A MUM'S GUIDE TO EARLY CHILDHOOD NUTRITION

1-2 YEARS OLD

HEALTHHUB.SG/EARLYNUTRITION
At 12 months, your toddler’s digestive system is ready to accept small portions of food similar to what adults eat. Ensure that meals are balanced amongst all four food groups (fruits, vegetables, grains, meat and alternatives) and prepared with minimal salt, sugar or seasoning. Include sufficient fibre (from fruits, vegetables and whole grains) and water to prevent constipation.

Toddlers may also continue to consume breast milk as an important source of nutrients through the first year and beyond. If your child has been drinking formula milk, he can switch to full cream milk (such as chilled pasteurised, UHT or powdered full cream milk). Complement this with a good variety of solid food to meet his increasing nutrient and caloric needs.

While milk is still an important source of nutrition, your toddler should be getting most of his calories from solid foods once he is above the age of one. He can still drink around 500ml of milk daily, spread over three to four times throughout the day.

THE NEXT STAGE
After 2 years of age, your toddler can switch to low-fat milk if he is eating and growing well.
WHY SHOULD I SWITCH TO COW’S MILK?

WHY COW’S MILK?

- Cow’s milk (or full cream milk) is a rich source of protein and calcium, essential for growth, and building healthy bones and teeth.
- Your toddler does not need the added nutrients from growing-up milk if he is growing well and eating a balanced diet.
- Growing-up or fortified toddler milk may be more energy-dense than cow’s milk, possibly displacing your toddler’s appetite for other foods.

TYPES OF MILK

The three main types of full cream milk – chilled pasteurised, UHT (ultra-high temperature) and powdered full cream milk do not vary much in nutritional value. Plus, powdered full cream milk is not to be confused with filled milk. Filled milk is typically reconstituted with any fat or oil of non-milk origins (e.g. palm oil) and is unsuitable for consumption by babies or infants.

MILK ALLERGIES

If your toddler is allergic to cow’s milk protein, is on a vegan diet, or has a medical condition, it is best to consult with a medical professional before considering alternatives. Some options may be unsweetened or reduced sugar calcium-fortified milk alternatives such as soy, almond or rice milk. Otherwise, you can continue feeding your toddler extensively hydrolysed stage 2 soy-based formula. Typically, soy-based milk has only about half the energy content of full-fat cow’s milk, so your child’s diet will need to include other energy-dense foods.

Do not substitute cow’s milk with condensed or evaporated milk, as these are high in sugar and saturated fat.

WHAT’S IN YOUR MILK?

<table>
<thead>
<tr>
<th>PER 100ml</th>
<th>Calories (kcal)</th>
<th>Protein (g)</th>
<th>Total Fat (g)</th>
<th>Saturated Fat (g)</th>
<th>Carbohydrates (g)</th>
<th>Calcium (mg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Cream Cow’s Milk (UHT)</td>
<td>71</td>
<td>3.5</td>
<td>4.2</td>
<td>2.8</td>
<td>5.0</td>
<td>130</td>
</tr>
<tr>
<td>Full Cream Cow’s Milk (chilled, pasteurised)</td>
<td>72</td>
<td>4.0</td>
<td>4.0</td>
<td>3.8</td>
<td>5.0</td>
<td>120</td>
</tr>
<tr>
<td>Full Cream Milk Powder</td>
<td>75</td>
<td>3.5</td>
<td>4.1</td>
<td>2.5</td>
<td>5.9</td>
<td>126</td>
</tr>
<tr>
<td>Stage 3 Formula Milk</td>
<td>80</td>
<td>2.6</td>
<td>3.0</td>
<td>1.0</td>
<td>10.4</td>
<td>91</td>
</tr>
<tr>
<td>Soy Milk (reduced sugar, hi-calcium)</td>
<td>38</td>
<td>3.0</td>
<td>0.8</td>
<td>0.2</td>
<td>4.7</td>
<td>200</td>
</tr>
</tbody>
</table>
A PLATEFUL OF GOODNESS

For your toddler (1–2 years old) to obtain all the nutrients he requires, offer him a variety of food from the four main food groups with the following recommended number of servings per day:

### FOOD GROUPS

<table>
<thead>
<tr>
<th>FOOD GROUPS</th>
<th>SERVINGS AND PORTION SIZES PER DAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>BROWN RICE &amp; WHOLEMEAL BREAD</td>
<td>2 to 3 servings =</td>
</tr>
<tr>
<td>1-1½ bowl of cooked rice/noodles/beehoon</td>
<td>4 to 6 slices of wholemeal bread</td>
</tr>
<tr>
<td>FRUIT</td>
<td>½ to 1 serving =</td>
</tr>
<tr>
<td>(Fruit should not be used to replace vegetables in the diet or vice versa because they contain different types of nutrients.)</td>
<td>½ to 1 small piece of apple/orange/pear/mango</td>
</tr>
<tr>
<td>VEGETABLES</td>
<td>½ serving</td>
</tr>
<tr>
<td>½ small rice bowl of cooked vegetables</td>
<td></td>
</tr>
<tr>
<td>MEAT AND OTHERS</td>
<td>½ serving</td>
</tr>
<tr>
<td>½ palm-sized of fish/meat/chicken</td>
<td>1 medium block of beancurd</td>
</tr>
<tr>
<td>MILK</td>
<td>500 – 750ml/2 – 3 cups</td>
</tr>
</tbody>
</table>

PAY ATTENTION TO HIS BOWEL MOVEMENT, HEIGHT AND WEIGHT TO ENSURE THAT HE’S EATING WELL.

HOW MAY I SERVE YOU?

USE HEALTHIER OILS WHEN PREPARING YOUR MEALS!
To get you started, here are some sample daily menus to give you an indication of the types of food you can prepare for your toddler. Please note that these plans serve as a guide only. Do feed your toddler according to his appetite. Let him decide whether he wants to eat and how much to eat, as he will be able to regulate his own milk or food intake.

### Sample daily meal plan for toddlers: 1–2 years

#### RISE & SHINE
- Early-morning snack
  - 150ml breast/full cream milk

#### PLAY TIME
- Breakfast
  - 3 – 4 tablespoons* of oat cereal with 60ml breast/full cream milk
  - 1 – 2 plain biscuits
  - 180ml breast/full cream milk

#### BREAKFAST
- 3 – 4 tablespoons* of oat cereal with 60ml breast/full cream milk
- 1 – 2 plain biscuits
- 180ml breast/full cream milk

#### LUNCH
- Half small block of tofu (43g)
- Peas (60g)
- ½ medium carrot (25g) stewed
- Cooked rice (25g to 50g)
- ¼ – ½ wedge watermelon

#### TOTAL SERVINGS

<table>
<thead>
<tr>
<th>Brown rice and wholemeal bread</th>
<th>Fruit</th>
<th>Vegetables</th>
<th>Meat and others</th>
<th>Milk</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 – 3</td>
<td>½ – 1</td>
<td>½</td>
<td>½</td>
<td>500 – 750ml</td>
</tr>
</tbody>
</table>

*1 tablespoon = 15g
**Rice bowl

Note: For babies aged 6 – 12 months, their dairy or calcium-rich food servings should not exceed 750ml.
Picky Eating

Fussy eating may be a common issue as children may refuse foods that they don’t prefer or aren’t used to. Most of them do grow out of it and learn to eat a variety of foods.

A toddler’s eating habits can influence how he eats as an adult, so address fussy eating by ensuring your toddler have a balanced and varied diet. Avoid feeding your toddler fatty, salty and sugary foods to prevent them from developing future unhealthy eating behaviour.

WAYS TO DISCOURAGE PICKY-EATING:

- **BE A ROLE MODEL**
  Your eating habits play an important part in shaping your toddler’s dietary habits.

- **PROVIDE SMALLER PORTIONS**
  Start slow and give your child smaller portions, refilling his plate as he requests.

- **BE PATIENT IF YOUR TODDLER REFUSES TO EAT A CERTAIN FOOD**
  Try alternatives, like spinach instead of broccoli. If he is still resistant, take a break from that food and try again after a week. It can take up to eight to ten tries before toddlers accept new foods.

- **CREATE A POSITIVE AND SUPPORTIVE ENVIRONMENT DURING MEAL TIMES**
  A child should not be forced to eat. Let him explore his food his own way. Praise him by describing what he did well. Children need encouragement to recognise the right behaviour.

- **INVOLVE YOUR CHILD IN PREPARING THEIR MEALS**
  For instance, shop with your child and let him choose his food and participate in the preparation (for simple recipes, eg: sandwiches). By doing so, it can evoke interest and anticipation towards his meals.

- **BE CREATIVE WHEN PREPARING AND PRESENTING FOOD**
  For example, include a variety of colourful food in your child’s meal and cut food into interesting shapes such as star-shaped carrots to attract his attention.

- **REWARD HIM WITH NON-FOOD TREATS LIKE STICKERS/TOYS**
  Do not reward him with desserts or processed food. You can create your own reward system that your toddler can look forward to. e.g. one gold star for each new food accepted; gold stars can be exchanged for a new toy, etc.

- **ENCOURAGE self-feeding WITH SUPERVISION**
  Make sure the food is not a choking hazard. Do not allow him to run around with food in his mouth.

- **INTRODUCE DIFFERENT FOOD TYPES AND TEXTURES**
  Let your child have varied interesting experiences with food, such as presenting eggs as egg custard instead of hard boiled eggs.

BIGGER CHILD, SMALLER APPETITE

Up till now, your toddler is growing rapidly, tripling his birth weight in a year. At 12 months old, his rate of growth will slow down and his appetite may decrease. This is normal, as his stomach is still small in size. Do not force him to eat more than required. It is best to offer smaller portions of healthy food more frequently and let him choose how much to eat. He is able to regulate his own food intake.
You should wean your toddler from the bottle when he reaches 1 year of age, as it will become more difficult to do so as he grows older. Staying on the bottle too long increases his risk of dental caries and may result in poor teeth development.

This is especially so when your child falls asleep with the milk bottle teat in his mouth and milk residue is in prolonged contact with your child’s teeth. It can also displace your toddler’s appetite for other foods (i.e. preferring milk over solids).

**WIN WITH THESE WEANING TIPS**

- **Give your toddler a training cup for milk, or a straw to drink with.**
- **Replace the bottle with a training cup for one feeding during the day, gradually increase the frequency. By 18 months of age, he should stop using the bottle entirely.**
- **Your child may protest at first, but be persistent. Respond by giving hugs and kisses instead of giving in.**

**FOOD AND DRINKS TO AVOID**

- Fish with high levels of mercury should be avoided - such as shark, swordfish, marlin, tuna (includes bluefin, big eyes, albacore yellowfin series), king mackerel, orange roughy, yellowback seabream and dash-and-dot goatfish
- Any uncooked foods and unpasteurised milk products
- Food that leads to choking easily – such as:
  - Small and hard pieces of food (e.g. corn, peanuts, nuts, seeds and grapes)
  - Food that is crunchy or hard (e.g.: uncooked vegetables)
  - Fish and meat with bones
  - Fruits with seeds
  - Sticky food (e.g.: glutinous rice dumpling)
- Salt, soy sauce, chicken powder – Once your toddler gets used to salty tastes, he may not easily accept bland-tasting food. This may lead to an increased intake of salt, which will raise your toddler’s risk of high blood pressure. Instead, use ginger, garlic or spring onion as alternatives for seasoning. Limit foods that are high in salt content, such as canned foods, sausages, foods preserved in salt and savory treats.
- Sugared drinks, soft drinks or fruit juice
- Caffeinated drinks such as energy drinks, coffee or tea

**HOW LONG CAN COOKED FOOD LAST IN A THERMAL FLASK?**

In general, a small thermal flask cannot store food at a safe temperature (60 degrees or above) for a long period. To reduce the risk of bacterial growth, food stored in a thermal flask should be eaten within two hours after it is cooked.
In general, symptoms may occur within several hours or several days after eating the food. It is best to observe your toddler’s reaction(s) closely, especially after introducing a new food. 

Common symptoms that occur within several hours:
- Hives, worsening eczema
- Swollen eyes, tongue, face, mouth and lips
- Watery stools
- Vomiting

Relatively rare but serious symptoms include:
- Difficulty in breathing
- Fainting

For some toddlers, they may have an allergic reaction 1 or 2 days later (e.g. eczema, wheezing, persistent vomiting, constipation, stomach pain). So do keep a lookout and see a paediatrician immediately if your toddler displays any of these reactions.

Consult your doctor or dietician if your child constantly refuses food from a particular food group, as his nutritional needs may be compromised.

If your child is healthy and growing well, you don’t need to worry. Keep offering him a variety of foods, dine with him, cultivate a relaxing and enjoyable mealtime to expand his acceptance of different food types as he grows.
INGREDIENTS  (Makes 1 toddler portion)
- ½ bowl pumpkin (skin and seeds removed, cut into pieces)
- 2 broccoli florets
- 2 slices salmon (about 2 tbsp)
- ½ bowl water, 1 tsp corn starch
- ½ to 1 bowl cooked shell/spiral pasta

METHOD
• Steam pumpkin pieces and broccoli florets until soft. Chop broccoli into 1cm cubes. Mash pumpkin and set aside.
• Heat oil in a pan, pan-fry salmon until golden on both sides. Break the fish into pieces with a spoon.
• To make pumpkin sauce:
  (a) cook mashed pumpkin with some water.
  (b) In a bowl, combine cornstarch with ½ bowl of water and mix well.
  (c) Add corn starch mixture to mashed pumpkin to create a thick sauce.
  Cook until thickened and set aside. Keep stirring so that the sauce does not clump together.
• Put cooked pasta in a bowl. Add salmon pieces and broccoli, pour pumpkin sauce and serve.
• You may also add a few drops of lemon juice to reduce the fishy taste.

HEALTHY EATING TIPS: Increase your toddler’s vegetable intake with sauce or soup with mashed vegetables. Instead of pumpkin, you can also use avocado, spinach, tomato or green peas to make the pasta sauce.

COOKING TIPS: Instead of pan-frying, you can either steam or bake the fish in the oven. You can also use other fish such as sole fillet, thread fin or cod.
**HEALTHY EATING TIPS:**

- To increase your toddler’s vegetable intake, you can serve sauce or soup with mashed vegetables. Instead of pumpkin, you can also use avocado, spinach, tomato or green peas to make the pasta sauce.

- Fresh or pre-packed tofu and dark green leafy vegetables are rich in calcium and is ideal for your child’s healthy bone growth and development.

- Instead of spinach, you can use other calcium-rich dark green leafy vegetables such as bok choy, chye sim, kale and mustard green. Replace chicken with tofu if you are making a vegetarian dish.

**COOKING TIPS:**

- Instead of pan-frying, you can either steam or bake the fish in the oven. You can also use other fish such as sole fillet, thread fin or cod.

**VEGETABLE CHICKEN SOUP**

Served with Bee Hoon/Noodles

### INGREDIENTS (Makes 1 toddler portion)

- 1 block tofu, cut into small squares
- 1 cup of spinach/chye sim, chopped
- 1/4 of a small carrot, cubed
- 1 tbsp of corn
- 2 tbsp steamed chicken, shredded
- 1 bowl of rice noodles or bee hoon (cooked and cut into 2 to 5cm pieces)
- Water

### METHOD:

1. Remove spinach roots. Rinse and soak in water for 1 hour, then blanch spinach/chye sim for 1 minute. Drain and set aside.
2. Add carrots, corn, tofu and the shredded chicken into boiling water. Let it boil for approximately 5-10 minutes before adding in the chopped spinach/chye sim.
3. Let the soup simmer until all ingredients are cooked.
4. Mix cooked rice noodles or bee hoon with the soup and bring it to boil before serving.

**SHRIMP, CARROT AND BROCCOLI ‘RISOTTO’**

### INGREDIENTS (Makes 1 toddler portion)

- 3 fresh or frozen shrimps
- 2 broccoli florets
- 1/2 of a small carrot
- 1/2 bowl of soft rice
- 1/2 tsp minced ginger and garlic

### METHOD:

1. Remove the intestines from the shrimps. Rinse and pat dry.
2. Cut the shrimps and broccoli into small pieces. Blanch the broccoli for 1 minute.
3. Shred the carrot and set aside.
4. Heat a little oil in a pan. Lightly stir fry garlic and ginger. Stir in the carrot and shrimp and then the broccoli and stir-fry until cooked. Set aside.
5. In a pan, bring cooked rice and 2 – 3 tablespoons of water to a boil. Stir in the broccoli, carrot and shrimp pieces. Cook until rice becomes soft and creamy.

**COOKING TIPS:**

- Instead of spinach, you can use other calcium-rich dark green leafy vegetables such as bok choy, chye sim, kale and mustard green. Replace chicken with tofu if you are making a vegetarian dish.

**HEALTHY EATING TIPS:**

- Fresh or pre-packed tofu and dark green leafy vegetables are rich in calcium and is ideal for your child’s healthy bone growth and development.

- Instead of spinach, you can use other calcium-rich dark green leafy vegetables such as bok choy, chye sim, kale and mustard green. Replace chicken with tofu if you are making a vegetarian dish.

**COOKING TIPS:**

- Instead of pan-frying, you can either steam or bake the fish in the oven. You can also use other fish such as sole fillet, thread fin or cod.
**MIXED BEANS AND VEGETABLE STEW**

SERVED WITH BREAD OR RICE

**INGREDIENTS** (Makes 1 toddler portion)
- 1½ tbsp vegetable oil
- 1 small onion, peeled and diced
- 1 tsp minced garlic
- 1 large potato, washed and cubed
- 3 carrots, peeled and sliced
- 1 large can (400g) chopped tomatoes
- 200g frozen peas
- 350ml water
- 1 large can (400g) reduced-salt, reduced-sugar mixed beans – chick peas, kidney beans
- 200g minced meat (chicken/pork/beef/lamb)

**METHOD:**
- Heat a little oil in a large pan and lightly stir-fry the onion and garlic until they start to soften.
- Add all the other ingredients to the pan and stir well.
- Bring to a boil and simmer gently for about 15 minutes until the vegetables are cooked.
- Serve with ½ bowl of rice or 2 pieces of toasted bread, as desired.

**HEALTHY EATING TIPS:**
- Stews can be a good way to get your child to eat more vegetables and get enough fibre in their diet.
- If on a vegan/vegetarian diet, alternatives such as beans is a good way to ensure that your toddler has enough protein in his diet.

**GREEN MAC AND CHEESE**

**INGREDIENTS** (Makes 12 toddler portions)
- 500g macaroni
- 1 head broccoli, cut into florets
- 200g low-fat soft cheese
- 200ml semi-skimmed milk

**METHOD:**
- Cook the macaroni in boiling water for about 15 minutes until soft. After the first 10 minutes, place the broccoli in the same pan as the macaroni or separately steam the broccoli.
- Drain the macaroni and broccoli and then stir in the low-fat soft cheese and milk.
- Heat through if necessary before serving.

**HEALTHY EATING TIPS:**
- Mixing in vegetables with foods that your toddler is familiar with (e.g. pasta) can encourage your toddler to eat more vegetables.

**COOKING TIPS:**
- You can use other green vegetables such as spinach, green peas or chopped green beans instead of broccoli. If desired, you can briefly bake the mac and cheese to get a crispy crust which your child may enjoy.
INGREDIENTS (Makes 4 toddler portions)
• 1 small tub plain yoghurt
• 1 cup chopped strawberries or whole blueberries (need to cut into pieces)
• 4 tbsp of plain corn flakes, lightly crushed

METHOD
• In a small glass or bowl, slowly layer with plain yoghurt, chopped fruits and cereal as shown in the picture.
• If desired, flavoured yoghurt can be made by mixing plain yoghurt and fruit of choice that has been mashed. For example, you can add mashed bananas.

HOME-MADE FRUIT YOGHURT SNACKS

HEALTHY EATING TIPS: You can make your own fruit yoghurts using plain yoghurt and the fruit of your choice. This is healthier than buying flavoured yoghurts from the supermarket which can be very high in sugar.
Here are some key takeaways to help you mind your child’s nutritional progress.

1. Your 1-year-old is ready for cow’s milk.
2. Feed your child with food from the four food groups to ensure a balanced diet.
3. Provide the recommended number of servings to give your child all the nutrients he needs.
4. Picky-eating behaviour can be minimised with a positive, fun, and engaging mealtime environment.
5. Wean your toddler from the bottle as soon as he turns a year old.
6. Look out for food allergies and foods to avoid feeding your child.

**INGREDIENTS** (Makes 12 portions)
- 85g pudding rice or oats
- 850ml semi-skimmed milk
- 1 apple (red or green), cubed
- 35g raisins

**METHOD:**
- Place the rice and milk in a saucepan and heat gently, stirring all the time, until the mixture just comes to a boil.
- Turn the heat down and, stirring regularly, allow to simmer gently for about 20 minutes while the rice absorbs the milk.
- Stir in the cubed apples and raisins and heat through. If preferred, apples can be cooked more until slightly soft.

**HEALTHY EATING TIPS:** Milky puddings can be a good way to get your child to eat more fruits or as a way to introduce your child to drinking full cream milk.

**COOKING TIPS:** You can make milky puddings with other cereals, such as sago, tapioca or oats. You can also add other fresh or dried fruits as desired.

**RICE PUDDINGS WITH APPLES & RAISINS**
For more on weaning and early childhood nutrition, visit [healthhub.sg/earlynutrition](http://healthhub.sg/earlynutrition)

You may also reach out to any of these support groups.

<table>
<thead>
<tr>
<th>Support Group</th>
<th>Hotline</th>
<th>Email</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breastfeeding Mothers' Support Group (Singapore)</td>
<td>6339 3558</td>
<td><a href="mailto:contact@breastfeeding.org.sg">contact@breastfeeding.org.sg</a></td>
<td><a href="http://www.breastfeeding.org.sg">www.breastfeeding.org.sg</a></td>
</tr>
<tr>
<td>Joyful Parenting and Breastfeeding</td>
<td>6488 0286</td>
<td><a href="mailto:joyfulparenting@gmail.com">joyfulparenting@gmail.com</a></td>
<td></td>
</tr>
<tr>
<td>Parentline</td>
<td>6289 8811</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Childcare Services</td>
<td>6258 5812</td>
<td></td>
<td><a href="http://www.childcarelink.gov.sg">www.childcarelink.gov.sg</a></td>
</tr>
</tbody>
</table>