

Implementing NutriSTEP® in Ontario



**Ontario Public Health Standards Roll-Out
Reproductive Health and Child Health Workshop
November 18, 2008**

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What we will cover

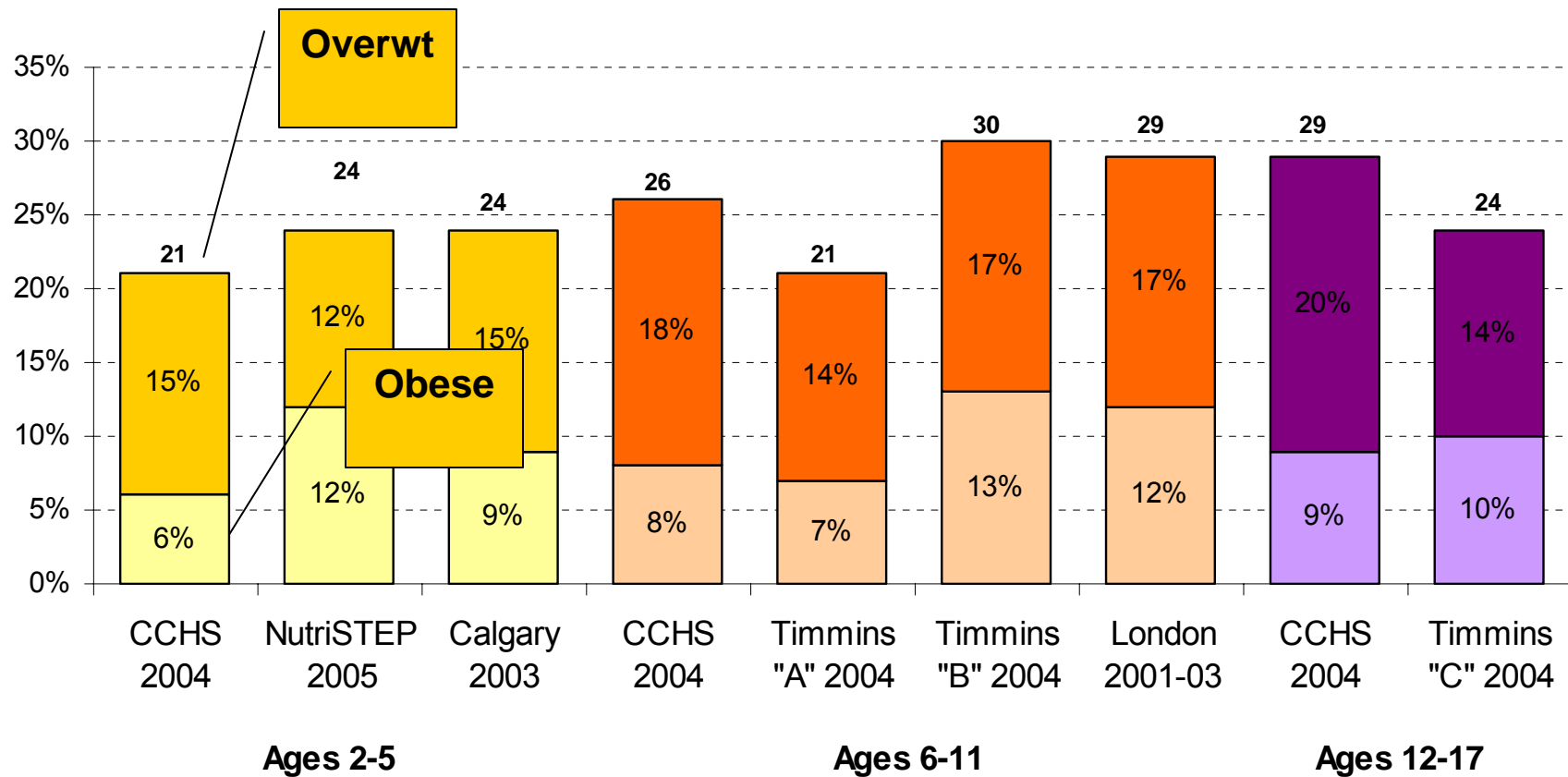
- **Preschool nutrition and parenting concerns**
 - **What is NutriSTEP® Program**
 - **Background - validation of NutriSTEP®**
 - **Where NutriSTEP® is being used right now**
 - **Natural fit with OPHS**
 - **Opportunities, challenges and next steps**
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Eating Habits

- **NOPCHS, 1-6 year olds, 2002**
 - 24% lacked a varied diet
- **Quebec 4 year olds, 2002**
 - below daily recommended intakes: 21% vegetables & fruit, >50% milk, 61% meat
 - 85% offered pop, fruit or sport drinks regularly; 20% having daily; 9% consuming ≥ 3 times/day
 - Fast foods, 72% \geq once/week
- **CCHS, 4-8 year olds, 2004**
 - vegetables, fruit & milk products less than recommended
- **Ontario 3-5 year olds, 2005**
 - below recommended intakes 35-55% vegetables & fruit, 15-25% milk, 22-32% meat
 - fast foods, 8-13% ≥ 2 /wk

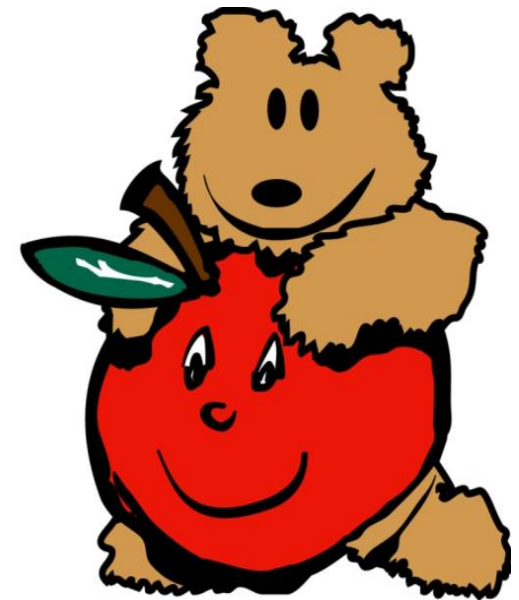


Physical Growth Concerns

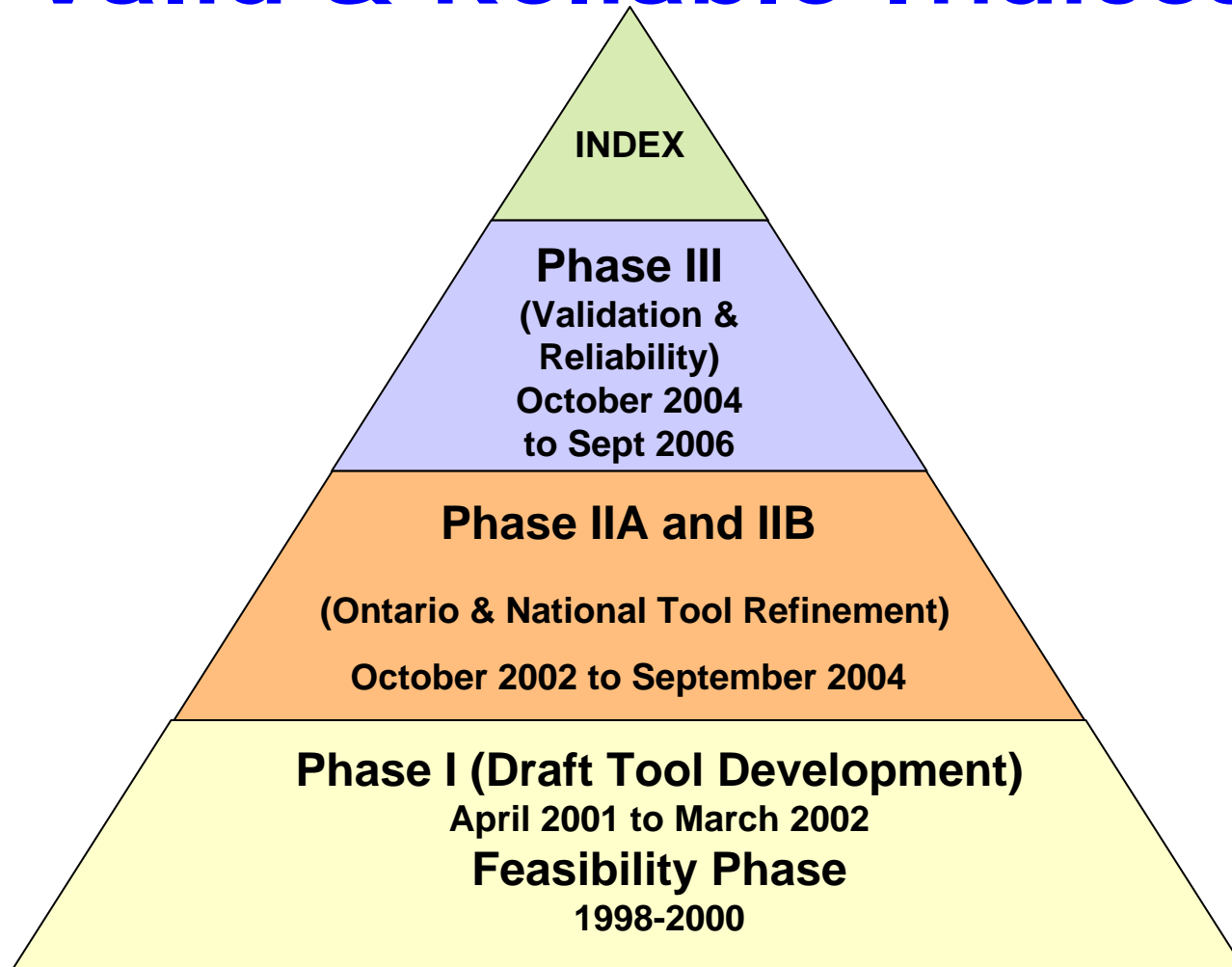


NutriSTEP® Program is ...

- **Parent-focused nutrition education and skill building program that starts with:**
 - **Nutrition risk screening index for preschoolers (3-5 years)**
 - **A multi-ethnic bilingual (English and French) parent-administered tool that can be completed in 5 minutes**
- **On-going collaborative practice-based research with University of Guelph and PHRED**



Screening Starts With Valid & Reliable Indices



Validation Phase 2004-2006

- **269 preschool children** (multi-cultural, English & French) from ON sites (Sudbury, Manitoulin Island, York Region, Middlesex-London)
- **Nutritional assessment by a trained Registered Dietitian**
- **Parent responses on NutriSTEP™ compared to the RD's risk rating**
- **140 test-retests**
 - Sudbury, Owen Sound, Hamilton, Perth County
 - Parents completed tool twice





Nutrition Screening Tool for Every Preschooler

Instructions

- Below are questions about your preschool child's (3 to 5 year old) eating and other habits.
- Think about your child's every day habits when answering. Check (✓) only one answer for each question.
- There is a number from 0 to 4 beside each answer. This number is a score for that question. At the bottom of each page is a box for the score for the page. For each page, add up the scores for each question.
- At the end of the questionnaire, you will add the page scores to get the total score.

1. My child usually eats grain products:

Examples are bread, bagel, bun, cereal, pasta, rice, roti and tortillas.

- 0 More than 5 times a day
 1 4 to 5 times a day
 2 2 to 3 times a day
 4 Less than 2 times a day

2. My child usually has milk products:

Examples are white or chocolate milk, cheese, yogurt, milk puddings or milk substitutes such as fortified soy beverages.

- 0 More than 3 times a day
 1 3 times a day
 2 2 times a day
 4 Once a day or less

3. My child usually eats fruit:

- 0 More than 3 times a day
 1 3 times a day
 2 2 times a day
 3 Once a day
 4 Not at all

Total Score for Page 1

Determinants of Nutritional Health in Children

- **Physical growth**
 - Weight and height; parent's comfort level
 - **Food and nutrient intake**
 - Types and amounts of foods eaten and how often
 - **Factors affecting intake and eating behaviour**
 - Feeding environment; food security
 - **Developmental and physical capabilities**
 - Food allergies; oral motor skills; emotional maturity
 - **Physical activity**
 - Indoors and outdoors; screen time
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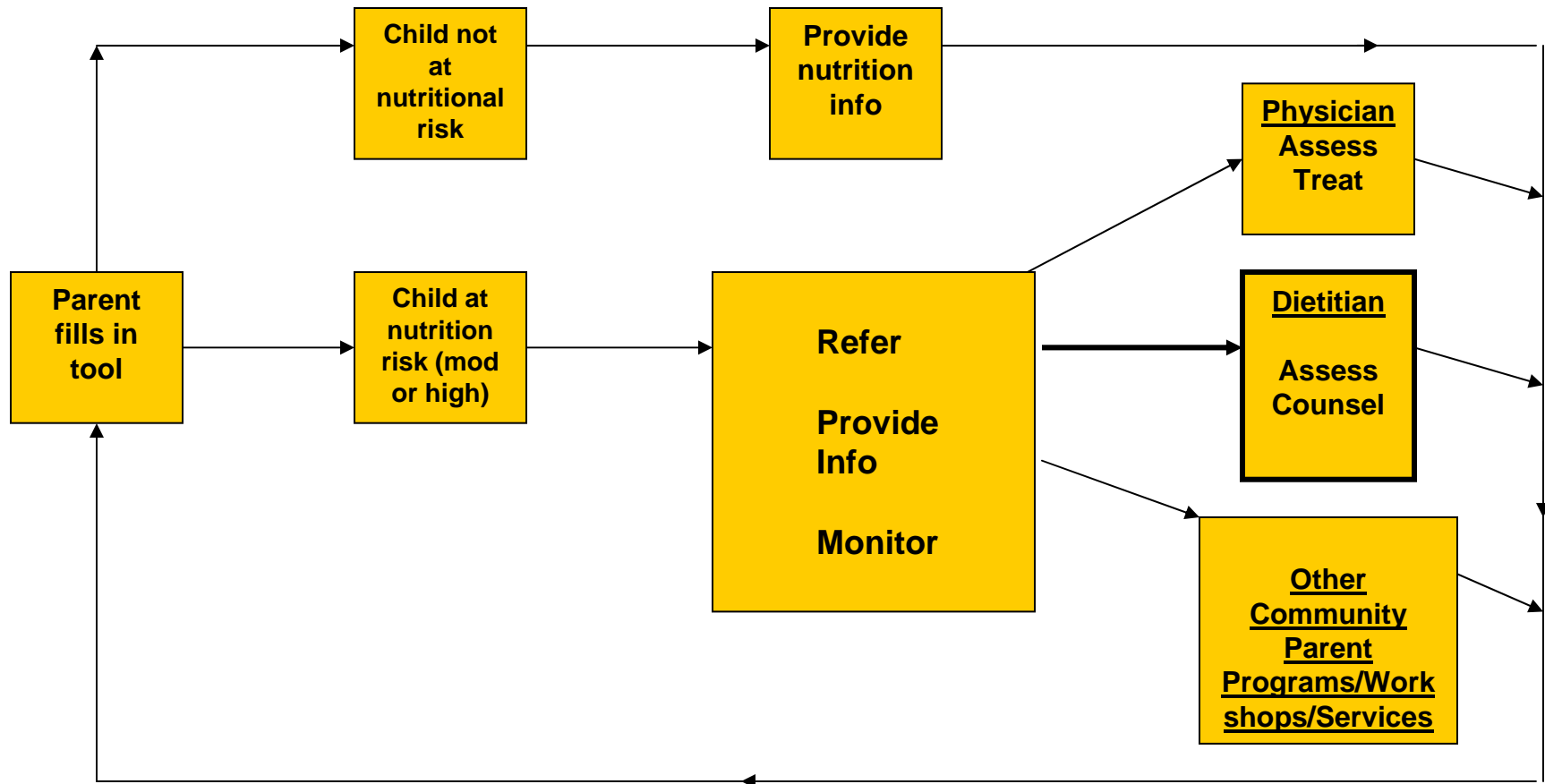
Why NutriSTEP® Program?

- Screening and Parent Education...
 - Leads to early identification and prevention of nutrition problems in priority populations
 - Increases nutrition awareness with families and providers
 - Means treatment can occur, reducing serious consequences
 - Helps manage scarce community resources
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NutriSTEP® Program Founded on Principles of “Ethical Screening”

- **Target screening to the right people**
 - **Identify nutrition problems and appropriate course of action (e.g. assessment, resources)**
 - **Has a referral/resource framework that meets needs**
 - **Includes follow-up education and parent skill building after screening**
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Ethical Screening...



Scoring and Prevalence

(Ref. Randall Simpson et al. European Journal of Clinical Nutrition, 2008:62, 770-780.)

- **Based on validation work, NutriSTEP™ identified approximately 10% of children at high risk who should receive further nutrition assessment and interventions**
 - **A further 23 to 33% of children would benefit from social and community services to improve their diet and health habits and reduce their nutrition risk**
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Parent Nutrition Education Booklets, 2007

- How to Build a Healthy Preschooler
- Busy Bodies
- Eat Right Be Active: A guide for parents and caregivers of preschoolers ages 3-5
- Eat Right Be Active: A guide for parents and caregivers of children ages 6-8

How to Build a Healthy Preschooler

A A healthy preschooler starts with healthy eating and physical activity habits.

B Balanced meals include a variety of foods from at least three of the four food groups.

C Canada's Food Guide includes foods from the four food groups—Vegetables and Fruit, Grain Products, Milk and Alternatives,

D Don't pressure or bribe your child to eat or to eat certain foods. The more a parent pushes foods, the less likely a child is to eat them.

E Eating together should be enjoyable and fun for you and your family.

F Food jags are periods of time when children will only eat a few kinds of foods. Be patient and try not to worry, especially if your child is active, growing and healthy.

G Growth is affected by many things. Each child is different and children can grow and develop at very different rates. It is important to watch your child's own growth pattern.

H Help children learn by setting a good example. Eat with them at the table and eat well yourself by choosing a variety of foods.

I It's never too early to start building healthy habits. Healthy eating and regular physical activity are key to healthy growing children.

J Juice intake should be limited to no more

K Keep a variety of healthy, ready to eat snacks available such as fresh fruit, cut up vegetables, yogurt, pretzels, cereal and milk.

L Let your child decide how much food to eat from the healthy choices you offer.

M Milk and Alternatives are important for growth as well as healthy bones and teeth, but too much milk can be filling and leave little room

N New foods that are offered over and over again will encourage children to try and taste them, but it may take 10–15 times before they actually eat them!

O Offer at least one food your child likes, as well as familiar and new foods at meals. Children will likely be more interested and hungry to eat.

P Playing actively indoors and outdoors should be fun and a regular part of every day. Children need to be physically active to grow up healthy.

Q Quality time with children includes playing active games together and eating family meals without TV or other distractions.

R Respect your child's appetite. Children are born with the ability to know when they are hungry and when they are full.

S Schedule meals and snacks at regular times so that children are hungry, but not too hungry, when it's time to eat and let them stop when they are full.

T The tiny tummies of children mean portion sizes need to be small. As children grow, portion sizes can grow too.

U Use meal and snack times as a chance to teach your children about different foods, food preparation and good table manners.

V Vitamin supplements are usually not necessary, even for picky eaters. Teach your children that good nutrition comes from food, not pills.

W Weight and height measurements should be taken regularly and plotted on a growth chart that is a part of your child's medical record with your health care provider.

X Expect your preschooler's appetite to vary from day to day.

Y Young children who are small eaters need to eat more often. They also need to eat nutritious, higher fat foods like peanut butter and cheese to meet their energy needs.

Z Zest for life is a preschooler! This is the age where at times, exploring and playing can be more interesting and important than eating.

Primary Sites for Screening...

CIHR Think Tank 2006

- **Screening fairs**
 - **Day cares**
 - **Kindergarten registration packages**
 - **Doctors' and primary health care offices**
 - **Outpatient clinics**
 - **Parent education programs**
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Evaluating Feasible Models 2007-2009

- Two feasible models for public health
 - Self-scoring and self-referral
 - Administrator assisted scoring and referral
 - Ontario sites
 - York Region-JK/SK registration packages
 - Thunder Bay-Fair Start screening program, JK/SK registration events
 - Sudbury- new “Best Start” hubs
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Evaluating Feasible Models 2008-2009

- Models for primary health care settings
 - Perth County Health Unit and Stratford Family Health Team, early years screening clinic
 - Hamilton FHT, immunization clinics
 - Pediatricians' offices, well child visits at HSC
 - Calgary Health Region primary health care
 - Northern Illinois day care settings
 - BC Ministry of Health in 2009
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Fit with OPHS: Requirements Related to Children

- **Foundational Standard:**

- 1, 2, 3, 4, 5, 6

- **Chronic Disease Prevention:**

- 1, 3, 7, 11

- **Child Health:**

- 1, 4, 5, 6, 7, 8, 9,

11

Child Health: BOH Outcomes

- **Health Promotion and Policy Development, Disease Prevention Requirements # 4 - 9, 11:**
 - Children at risk of poor health and developmental outcomes are supported and referred to services prior to school entry.
 - Priority populations are linked to child/family health information, programs and services.
 - Community partners and the public are aware of the importance of creating safe and supportive environments that promote healthy child development.
 - The public is aware of the factors associated with positive parenting.
 - Policy-makers have the information required to enable them to amend current policies that would have an impact on the promotion of healthy child development.

 - **Assessment & Surveillance Requirement # 1:**
 - The BOH is aware and uses epidemiology to influence the development of healthy public policy and its programs and services for the promotion of healthy child development.
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Steps Towards Implementation

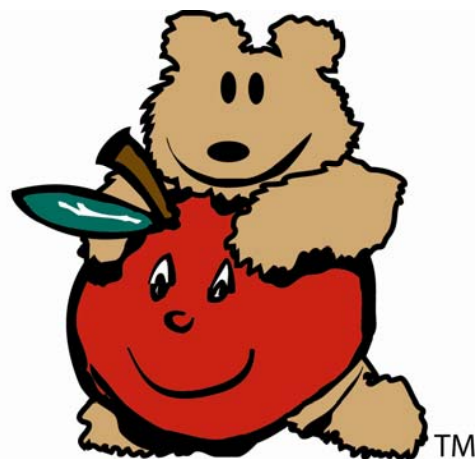
- Obtain the NutriSTEP Implementation Toolkit
 - Select a Site Coordinator
 - Train those involved in the process
 - Identify resources to meet needs
 - Develop referral maps for services
 - Monitor and evaluate process and outcomes
 - Use results to inform practice and service delivery
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Other Activities and Next Steps

- **Web site development and a web based program**
 - **Process evaluation in other settings e.g. primary health care: family health teams, health centres**
 - **NutriSTEP® validity and reliability with other age groups of children e.g. 18 months, young school age**
 - **Culturally sensitive NutriSTEP™**
 - **Population health assessment & surveillance**
 - **Long-term: Testing of efficacy and effectiveness of preschool nutrition screening**
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What next for you?

- Handouts: NutriSTEP® Background; Mapping to OPHS; and, Situational Assessment Template
 - Screening Tool and Implementation Toolkit
www.flintbox.ca/technology.asp?page=3586.
 - Nutrition Resource Centre (www.nutritionrc.ca)
 - Provincial Program Coordinator:
Lee Rysdale:
lrydale@opha.on.ca
 - Past project updates and documents:
www.sdhu.com
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NutriSTEPTM

**Nutrition Screening Tool
for Every Preschooler
Évaluation de l'alimentation
des enfants d'âge préscolaire**