

Family Mealtime Observation Study (FaMOS)

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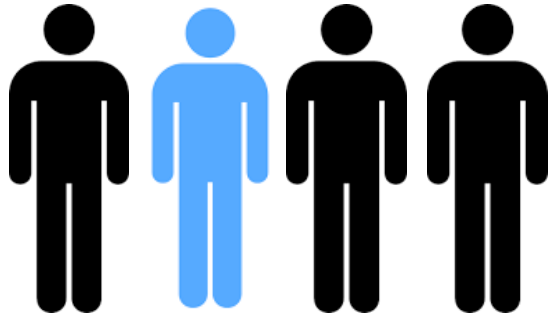
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Objectives

- What do we know about parent feeding practices?
- The FaMOS Study
- Preliminary Results & Implications
- Questions



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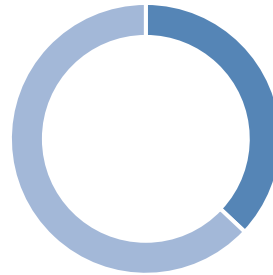


1 in 4

Canadian children
have overweight or
obesity

70

The percent of children
aged 4-8 meeting Fruit &
Veg recommendations



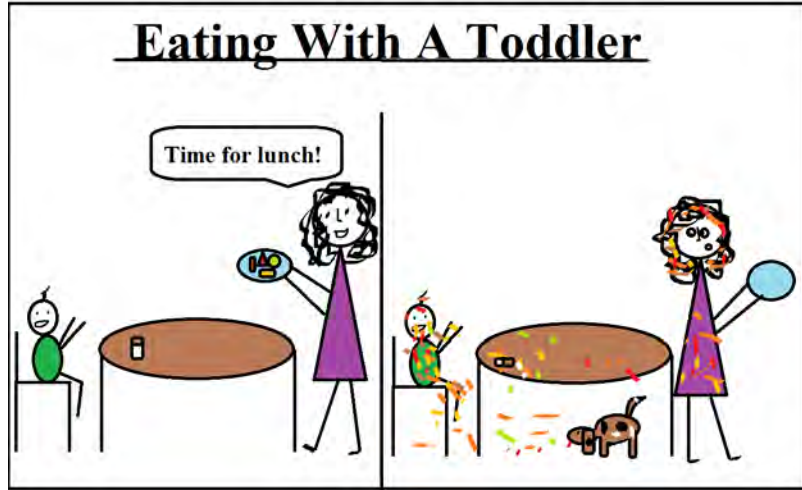
37% = percent of 4-8
year olds meeting dairy
recommendations



More than 75% of 4-8
year olds have sodium
intakes above the TUL



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Parental Feeding Practices: What do we know?

- Parental feeding practices: specific behavioural strategies that parents use to influence what, how much, or whether their children eat
- Parents feeding practices influence children's dietary intake and weight status
 - Highly controlling practices may undermine children's ability to self-regulate their dietary intake



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Parental Feeding Practices: What do we know?

- The preschooler age group (3-5 years) is a critical time for intervention
- Results are equivocal, especially around restricting intake
- Key Limitations:
 - 1) Reliance on parent report
 - 2) Overlooking the general family environment



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The Family Mealtime Observation Study (FaMOS)

Overall Aim:

To address the limitations of existing research through a cross-sectional study that will examine the associations between observed parental feeding practices and nutrition risk among preschoolers aged 3-5 years in a sample of 75 Canadian families



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The Family Mealtime Observation Study (FaMOS)

Objectives:

1. To examine cross-sectional associations between observed parental feeding practices and preschool children's nutrition risk score (NutriSTEP[®])
2. To examine how aspects of the general family environment, moderate the associations between parental feeding practices and children's dietary intake and nutrition risk



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FaMOS Methods

- Recruitment
 - Facebook, GFHS, OEYC
- Eligibility
 - At least one child between 2-5 years
 - Ability to understand and speak English during meals
 - Individual who primarily fed child was able to participate



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FaMOS Methods

Home Visit #1

- Study consent
- Video-camera set-up/demonstration
- Height and weight measurements

3 Videotaped Family Meals

Parent Survey

- Completed by both parents in two-parent families

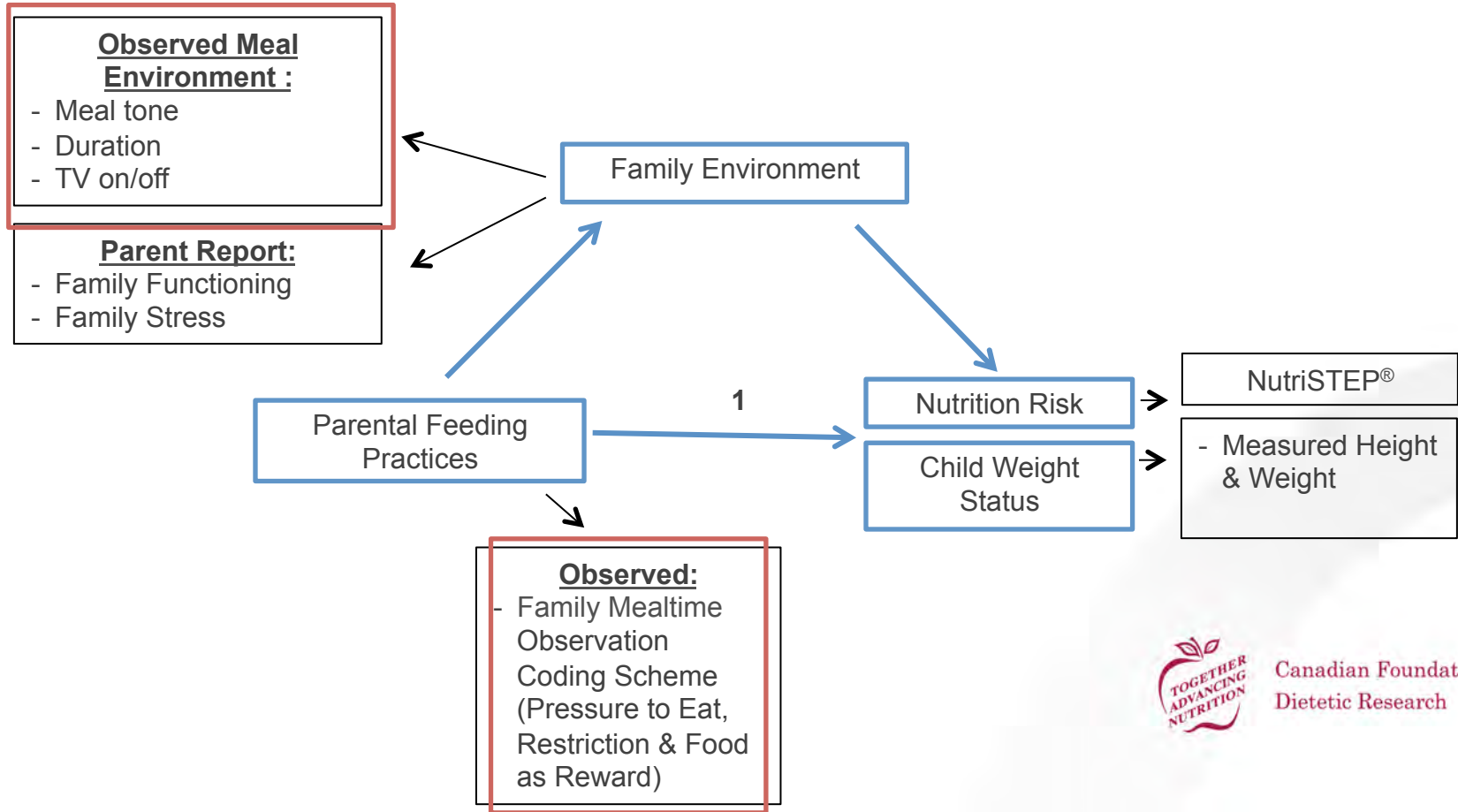
Home Visit #2

- Camera pick-up & incentive



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FaMOS Measures



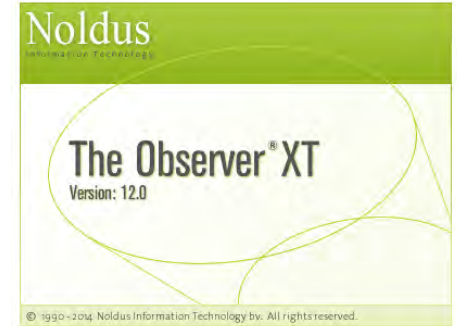
FaMOS Methods: Video Coding

- The Family Mealtime Coding Scheme

The screenshot displays the The Observer XT software interface. The main window shows a video titled 'MOS9_03.02.15.MP4' depicting a man and a child at a dining table. Below the video is a 'Playback Control' section with standard media controls. To the right, there are three panels: 'Timers', 'Codes', and 'Event Log'. The 'Timers' panel shows a table with columns for 'Timer', 'Relative s.ff', and 'Status'. The 'Codes' panel shows a table with columns for 'Subjects', 'Behaviors', 'Modifiers', and 'Status'. The 'Event Log' panel is currently empty.

Timer	Relative s.ff	Status
Observation - Current Time	-	
Observation - Elapsed Time	-	
Observation - Observed Time	-	
Observation - Remaining Time	786.23	
Observation - Start Time	-	
Observation - Stop Time	-	
Event Log - Start Time	-	
Event Log - Stop Time	-	

Subjects	Behaviors	Modifiers	Status
Target Child			T
Parent 1			P
Parent 2			a



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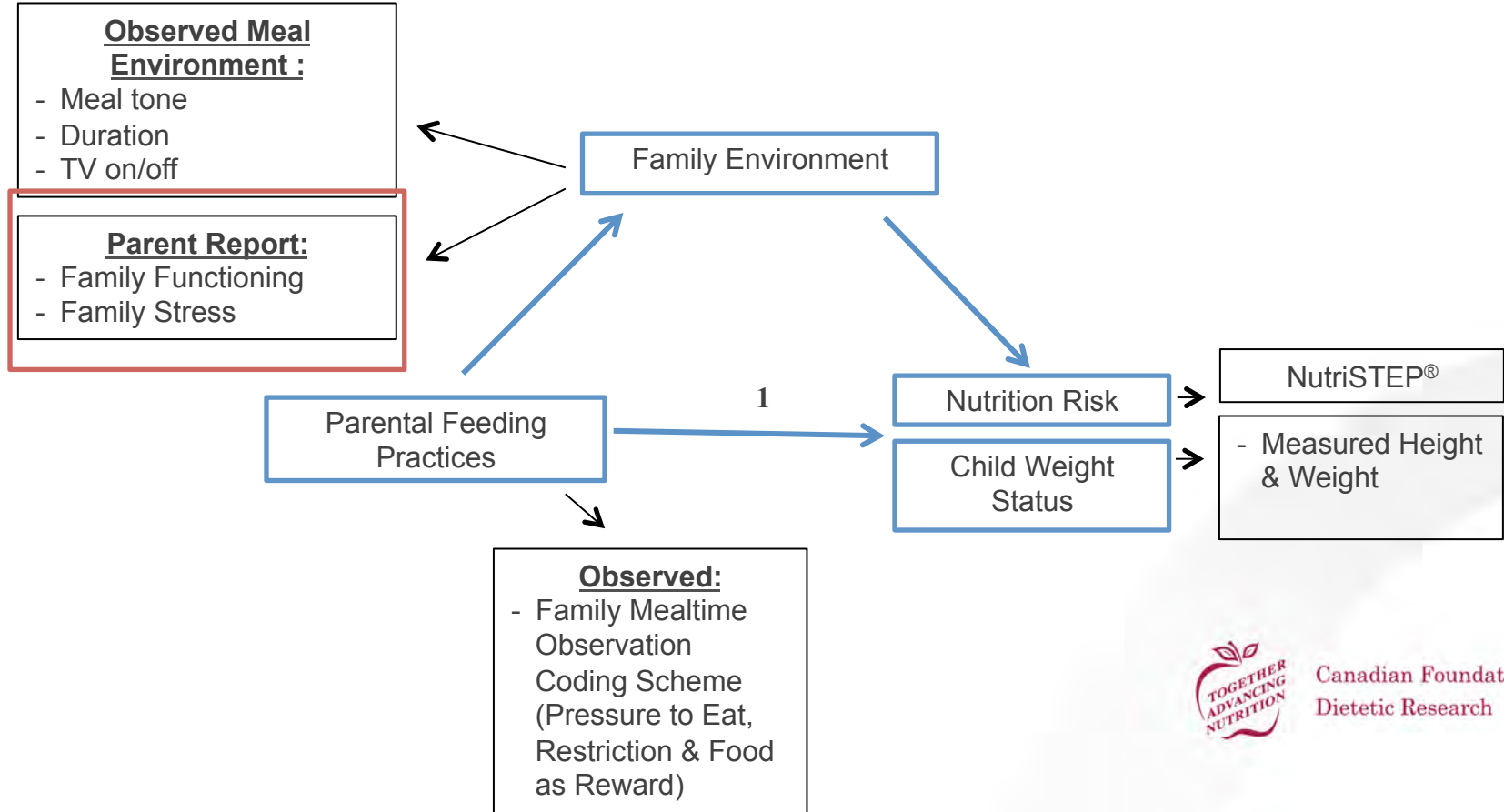
FaMOS Measures

- Measured Height and Weight
- NutriSTEP®
 - 17 item questionnaire used to assess eating habits and identify nutrition problems in preschool aged children (3-5 years)
 - individual question scores are tabulated to determine three levels of risk, low, medium and high



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FaMOS Measures



FaMOS Measures

- Family Functioning:
 - McMaster Family Assessment Device- General Functioning Subscale
 - *“Planning family activities is difficult because we misunderstand each other.”*
- Family Stress:
 - Parenting Stress
 - Parenting Stress Index- Short Form- Parent Distress Subscale
 - *“Since having this child, I feel that I am almost never able to do things that I like to do”*
 - General Stress
 - *“Using a scale from 1 to 10, where 1 means ‘no stress’ and 10 means ‘an extreme amount of stress,’ how much stress would you say you have experienced in the last year?”*



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FaMOS Timeline

July 2016: Recruitment for FaMOS begins



January 2017: REB approval for broad recruitment



October 2017: Study Visits Completed



November 2017: Data Analysis



August 2018: Completion of PhD

Grant Year 1



Grant Year 2



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FaMOS Results: Feasibility

- **Feasible**

- 148 families expressed interest
 - 112 completed eligibility (6 ineligible)
 - 77 completed FaMOS

- **Acceptable**

- 100% of participants reported they were 'comfortable' or 'very comfortable' filming their meals
 - Only 1 family did not complete filming
- 100% of participants reported the study protocol was easy to follow



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FaMOS Results: Participants

- N= 77 families (147 parents; 70 fathers, 77 mothers)
- 83.6% of parents identified as white
 - 18% of parents born outside of Canada
- Average Parent BMI: 26.9
- Average age of Target Child: 3 years
- 54% Female



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FaMOS Results: Reactivity

- Reactivity is a concern in research applying direct observation.

Do children's behaviours change over the course of 3 observed meals?

- 15% of the families (n=12; 36 observations)
- All 3 observations for each family were coded separately by two observers (85% agreement).



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FaMOS Results: Reactivity

Table 1: Descriptive statistics and Analysis of Covariance between child camera interactions (N= 36 observations; 12 families)

	Observation 1	Observation 2	Observation 3	P value
	Mean (SD)	Mean (SD)	Mean (SD)	
Average Camera Interactions	8.17 (8.871)	3.5 (2.5)	2.17 (1.34)	0.026



FaMOS Results: Parent Feeding Practices

- **Pilot Results**
 - N=12 families (23 parents; 11 fathers)
- Videos coded using the Family Mealtime Coding System (FMCS)
- **Inter-rater reliability:** kappa= 0.89
- **Average length of meal:** 22.04minutes \pm 6.83minutes
- **Ease of Child Feeding:** Mean= 4 (0.78)
- **Meal Tone:** Mean= 2.29 (0.54)



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FaMOS Results: Parent Feeding Practices

- Pilot Results
 - N=12 families (23 parents; 11 fathers)
- No association between mothers reported and observed feeding practices
- Mothers verbally pressured child to eat significantly more than fathers
 - Mothers ($\mu=5.08 \pm 3.45$), Fathers ($\mu= 2.50 \pm 1.71$), $p= 0.05$



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FaMOS: Next Steps

- Complete Video Coding
 - Assess reactivity in parent feeding practices over 3 observations
- Examine the associations between observed parent feeding practices and child nutrition risk
- Examine how aspects of the general family environment, moderate the associations between parental feeding practices and children's nutrition risk

Conclusions

- FaMOS has been found to be feasible and acceptable among parents of preschool-aged children
- The development of family-based interventions currently involves a lot of guess work because there is no clear understanding of how parental feeding practices influence children's dietary intake
- FaMOS includes both mothers and fathers for a more complete picture of family meals
- Findings from FaMOS will help develop 'best practices' for feeding young children

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