



# Feeding your baby

Introducing solids

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**Presentation adapted from The Connexion Family Health Team**

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# Summary

- ◆ When to start solid foods
- ◆ How to introduce solid foods
- ◆ Which foods to start and how much
- ◆ Textures
- ◆ Fluids
- ◆ Food allergies
- ◆ Choking risks
- ◆ Dental health
- ◆ Establishing healthy eating habits for life



# *When to introduce solids foods?*

- **Signs that your baby is ready for solid foods:**
  - Able to sit up in a high chair without support
  - Has good head and neck control
  - Showing interest in what you are eating
  - Watches spoon and opens mouth when spoon is coming
  - Decreased tongue-thrust reflex (swallows food instead of pushing food out)
  - *Your baby does not require teeth to start eating solids*

# *When to introduce solid foods?*

**The optimal time to introduce solid foods is at about 6 months**

## **If you start before 4 months:**

- Baby's digestive system may not be ready for solid food
  - Can cause diarrhea, more spit-up, gas, etc.
- Baby may not be able to swallow from a spoon
- Baby may drink less breast milk, *or even stop drinking it*
  - Results in less intake of protein, fat and other important nutrients

## **If you start after 6 months:**

- Baby may not get all the vitamins and minerals required
  - Possible iron deficiency
- Baby may be slower at accepting and trying new foods and textures
- Baby may have difficulty chewing foods

# *How to introduce solids at 6 months?*

1. Offer breast milk/formula first, followed by solids
  - Breast milk/formula = primary source of nutrition at 6 months
  - Solid food merely **complements** breast milk/formula at this age
  - Primary goals of introducing solids at 6 months: 1) learning and development, 2) iron intake
2. Introduce new foods when baby seems happy and hungry
3. Sit baby in a high chair at the table during family meals
4. Start by offering solids at 1 meal in the day
  - Gradually increase from 1 meal to 2 meals, then 3 meals
5. Offer small quantities
  - ½ teaspoon or less

# How to introduce solids at 6 months?

## 5. Introduce **1 new food** at a time

- Wait 2-3 days before introducing another food
- Watch for symptoms of allergy:

Rash

Hives

Runny nose

Itchy, watery eyes

Vomiting / diarrhea

Breathing problems



- If allergy symptoms arise, stop feeding the trigger food and talk to your doctor
- If baby is having breathing problems, call 911

# *What to start at 6 months?*

## **Iron-rich foods**

- **Why iron-rich foods?**
  - Baby's iron stores are mostly depleted by 6 months, so baby needs iron from foods
- **Iron-rich foods:**
  - Iron-fortified infant cereal
  - Animal sources are best absorbed
    - Beef, lamb, poultry, veal, pork, fish and whole eggs
  - Plant sources are not easily absorbed
    - Lentils, dried peas and beans, dark green leafy vegetables

# Iron-fortified infant cereals

- Iron-fortified infant cereals
  - Start with single grain cereal
    - E.g. Rice, because it's the most hypoallergenic
  - Then oat or barley based cereals
  - **Plain** – no added sugars/fruits/salt
    - *Check the nutrition label for sugar content!*
  - Mix cereal with breast milk or formula
  - Feed with a spoon, do not add to bottle.



# Texture of meats & alternatives at 6 months

- To start at 6 months: puree, lumpy puree
  - finely minced or ground meat mixed with breast milk, formula or water to make puree



Offer iron-rich foods 2 or more times each day from 6 months and beyond.

# Which foods to offer after iron-rich foods?

- There is not enough evidence to recommend vegetables before fruit or vice versa, according to the World Health Organization (2009)
- However, **orange** and **dark green vegetables** should be offered **often** because they are “nutrient dense”
  - **Orange**: carrots, sweet potato, squash
  - **Dark green**: broccoli, peas, asparagus, Brussels sprouts, green leafy vegetables (spinach, kale)
- Remove thick peels, seeds and pits to prevent choking

# Texture of vegetables and fruits at 6 months

- Begin with puree to ensure baby eats enough



- After acceptance of puree, you can occasionally offer lumpy puree to see if baby accepts it

# How much to feed at 6-7 months

- The amount eaten at a meal depends on:
  - How baby feels
  - Appetite
  - Time of day
  - Breast milk/formula intake
  - Presence of distractions
- Typically, about 2 - 4 Tbsp at a meal
  - This amount will be less when first introducing solids
- Let baby's appetite guide how much is eaten
  - Trust baby's appetite
- Signs that baby is finished eating:
  - Turns head away
  - Closing mouth
  - Spitting food out

# What to eat at 7-8 months

## What's new at 7-8 months?

- Progress to 2-3 different types of food at each meal
- Combination foods
  - E.g. Fork-mashed spaghetti with tomato sauce
- Progress texture to lumpy puree
- Introduce finger foods at 7 months
  - Soft bread
  - Occasionally offer soft fruit or soft, cooked vegetables
  - Offer in shape of fry/stick so baby can grasp food with hand easier

# What to eat at 7-8 months

## What's new at 7-8 months?

- Introduce water (*offered in a cup*)
  - Between meals
  - 2-4 Tbsp (4 tbsp =  $\frac{1}{4}$  cup) at a time
  - Gradually increase quantity as quantity of solid foods increases

# What to eat at 9-12 months

## What's new at 9-12 months:

- Breast milk or formula **AFTER** the meal or as snack
- Texture progression of meats to finely chopped, bite-sized, soft and moist meats
- Snacks between meals
- Emphasis on finger foods – important for development
  - Spoon feeding *may* still be required for adequate intake
- Small amounts of family food
  - Meat sauces, stews, mashed baked beans or chopped meat loaf, rice, couscous or small pieces of pasta
  - No added salt or sugar for baby's portion

# Dairy at 9-12 months

- **At 9 Months:**

- Offer plain, full fat yogurt
- Full fat cottage cheese, shredded cheese



- **At 12 Months:**

- Whole milk (3.25%) – baby needs the fat and calories for development
  - 2 cups per day; never more than 3 cups per day
- Do NOT give almond or rice milk – not enough fat, protein, calories, may not have Vit D
- NEVER give unpasteurized milk
- Offer milk **after** solids at meals and snacks
- Serve milk in a cup

# Juice

## **Babies and children *don't need* juice**

- Too much juice:
  - Can cause diarrhea
  - Can fill up small stomachs and decrease appetite for healthy foods
  - Can cause early childhood tooth decay
- If you do decide to offer juice:
  - Offer 100% fruit juice
  - Offer in a cup as part of meal or snack
  - Limit to less than  $\frac{1}{2}$  cup per day (125ml)

# Honey

- **Do not give honey until 12 months**
- Risk of botulism - *bacteria*
- “Honey should not be consumed by infants under a year of age due to it's potential contamination with *Clostridium botulinum* spores.” - *Practice in Evidence Based Nutrition (PEN)*



# Food allergies



- A **food allergy** is an immune reaction to food
  - Dangerous; potentially life-threatening
  - Signs of allergy include: rash, hives; itchy mouth, lips, throat, eyes, skin, tongue; swelling (lips, eyelids), runny/congested nose, nausea/vomiting, shortness of breath
  - Common food allergens include:
    - ✓ Peanuts
    - ✓ Tree nuts
    - ✓ Soy
    - ✓ Wheat
    - ✓ Eggs
    - ✓ Shellfish
    - ✓ Cow's milk
    - ✓ Fish
- A **food intolerance** is a sensitivity to a food; no immune reaction
  - Causes discomfort (e.g. bloating, loose stools, gas, cramps)
  - Not dangerous

# Food allergies – new recommendations

- In the past, there were recommendations about when to introduce various allergen foods in order to prevent the development of allergies
- New recommendations:

## Dietitians of Canada :

“No current scientific evidence supporting delaying introduction of common allergenic foods beyond 6 months to prevent/protect against allergies.”

## Health Canada (Sept. 2012):

“Delaying the introduction of priority food allergens is not recommended as a way to prevent food allergies.”

## Canadian Paediatric Society (Oct. 2012)

“No reason to delay the introduction of common allergens (such as whole eggs, fish or nut butter).”

# Choking risks

- Avoid small and round shaped foods
  - Hot dogs, whole grapes and whole baby carrots
    - Cut lengthwise, quarter grapes, grate carrots
  - Avoid whole peanuts and popcorn until 4 years old
- Avoid hard and sticky foods
  - Hard candy, gummy candies, marshmallow
  - Never give peanut butter alone – always spread thinly onto cracker/toast/etc.
- Avoid dry and stringy meat and poultry
- Always supervise babies and children while they are eating

# Dental health

- Wipe your baby's gums with a soft, clean, damp cloth or baby toothbrush twice a day
- Avoid leaving your baby with a bottle of formula or breast milk
- Avoid/limit juice
- Limit sweets and brush your child's teeth after eating sweet or sticky food (*e.g. raisins, dried fruit.*)
- Avoid giving teething biscuits, which often contain sugar



# Baby-led weaning

- Method of introducing complementary foods by which baby self-feeds finger foods rather than being spoon-fed by parents (at 6 months, not before)
- Drawbacks:
  - Difficult for baby to get enough iron rich foods
    - Unable to spoon feed cereals to self
    - Unable to chew meats
  - Baby would not consume enough calories and nutrients
    - Due to lack of chewing skills and lack of stamina and/or interest
    - Slowed growth/weight gain
  - Choking risk
- **Strict baby-led weaning is not recommended**

# Establishing healthy eating habits for life

*Early childhood food experiences are critical to the development of healthy eating habits.*

- Parents need to be positive role models for their children
  - If parents eat unhealthy foods, children will likely eat unhealthy foods
  - Unhealthy eating habits in childhood are often carried into adulthood
- Family Meals
  - Bring your baby to the table to join in family meals
  - No toys or TV/electronics at meal time

# Establishing healthy eating habits for life

- Establish regular meal and snack times
- *Encourage* your baby to eat, but *do not pressure* them
- Avoid using food as *reward* or *punishment*
  - Talk positively about food; avoid being negative
- Serve them a variety of healthy foods.....even if you don't like them
- Limit “junk food” (e.g. Chocolate bars, chip, pop, etc.)

# Division of Responsibility

(Ellyn Satter)

**YOU** are responsible for **WHAT, WHERE & WHEN** your baby eats and...

**YOUR BABY/CHILD** is responsible for **IF & HOW MUCH** he/she eats.



# References

- **Health Canada** – Nutrition for Healthy Term Infants: Recommendations from 6-24 Months. (2014)
- **Canadian Paediatric Society** -Caring for Kids; *Feeding your baby in the first year.*(2012)
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- **Nutrition Resource Centre(NRC)** -Best Start; *Feeding your Baby From Six Months To One Year.* (2011)