McGill Nursing & Montreal City Mission Presents:

# Child Health; Development & Nutrition



November 9th, 6-7pm







### Hello!



Ontario





...and we are 4th year Nursing Students at McGill!



? What to Expect this Evening...

1. Get to Know You 2. Childhood Development 3. Childhood Nutrition 4. Questions!

Questions? Feel free to Un-mute or type your questions in the Chat!

Cameras may remain **on** or **off**; whichever you prefer. While we are presenting, we ask that you remain muted! Thank you

#### Get-to-Know You Poll

Tell us about yourself!

#### Childhood Development

Reaching milestones with your child





#### **Overview of Topics**

- Physical, Cognitive, Social & Emotional Developmental Stages
  - Toddlerhood: 0 2 years



• **Early Childhood**: 2 – 6 years



Middle Childhood: 6 – 11 years



Adolescence: 11 – 18 years



- How to Promote Development
- Addressing Challenges to Reaching Milestones

# Development throughout Toddlerhood

(0 - 2 years old)

And what you can do to promote it



#### **Physical Development**

in Toddlerhood

#### Birth - 6 Months

- Rapid Growth
- Normalize sleep schedule
- Develops five senses
- Gross motor skills
  - Holds head up
  - Rolls over
  - Grasps objects



#### 7 - 12 Months

- Sleep schedule very similar to an adult's
- Gross motor skills
  - Sits alone
  - Crawls
  - Walks
  - More accurate grasping



#### 13 - 18 Months

- Continues rapid growth
  - Slightly slower than first year
- Gross motor skills
  - More coordinated walking
  - More coordinated playing with smaller objects



#### 19 - 24 Months

- Gross motor skills
  - Walks up stairs
  - Very coordinated with small objects

### What you can do to Promote Physical Development

#### Nutrition

- Breastfeed until two years old
- Introduce food at 6 months old
- Various environments for play
- Toys ranging in size and shape
- "Tummy time"



#### **Cognitive Development**

in Toddlerhood

- Brain is most "plastic" in first few years of life
- Gradual, progressive growth (not spurts)
- Learning methods:
  - Classical conditioning
  - Operant conditioning
  - Habituation
  - Imitation



#### Birth - 6 Months

- Repeats actions to get same results
- Knows out of sight objects still exist
- Recognizes objects seen before
- Shifts attention between two topics
- Categorizes objects based on physical features
- Language:
  - Coos
  - Babbles

#### 7 - 12 Months

- Goal-directed behaviour
- Finds hidden objects
- Solves current problems using previous solutions
- Language:
  - Pat-a-cake
  - Babbles sound similar to words
  - First word (-12 months)





#### 13 - 18 Months

- Finds hidden objects by looking in multiple places
- Imitates other's actions
- Longer attention span
- Understands pictures represent real things
- Language:
  - 50 word vocabulary



#### 19 - 24 Months

- Comes up with solutions to simple problems suddenly
- Make-believe
- Categorizes objects based on function
- Language:
  - 200 250 word vocabulary

### What you can do to Promote Cognitive Development

- Play with your child
- Speak and sing to your child using exaggerated sentences
- Read to your child
- Expose your child to different environments and people
- Positive reinforcement



#### Birth - 6 Months

- Imitates expressions when face-to-face with caregiver
- Smiles and laughs
- Recognizes mother's facial features



#### 7 - 12 Months

- Strong connection with caregiver
- Understands wider variety of facial expressions:
  - Happiness
  - Surprise
  - Fear
  - Anger
- Regulates emotions



#### <u>13 – 18 Months</u>

- Follows simple instructions
- Recognizes themself in a mirror
- Plays alone with toys



#### <u> 19 – 24 Months</u>

- Classifies themselves and others based on sex, age, physical qualities
- Develops self-control
- Chooses toys based on gender stereotypes



#### **Emotional Development**

in Toddlerhood

#### Birth - 6 Months

- Attraction to pleasant stimuli
- Withdrawal to unpleasant stimuli
- Facial expressions have emotional meaning behind them



#### 7 - 12 Months

- Increased smile/laughter frequency and intensity
- Increased anger/fear frequency and intensity
- Develops more anxiety away from caregiver or with strangers



#### **Emotional Development**

in Toddlerhood

#### 13 - 18 Months

- Realizes their own other people's emotions can differ from their own
- Needs reassurance with fears



#### 19 - 24 Months

- Develops self conscious emotions
  - Guilt
  - Shame
  - Embarrassment
  - Fear
- Can describe feelings
- Starts showing empathy
- Handles absences from caregivers better

### What you can do to **Promote Social and Emotional Development**

- Make exaggerated facial expressions to your child
- Respond promptly and consistently to child's needs and interactions
- Show physical affection
- Engage in face-to-face interactions
- Sing to child
- Pay attention to when child is responsive to stimuli

#### ? — Tiı

#### Time to test your knowledge!

Poll: What is/are the best ways to promote **cognitive development** in children from birth to 2 years old?

- a) Speak to children quickly
- b) Keep them in the same environment so they get used to it
- c) Play matching games with them
- d) Sing to them using exaggerated words
- e) Both c and d

# Development throughout Early Childhood

(2 - 6 years old)

And what you can do to promote it



#### **Physical Development**

in Early Childhood

- Height and weight continue to increase
  - Rate of growth continues to decrease
- Gross motor skills
  - Walk with more balance → running → skipping
  - Jumps
  - Throws/catches balls
  - Dress themself
- Fine motor skills
  - Tie shoes
  - $\circ$  Use utensils: spoon  $\rightarrow$  fork  $\rightarrow$  knife  $\rightarrow$  scissors
  - $\circ$  Drawing: scribbles  $\rightarrow$  drawing pictures  $\rightarrow$  writing letters + numbers
- Starts to lose baby teeth



### What you can do to Promote Physical Development

- Nutrition: same nutrients as adults, smaller portions
- Play spaces and equipment for running, jumping, throwing
- Fun > Technique
- Step-by-step instructions for new actions



#### **Cognitive Development**

#### in Early Childhood

- More complex make-belief  $(2 4 \text{ yrs}) \rightarrow \text{magical beliefs decline } (5 6 \text{ yrs})$
- Counting (up to 10)
- Understands models and drawing symbolize real world
- Understands cause and effect situations
- Working memory
- Categorizes objects based on status
- Realizes thinking occurs inside their head
- Plans tasks (5 6 yrs)
- Talks to self during tasks
- Understands other perspectives differ from their own





#### **Cognitive Development**

in Early Childhood

- Language:
  - o 2 years:
    - Speaks in simple sentences
    - Uses non-verbal cues to understand word meanings
  - 5 6 years:
    - Understands link between letters and sounce
    - Begins to spell
    - 10 000 word vocabulary



### What you can do to Promote Cognitive Development

- Interactive reading
- **Simplify** tasks
- Enrollment in school
  - Enhances numerical understanding, writing/reading, problem-solving, memory
- Repeat questions and responses
- Follow child's lead in conversation
- Limit screen time
  - Educational > entertainment
- Use exploration to correct actions or phrases



#### **Social Development**

in Early Childhood

- Gender stereotype beliefs increase
- Describes self using emotional and physical characteristics
- Plays alongside other children
  - Occasionally works with other children
- Develops moral rules and behaviours





#### **Emotional Development**

in Early Childhood

- Understands characteristics of basic emotions
- Develops self-esteem
  - Making friends
  - Accomplishing tasks
  - Learning new things
- Better emotional self-regulation
- More frequent self-conscious emotions
- Physical aggression increases (especially in boys)



### What you can do to **Promote Social and Emotional Development**

- Encouraging play with children of similar ages
- Emphasize *effects of behaviours* on others
- Set rules with child and be consistent with them
- Praise your child for good behaviour
- Introduce toys of either gender
- Authoritative child-raising style

#### ? Time to test your knowledge!

Poll: What is/are the best ways to promote **physical development** in children ages 2 - 6 years old?

- a) Focus on enjoyment when trying new activities
- b) Make sure they are using proper technique when trying new things
- c) Give the same nutrients and quantities as adults get for meals
- d) Prevent them from running around so they don't get hurt

## Development throughout Middle Childhood

(6 - 11 years old)

And what you can do to promote it



#### **Physical Development**

#### in Middle Childhood

- Continued growth, slower rate
  - Growth spurts
- Adult teeth replace baby teeth
- Gross motor skills
  - More legible writing
  - More organized drawing
  - Coordinated running, jumping, catching
  - Kicks and dribbles a ball



### What you can do to Promote Physical Development

- Introduce sports and activities
  - Do not force participation
  - 1 hr of enjoyed physical activity per day
  - Enjoyment > achievement
  - Focus on teamwork and improvement
- Model healthy habits
- 9 12 hrs of sleep per night



#### **Cognitive Development**

#### in Middle Childhood

- Processes information quicker
- Uses multiple memory strategies
- Plans and completes multi-step tasks
- Complete more complex math problems
- Improved spatial awareness
- Increased variety and organization of general knowledge





#### **Cognitive Development**

#### in Middle Childhood

- Language
  - More accurate word definitions
  - Conventional reading > word recognition
  - Stories are more organized and detailed
  - Subtle expressions (eg sarcasm, irony)
  - Understands dual meaning



### What you can do to Promote Cognitive Development

- Focus on *effort* and *confidence* in tasks
- Praise behaviour > qualities
- Promote collaborative work with peers
- Step-by-step problem-solving
  - Child leads



#### **Social Development**

in Middle Childhood

- Shares with others
- Enjoys playing with others more than playing alone
- Friends become very important
- Starts to mix friends of different genders
- Enjoys being part of groups (eg boy or girl scouts)
- Understands self in terms of personality and social comparisons
- More selective with friends





#### **Emotional Development**

#### in Middle Childhood

- High but realistic self-esteem
- Empathy increases and applied to more general situations
- Physical aggression decreases
- Problem-centered and emotional-centered regulation
- Understands socially acceptable ways to display negative emotion
- Understands real meaning behind contradicting expressions and circumstances
- Increased awareness on gender stereotypes



#### What you can do to

#### **Promote Social and Emotional Development**

- Monitor decisions and outcomes
- Explain how *personality traits are changeable* 
  - Better resolvement of arguments with peers
- Encourage interactions with diverse groups of people
- Take turns reading with child
- Encourage respect
  - Demonstration, setting limits, praising
- Teach patience
  - Practice sharing, wait to give reward, acknowledge difficulty

#### ? Time to test your knowledge!

Poll: What is/are the best ways to promote **social development** for children ages 6 - 11 years old?

- a) Read to your child while they listen
- b) Encourage new interactions with diverse groups of people
- c) Change punishments up depending on the situation
- d) Have children guide decision-making and monitor the outcome
- e) Both b) and d)

# Development throughout Adolescence

(11 - 18 years old)

And what you can do to promote it



#### **Physical Development**

#### in Adolescence

- Growth spurts stop  $\rightarrow$  more continuous growth
  - Girls: 14 16 years old
  - Boys: 16 18 years old
- Awareness of sexual orientation
- Stronger reactions to stressful events
- Male voices deepen
- Fat:Muscle ratio more defined for girls and boys
- May be sexually active
- Girls start to menstruate (11 14 yrs)
- Boys start to ejaculate (11 14 yrs)



## What you can do to Promote Physical Development

- Talk to child about bodily and sexual changes
  - Assess readiness to talk
- Serve healthy, well-balanced meals
  - Canada's food guide
  - Eating meals as a family
- Encourage participation in individual or team sports
- 8 10 hrs of sleep



#### Cognitive Development

in Adolescence

- Understands scientific processes
  - Hypothesis, evidence
- Becomes more critical of themself
- Better decision-making



## What you can do to Promote Cognitive Development

- Communicate with child's teachers
- Remain *involved* with their *schooling*
- Continue to regulate screen time (phones, tablets, TVs)
- Continue to emphasize effort over achievement



#### **Social Development**

in Adolescence

- Becomes more self-conscious
- Becomes interested in romantic relationships
- More "clique-y" friendships
- Number of friends decreases
- Describes self using moral, physical and social features
- Understands moral problems and how to solve them





#### **Emotional Development**

in Adolescence

- Moodiness
- Tenser relationship with parent
  - Spends more time with peers than parents



#### What you can do to

#### **Promote Social and Emotional Development**

- Discuss social and romantic relationships
- Discuss "uncomfortable subjects"
  - Safe sex, alcohol, peer pressure
- Allow autonomy in exploring social roles but discuss firm guidelines
  - Avoid convincing or controlling
- Quality > quantity of time spent with child
- Get to know your child's friends
- Respect your child's opinions
- Pay attention to *mental health* cues
  - Eating/sleeping habits, involvement with school, socializing

#### ? Time to test your knowledge!

Poll: What is/are the best ways to promote **physical development** for children ages 11-18 years old?

- a) Avoid talking about pubertal changes to prevent awkward moments with your child
- b) Ensure they are getting 12 14 hrs of sleep
- Serve well-balanced meals based on Canada's food guide and together when possible
- d) Avoid putting your child into group physical activities since they are probably too mature for them anyways

# What if my child isn't reaching milestones?

Steps to take and resources



#### What you can do

- Regular screening with family doctor
- Discuss concerns with family doctor
  - Earlier intervention = better
- Continue to stimulate child
- Contact others with similar experiences (online, support groups, phone apps, etc)
  - Link: <a href="https://amiquebec.org/family-support/">https://amiquebec.org/family-support/</a>



## What if you don't have a family doctor?

#### Register for waiting list on Quebec Family Doctor Finder

- Requirements
  - 14+ yrs (can register a younger person)
  - Not have a family doctor currently
  - Have a valid Health Insurance Card
  - Live in Quebec with Quebec address on file
- Link:

https://www4.prod.ramq.gouv.qc.ca/GRL/LM\_GuichAcces MdFamCitoy/en



#### While you wait...

- Contact Your Local CLSC
  - How to get a health insurance card
  - How to assess development in your child
  - Steps to take if your child is experiencing developmental delays
  - Consults with professionals
- Find my CLSC:
   <a href="https://santemontreal.qc.ca/en/public/montreals-institutions">https://santemontreal.qc.ca/en/public/montreals-institutions</a>
   -at-a-glance/clscs/



#### **Resources**

#### To track development



https://www.cdc.gov/ncbddd/actearly/pdf/parents\_pdfs/milestonemomentseng508.pdf



#### ? — Check-in

Questions?

## **Childhood Nutrition**

3.

Does an apple a day keep the doctor away?





#### **Overview of Topics**

Your role in feeding your household



Canada's Food Guide



Childhood nutritional guidelines & food labels



Common challenges to healthy eating



?— **Poll** 

#### Tell me more about yourself!

- Who does the **cooking** at home?
- Who does the **grocery shopping** at home?

### Your Role...

# ... in feeding your household

And what that means for you



- Develop family food skills
- Create healthy food environment
- Make healthy food interesting
- Shaping eating habits & behaviours

... but what does this all mean?



- Food skills
  - How to cook, assess food, follow recipe
- Food environment
  - What food is available at home
- Make healthy food interesting
  - Interest = Healthy > Junk Food
- Habits & behaviours
  - Life skills & habits that carry to adulthood

# Canada's Food Guide First introduced in

1942!

But it looks a little different now

#### CANADA'S OFFICIAL FOOD RULES

These are the Health-Protective Foods

Be sure you eat them every day in at least these amounts.

(Use more if you can)

MILK-Adults-\(\frac{1}{2}\) pint. Children-more than 1 pint. And some CHEESE, as available.

FRUITS—One serving of tomatoes daily, or of a citrus fruit, or of tomato or citrus fruit juices, and one serving of other fruits, fresh, canned or dried.

VEGETABLES (In addition to poratoes of which you need one serving daily)—Two servings daily of vegetables, preferably leafy green, or yellow, and frequently raw.

CEREALS AND BREAD—One serving of a whole-grain cereal and 4 to 6 slices of Canada Approved Bread, brown or white.

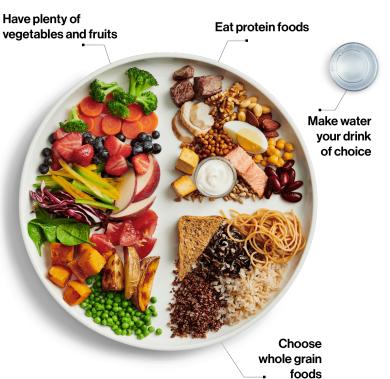
MEAT, FISH, etc.—One serving a day of meat, fish, or meat substitutes. Liver, heart or kidney once a week.

EGGS-At least 3 or 4 eggs weekly.

Eat these foods first, then add these and other foods you wish.

Some source of Vitamin D such as fish liver oils, is essential for children, and may be advisable for adults.





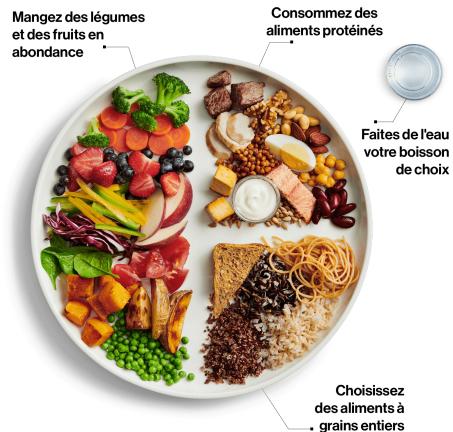
#### **Rule of Halves and Quarters**

½ vegetables & fruit

1/4 protein

1/4 whole grains







### What else might I need to know?

**Drinks** 





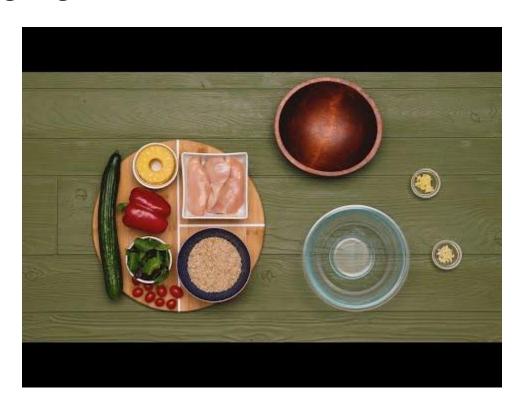








#### **Eating Together**



#### ? — Check-in

Any questions so far?

# Nutrition by Age

Infants to Teens

And what to expect in between



#### **Stages of Development**



Infants AGES 0-1



Toddlers AGES 1-3



Preschoolers
AGES 3-5



School-Aged AGES 6-12



Teens AGES 13-18

But first: what is a Calorie?



#### **Infants**

Ages 0 - 1 year old

#### **Tips**

#### Do:

- Hunger cues
- → Supervision

#### Don't:

- Round & solid
- Caffeine
- Honey

#### **Young Infants**

0 - 6 months old

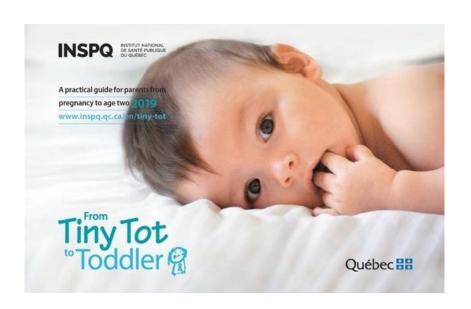
- Breastfeeding
- Vit D supplement

#### **Older Infants**

6 - 12 months old

- Introduce solids
- Foods that can be eaten with hands
- Cow's milk: wait until 9-12 months
- Soy milk: wait until 2 years





#### From Tiny Tot to Toddler

Guide from the Government of Quebec regarding pregnancy, delivery and the first two years of your child's life



#### **Toddlers**

Ages 1 - 3 years old **Caloric Requirement:** 1200-1800 cal/day

#### You might start seeing...

- Picky eating
- 'Ritual' eating

#### **Common Challenges**

Deficiencies in;

- Iron
- Vitamin C
- Vitamin A

#### What to do?

- Short & simple
- Avoid food as a reward/punishment
- Limit sweets
- Incorporate nutrient-rich foods



#### **Preschoolers**

Ages 3 - 5 years old **Caloric Requirement:** 1600 cal/day

#### You might start seeing...

- Rushing through meals
- Interest in cooking

#### What to do?

- Snacks
- Start to involve in the kitchen



#### **School-Aged Children**

Ages 8 - 12 years old **Caloric Requirement:** 2400 cal/day

#### You might start seeing...

- Skipping breakfast
- Mirroring
- Mealtime independence

#### What to do?

- Prep ahead
- Mealtime routine
- Talk about healthy food choices



#### **Teenagers**

Ages 13 - 18 years old **Caloric Requirement:** Varies

#### You might start seeing...

- Growth spurts
- Snacking

#### **Common Challenges**

#### Deficiencies in;

- Protein
- Calcium
- Iron
- Vitamin B
- Vitamin D

Challenges with eating & changing body

#### What to do?

- Incorporate nutrient-rich foods
- Healthy snacks
- Give them independence
- Watch for signs of eating disorder

#### ? — Check-in

How are we doing?

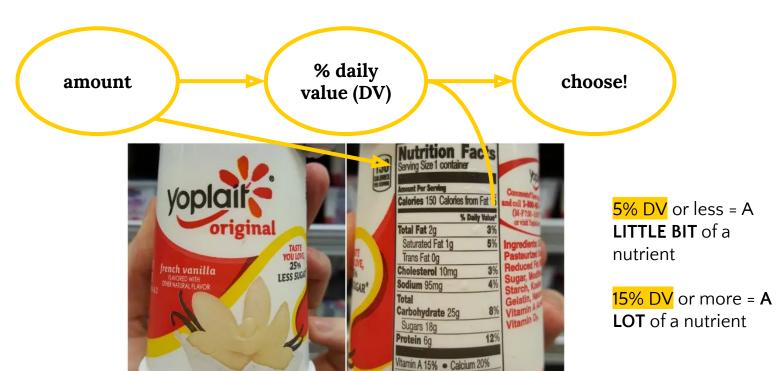


## **Food Labels**

What's in your food?



#### **How to Read Food Labels**



Vitamin D 20% • Phosphorus



#### Which is the healthier choice?

#### **Product 1**

#### **Nutrition Facts** Per burger (85 g) Amount % Daily Value Calories 210 28 % Fat 18 g Saturated 7 g 38 % + Trans 0.5 g Cholesterol 55 mg Sodium 330 mg 14 % 1 % Carbohydrate 1 g Fibre 0 g 0 % Sugars 0 q Protein 12 g Vitamin C Vitamin A 0 % Calcium 2 % Iron 10 %

#### **Product 2**

Nutrition I Per burger (85			
Amount		% Daily	Value
Calories 123			
Fat 7 g			17 %
Saturated 3	g		17 %
+ Trans 0.5	g		
Cholesterol 3	3 mg		
Sodium 200 n	ng		8 %
Carbohydrate	e 1 g		1 %
Fibre 0 g			0 %
Sugars 0 g			
Protein 14 g			
Vitamin A	0 %	Vitamin C	0 %
Calcium	2 %	Iron	12 %

- 1. Amount
- 1. % Daily Value (DV)
- Choose!

Cast your vote in the poll!



#### Let's break it down

#### **Product 1**

		_		
Amount			% Daily	/ Value
Calorie 210				
Fat 18 g			<del></del>	28 %
Saturated 7 g				38 %
+ Trans 0.5 g				
<b>Cholesterol</b> 55	mg			
Sodium 330 mg	) —		-	14 %
Carbohydrate :	1 9			1 %
Fibre 0 g				0 %
Sugars 0 g				
Protein 12 g				
Vitamin A	0 %	V	tamin C	0.04
Calcium	2 %	Te	on	10.04

#### **Product 2**

Amount			% Dai	lv Val	ue
Calories 123				.,	
Fat 7 g				17	%
Saturated 3 g				17	%
+ Trans 0.5 g					
Cholesterol 33	mg				
Sodium 200 mg				- 8	%
Carbohydrate 1	g			1	%
Fibre 0 g				0	%
Sugars 0 g					
Protein 14 g					
Vitamin A	0	%	Vitamin	C O	04
Calcium			Iron	12	9/6

Product 1	Product 2
calories: 210	calories: 123
fat: <b>28%</b>	fat: <b>17%</b>
saturated/trans 38%	saturated/trans 17%
sodium: 14%	sodium: 8%
iron: <b>10%</b>	iron: <b>12%</b>



#### So which one is healthier?

It depends on what you're looking for!

Generally; Product 2 is healthier if you are looking to have

- Lower calorie
- Lower fat
- Lower sodium

Product 1	Product 2
calories: 210	calories: 123
fat: <b>28%</b>	fat: <b>17%</b>
saturated/trans 38%	saturated/trans 17%
sodium: 14%	sodium: 8%
iron: <b>10%</b>	iron: <b>12%</b>

## Challenges...

### ... to healthy eating

And some ways to overcome them



## Why does it feel hard to eat healthy?



## 4. Questions?



# Thank you for your time!

One last thing before you go...



Please fill out our survey!



#### **Extra Resources**

Canada's Food Guide: <a href="https://food-guide.canada.ca/en/">https://food-guide.canada.ca/en/</a>

**Tiny Tots to Toddlers:** 

https://www.inspq.qc.ca/en/tiny-tot/consult-the-guide



## END OF PRESENTATION