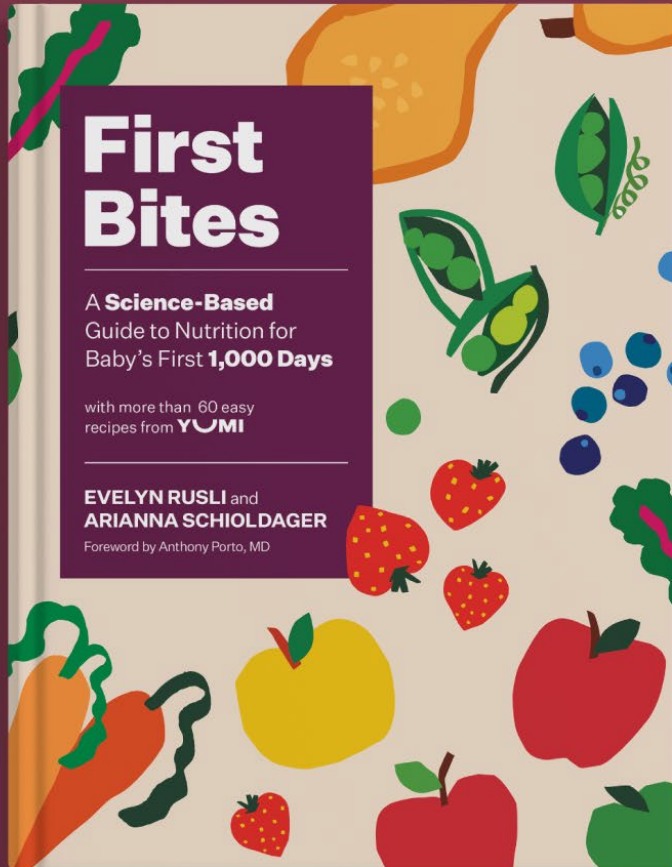
If you are considering early allergen introduction, below are a few tips:

- 1** Start with small servings. Use small doses so you can gauge your kid's reaction to allergens, especially nuts.
- 2** Don't give whole nuts. Whole nuts are a choking hazard.
- 3** Avoid brands with added sugar/salt. Be sure to read the back of the label. There are plenty of brands made without added sugar/oil/salt.
- 4** Try powdered versions of allergens. The powdered version of nut butters, for instance, make it easy to add a small amount to your baby's puree, mashed bananas, or other foods.



# WANT TO LEARN MORE?

Check out First Bites



Available to purchase [here](#)

OR SCAN ME!



## A Science-Based Guide to Nutrition for Baby's First 1000 days



Reviewed and approved by a board of pediatricians, First Bites connects nutrition and development with hard-hitting data, fascinating facts, and flavorful, healthy food.

Part One examines the significance of the first 1,000 days, the most important nutrition window in life. Discover which nutrients

mother and baby need when and which fundamentals to keep on hand.

Part Two offers more than 60 easy-to-follow recipes, from pregnancy dishes for expecting mamas to basic blends for infants starting solids and tantalizing finger foods for toddlers, all free of added sugars, gluten, and dairy.

RECIPE SNEAK PEEK



# Cubano Blend



YIELD: 2 cups (480 grams) PASSIVE: 8 hours  
PREP: 2 hours PROCESSING: 5 minutes  
TOTAL: 10 hours 5 minutes



Think it'll be hard to get your baby to eat beans and kale? Not with this recipe. The sweetness of the banana balances the bitterness of kale and beans, making it a great way to feed your baby plant-based protein along with all the superfood benefits of kale.

- ½ cup (40 grams) black beans, soaked overnight**
  - 1 banana (140 grams)**
  - 2 cups (164 grams) kale, stems removed and chopped**
  - ¼ cup (31 grams) quinoa**
  - 1 tablespoon flaxseed**
1. Bring 4 small pots of water to a boil. Add the black beans to one pot and reduce the heat to medium. Boil for 1 to 2 hours, until tender.
  2. Add the quinoa to the second pot of boiling water and reduce the heat to a simmer. Cover and cook on low heat for 20 minutes.
  3. In the third pot of boiling water, steam the kale for 15 minutes.
  4. Cut off the ends of the banana and add it to the last pot of boiling water. Lower the temperature to medium and cook for 10 minutes.
  5. Strain the black beans, banana, and kale, then add them to a food processor with the quinoa. Pulse everything together until smooth while gradually adding the flaxseed.

## MILESTONE

As babies learn to crawl, they have a harder time sleeping during the night. That's because motor skills often develop during REM sleep. Seeing them crawl in their sleep? Cute! But it's less cute when it wakes them up. At this age, maintaining healthy magnesium levels can lead to deeper, sounder sleep. Magnesium supports restorative sleep by maintaining healthy levels of GABA, a neurotransmitter.



# Vegan Goldfish



YIELD: Approximately 35 crackers PREP: 30 minutes  
BAKE: 15 minutes TOTAL: 45 minutes



These goldfish are a golden treat. They're a perfect, worry-free, on-the-go snack with just the right amount of spice to taste-train your tot's palate, and kids love them.

- 1 cup (115 grams) all purpose or whole wheat flour**
  - 5 tablespoons nutritional yeast**
  - 1 teaspoon kosher salt, divided in half**
  - ¼ teaspoon garlic powder**
  - ¼ teaspoon turmeric**
  - ¼ teaspoon paprika**
  - 6 tablespoons (95 grams) vegan butter, room temperature**
1. Preheat the oven to 375°F. Line a beaking sheet with parchment paper.
  2. In a kitchen mixer with a paddle attachment, combine all ingredients except for ½ teaspoon of salt.
  3. Blend on medium speed until the mixture begins to crumble.
  4. Add 1 to 4 tablespoons cold water, 1 tablespoon at a time, until a dough forms. You shouldn't need more than 4 tablespoons of water for a good dough.
  5. Remove the dough from the kitchen mixer and roll it out between two sheets of parchment to prevent sticking. You want the dough to be about ½ inch thick.
  6. Using a fish-shaped cookie cutter or whatever other shapes you have, cut the dough and line up the shapes on the baking sheet. Sprinkle the remaining salt on the fish.
  7. Bake for approximately 15 minutes, until the bottoms of the crackers turn golden brown.
  8. Let cool and serve.

NOTE: For a gluten-free option, replace the whole wheat flour with oat flour.

## MILESTONE

You might notice that your baby shows more interest in playing with toys than other kiddos. Grabbing and picking up objects help refine their pincer grasp (which makes these goldfish the perfect snack for self-feeding). Toddlers playing side by side but together is called "parallel play." Sharing is a process, and at this stage parallel play is a wonderful opportunity to help your toddler label emotions, develop social skills, and build compassion.



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