

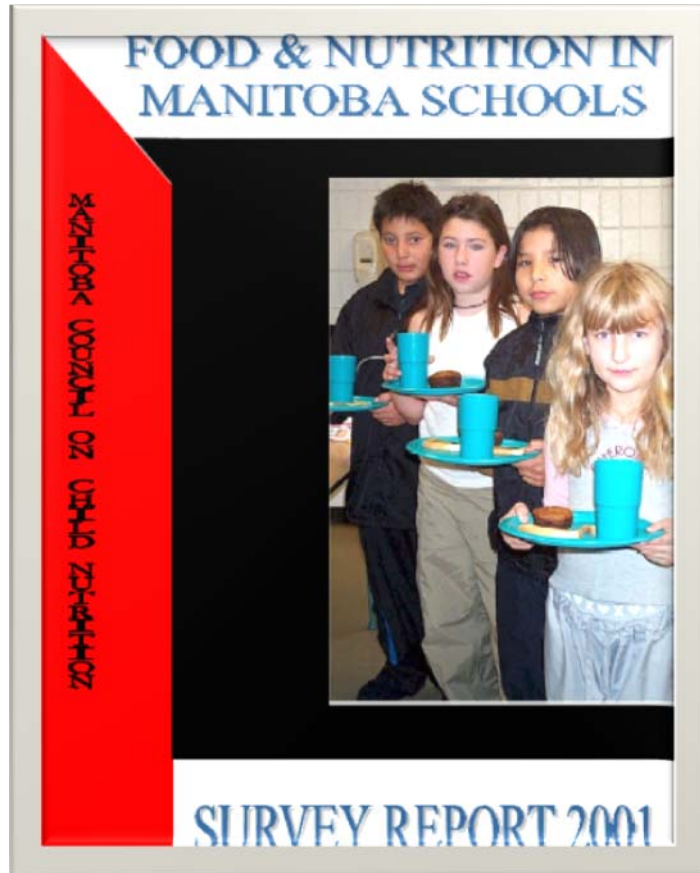
School nutrition

*How do we know if we are
making a difference?*



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MSc Candidate, University of Manitoba,*



Issues & Concerns

Obesity & chronic disease

Hungry children

Family economics

Food allergies

School facilities & capacity



A CALL TO ACTION

Manitoba
Healthy Living



A REPORT ON THE
Weight Status
of Manitoba Children
and Youth

Manitoba 

The key findings show that, the prevalence of childhood overweight/obesity in Manitoba (31 per cent) in 2004 was significantly higher than the national average (26 per cent) of the same year.



CHILDHOOD OBESITY IN MANITOBA

41,500 [9.4%] Manitoba households reported some degree of food insecurity;

11,700 of these were classified as severe.

Food insecurity is significantly associated with

- **Low household SES,**
- **Low income – especially social assistance**
- **Off-reserve aboriginal ethnicity,**
- **Female lone parent households**
- **Northern residency and core areas of Winnipeg,**
- **Overweight/obesity.**
- **Younger children in household**



Food insecurity in Manitoba 2004

- Healthy Eating helps children grow, develop and do well in school
- Healthy Eating helps prevent health problems such as obesity, diabetes and dental cavities
- A healthy diet helps children be more settled, attentive and ready to learn
- Poor nutrition is associated with poorer learning outcomes in some subjects



Nutrition, Health & Education

- Grade 4
Students use the food guide to evaluate their intake, write goals for healthy eating
- Grade 12
Our emphasis is on the importance at this age in being active regularly, eating healthy food and moderate intake of fat added in food processing

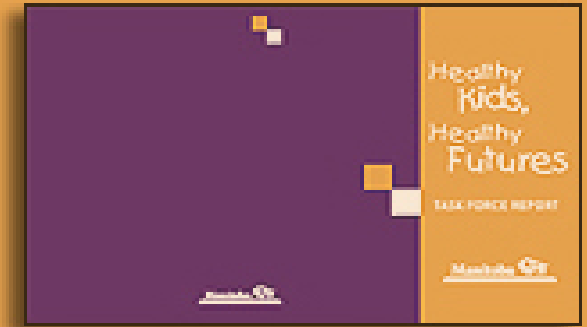


This is what we say....



This is what we do...

Healthy Kids, Healthy Futures TASK FORCE REPORT



- Reported to the Legislature in June 2005
- Adopted by government Fall 2005
- Key recommendation
 - **Increase access to nutritious foods in schools**



Trigger for change

“The provincial government require all schools to have a written school food and nutrition policy as part of their school plan.”



Key Policy Recommendation

⊕ Mandatory / legislation

⊕ Education/awareness

⊕ **Enabling**

✓



proactive without being over-directive



Recommended Policy Approach

- ⊕ Consultation
- ⊕ Guidelines for foods served at school
- ⊕ Model policies and tools
- ⊕ Healthy Vending demonstration
- ⊕ Survey / audit
- ⊕ Evaluation
- ⊕ Practical support



School nutrition policy implementation

MANITOBA SCHOOL NUTRITION HANDBOOK

Getting Started with Guidelines and Policies



Healthy Kids,
Healthy Futures

Healthy Child Manitoba
Putting children and families first

Manitoba

ba

QUICK GUIDE

are not intended to evaluate
its and communities.

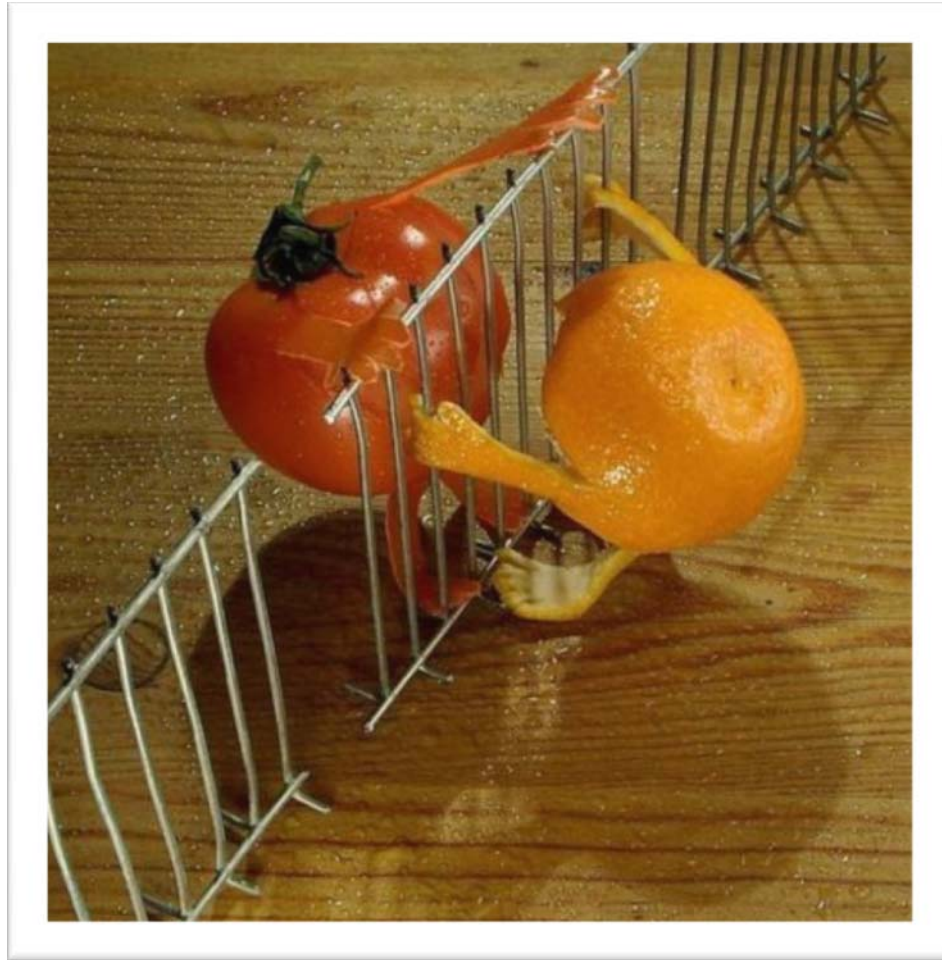
	MILK PRODUCTS	MEAT AND ALTERNATIVES
 nd nd dried il sauce stable bar	<ul style="list-style-type: none"> Choose lower-fat milk products more often. Milk, evaporated milk, skim milk powder, milk solids or modified milk solids should be listed as one of the first ingredients. <p>SERVE MOST</p> <ul style="list-style-type: none"> white, strawberry, vanilla, banana, chocolate milk hot chocolate made with milk long-life (UHT) milk instant breakfast powder fortified soy rice beverages yogurt yogurt tubes yogurt beverages milk/yogurt smoothies hard cheese cheese slices cottage cheese pudding made with milk custard milk based soup 	<ul style="list-style-type: none"> Choose leaner meat, poultry and fish, as well as dried peas, beans and lentils more often. <p>SERVE MOST</p> <ul style="list-style-type: none"> meat, poultry – baked, grilled, roasted, stir-fried fish, seafood – baked, grilled, canned in water deli meats – lean turkey, chicken, roast beef, pork eggs – boiled, scrambled, poached legumes – peas, beans, lentils tofu, vegetarian meat alternatives nuts, seeds, nut butter (peanut butter)  
	<p>COULD BE SERVED SOMETIMES (>4 TIMES PER MONTH)</p> <ul style="list-style-type: none"> whole milk reduced-fat egg nog fruit shakes milkshakes yogurt and yogurt drinks over a percent milk fat cheese and cracker packages high fat cheese reduced-fat processed cheese spread plain ice cream reduced-fat sour cream 	<p>COULD BE SERVED SOMETIMES (>4 TIMES PER MONTH)</p> <ul style="list-style-type: none"> ham canned turkey, ham, chicken fish canned in oil jerky pizza fried eggs 
<p>HL healthier</p>	<p>OTHER FOODS – COULD BE SERVED RARELY (>2 TIMES PER MONTH OR LESS)</p> <p>These choices offer little nutrition for growing minds and bodies. If small portions of these foods are offered pair them up with healthier foods when possible!</p> <ul style="list-style-type: none"> candy flavored malted milk milkshakes with coffee or tea hot chocolate made with water ice cream with candy sherbet cream sour cream whipping cream whipped topping cream cheese frozen ice cream treats non-dairy creamer coffee whitener 	<p>OTHER FOODS – COULD BE SERVED RARELY (>2 TIMES PER MONTH OR LESS)</p> <p>These choices offer little nutrition for growing minds and bodies. If small portions of these foods are offered pair them up with healthier foods when possible!</p> <ul style="list-style-type: none"> sausages smokies hot dogs bacon bacon bits pepperoni sticks pizza pops canned meats processed meats – bologna, salami, pepperoni, corned beef, pastrami chicken wings deep fried meat, fish, poultry pogo stick processed meat pie turkey roll gravy refried beans chocolate, yogurt covered nuts sesame snaps dessert tofu

Healthy Kids,
Healthy Futures

Manitoba



POLICY AND GUIDELINES



How do we know if we are making a difference?



INSIDE: Should Schools Ban Junk Food?

CONTEST!
MAKE YOUR
OWN COMIC

OWL

COMIC ISSUE

Artist
Tips and
Tricks

Draw
a Comic
Character

Picture undiversifiable Canadian addresses to: CIBC, Dept., P.O. Box 990 Stn. Desmarres, Montreal, QC H2H 2T1

\$4.50



March 2008
www.owlkids.com

From the publisher of **CHIP** and **chickaDEE**

Hot Topic

FOOD FIGHT

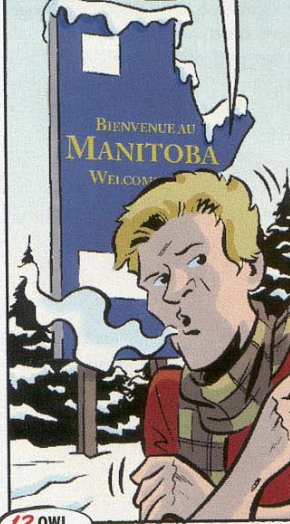
A REAL NEWS STORY IN COMIC FORM!

Should schools sell junk food?



PHEW! THAT WAS FAST. LET ME CATCH MY BREATH...

MANITOBA IS JUST ONE CANADIAN PROVINCE TRYING TO IMPROVE KIDS' EATING HABITS.



IN AN EFFORT TO CLEAN UP THEIR ACT, SCHOOLS ACROSS THE PROVINCE HAVE STARTED USING THE MANITOBA SCHOOL NUTRITION HANDBOOK. THE GOAL IS TO GET KIDS TO MAKE HEALTHIER FOOD CHOICES.



LOTS OF SCHOOLS HAVE STOPPED SELLING POP AND POTATO CHIPS IN VENDING MACHINES. THEY'RE ALSO NOT SERVING AS MUCH FRIED FOOD AND PIZZA IN THE CAFETERIA.



Evaluation and Reporting

1. Policy Evaluation Studies.

- Monitor components of policy implementation
- Assess level of policy implementation
- Understand implementation process including perceptions of success, challenges and impact.

2. Surveillance tracking of individual and environmental outcomes over time to assess nature and degree of change.

- Changes in school environments
- Activities undertaken
- Financial impact tracking

3. Student health and education outcomes

- Food and beverage consumption of individuals
- Knowledge / attitude changes
- Health indicators e.g. BMI
- Education indicators: academic achievement; student behaviour

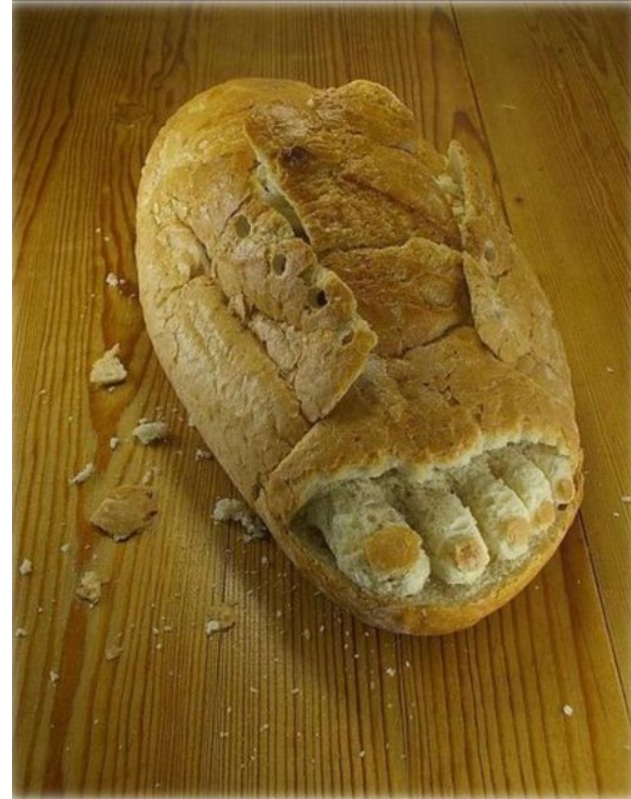


- **Simple annual reporting system beginning 2007-08 school year**
- Series of school environment surveys
- Policy implementation & impact research
 - **Case studies**
 - **Communications analysis**
 - **Content Analysis**



Manitoba Reporting & Evaluation Plan

- Schools required to report annually to Dept. Education, as part of school plan.
- High level – to demonstrate how schools are moving forward



School Annual Reports

Reporting on School Nutrition Policy Implementation from School Administrators. Fall 2007 – Fall 2008

Overall, the data suggests that compliance with the development of school nutrition policies has been high and that most schools are utilising the support materials provided.

Cautions:

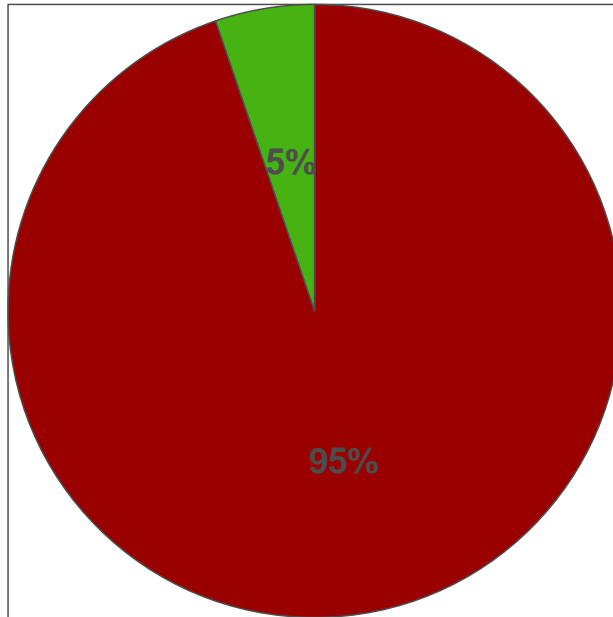
1. The number of schools responding each year was different
2. It is not known to what degree the two sample sets overlap .
i.e. the responses may be coming from a different set of schools in each year
3. The no-response rate is different in each year



Of the schools responding to this question

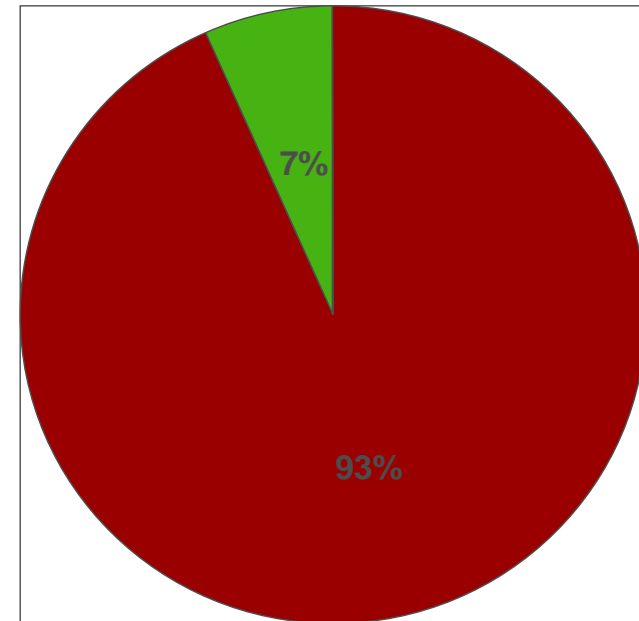


2007



N = 554

2008



N = 612

38 = schools not responding to this question = 87

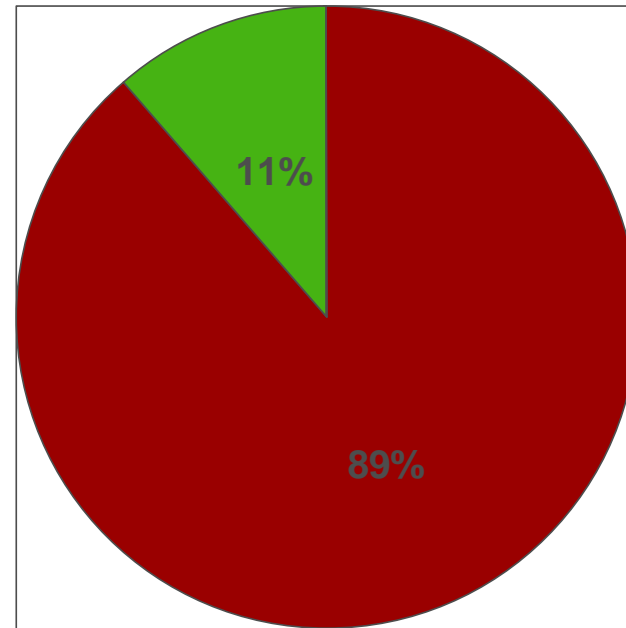
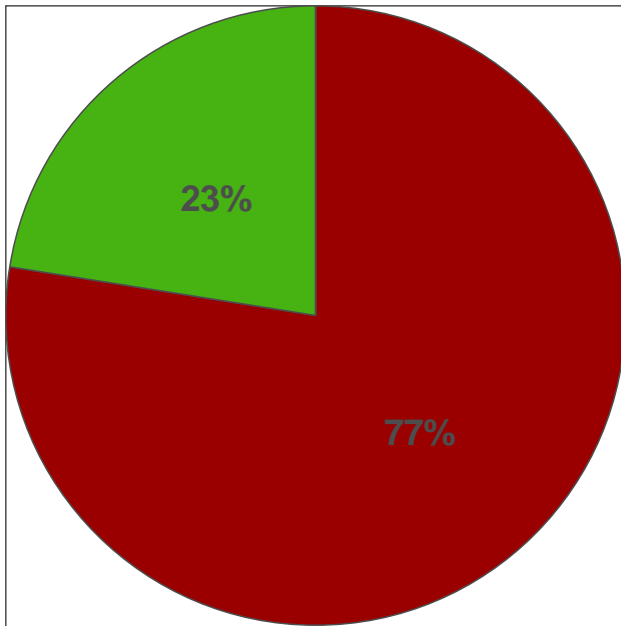


Have you utilized the Manitoba School Nutrition Handbook?

Of the schools responding to this question

2007

2008



N = 571

N = 531

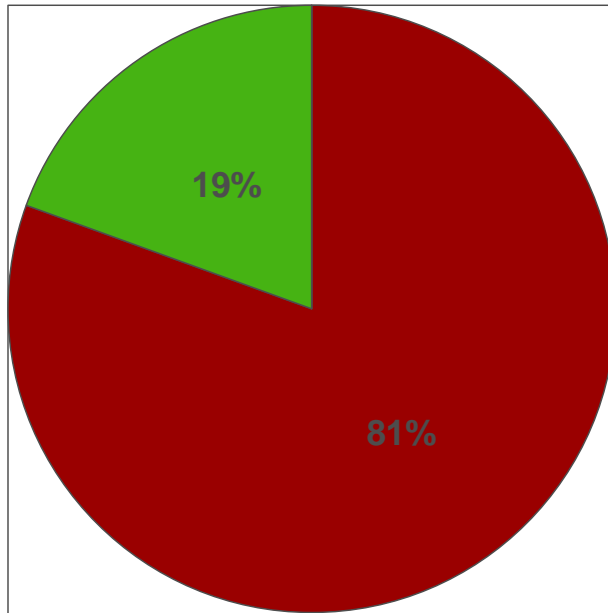
38 = schools not responding to this question = 87



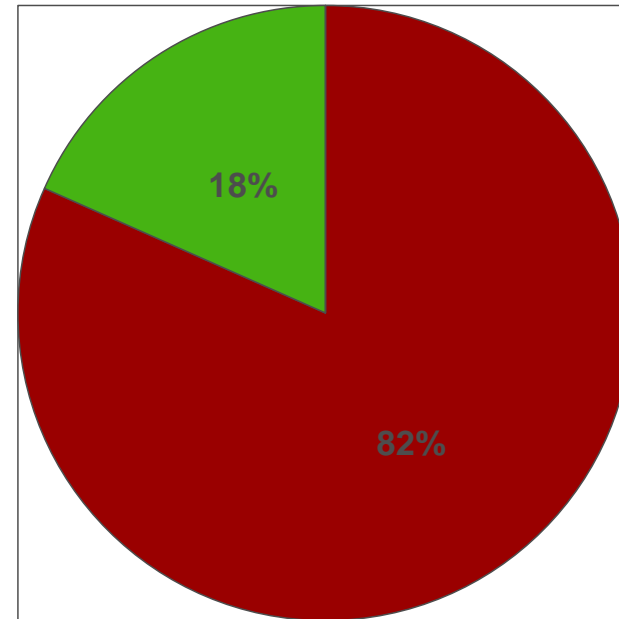
Have you adopted the Manitoba Guidelines for Foods Available at schools?

Of the schools responding to this question

2007



2008



N = 564

N = 531

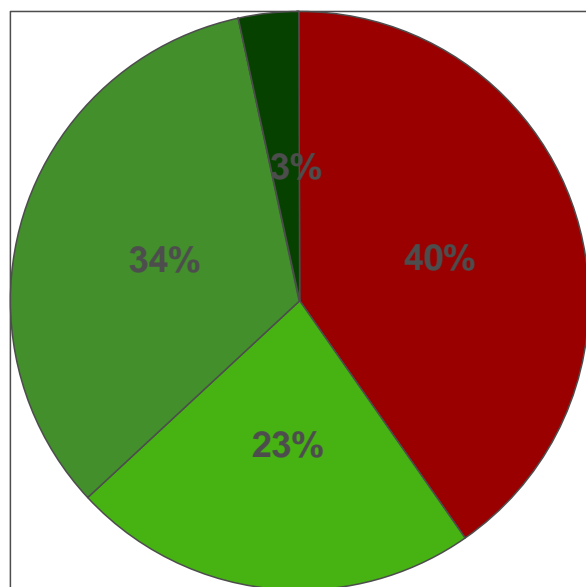
39 = schools not responding to this question = 87



Does your school have a representative committee or group that addresses school nutrition issues?

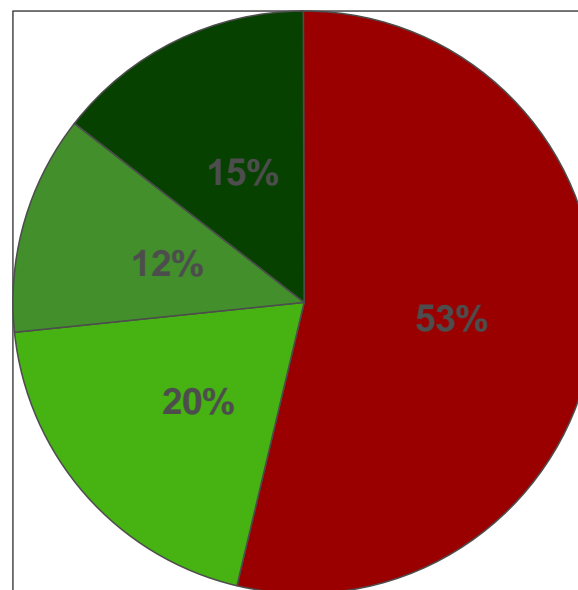
Of the schools responding to this question

2007



N = 571

2008



N = 612

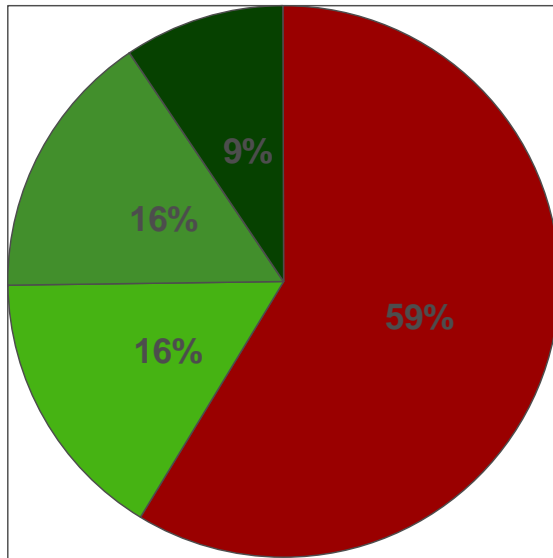
48 = schools not responding to this question = 73



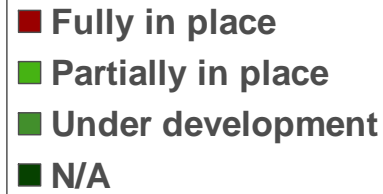
Do you have a written school nutrition policy at the school level?

Of the schools responding to this question

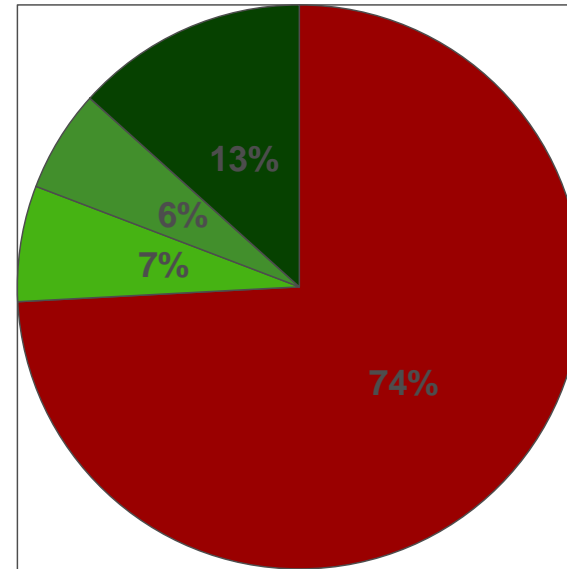
2007



N = 571



2008



N = 581

136 = schools not responding to this question = 81



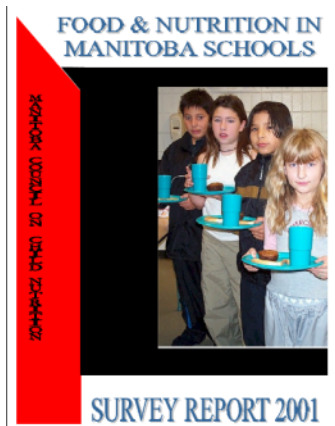
Do you have a written school nutrition policy at the Division level?

- Simple annual reporting system beginning 2007-08 school year
- **Series of school environment surveys**
- Policy implementation & impact research
 - **Case studies**
 - **Communications analysis**
 - **Content Analysis**

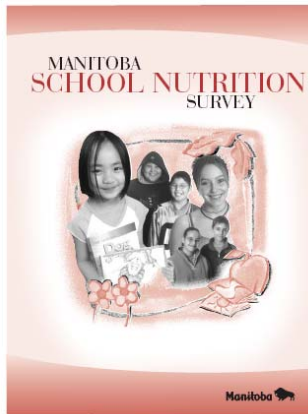


Manitoba Reporting & Evaluation Plan

- Food available in schools
- Food and nutrition programs
- Existing guidelines and policies



2001 historical data



2006 baseline



2009 repeat



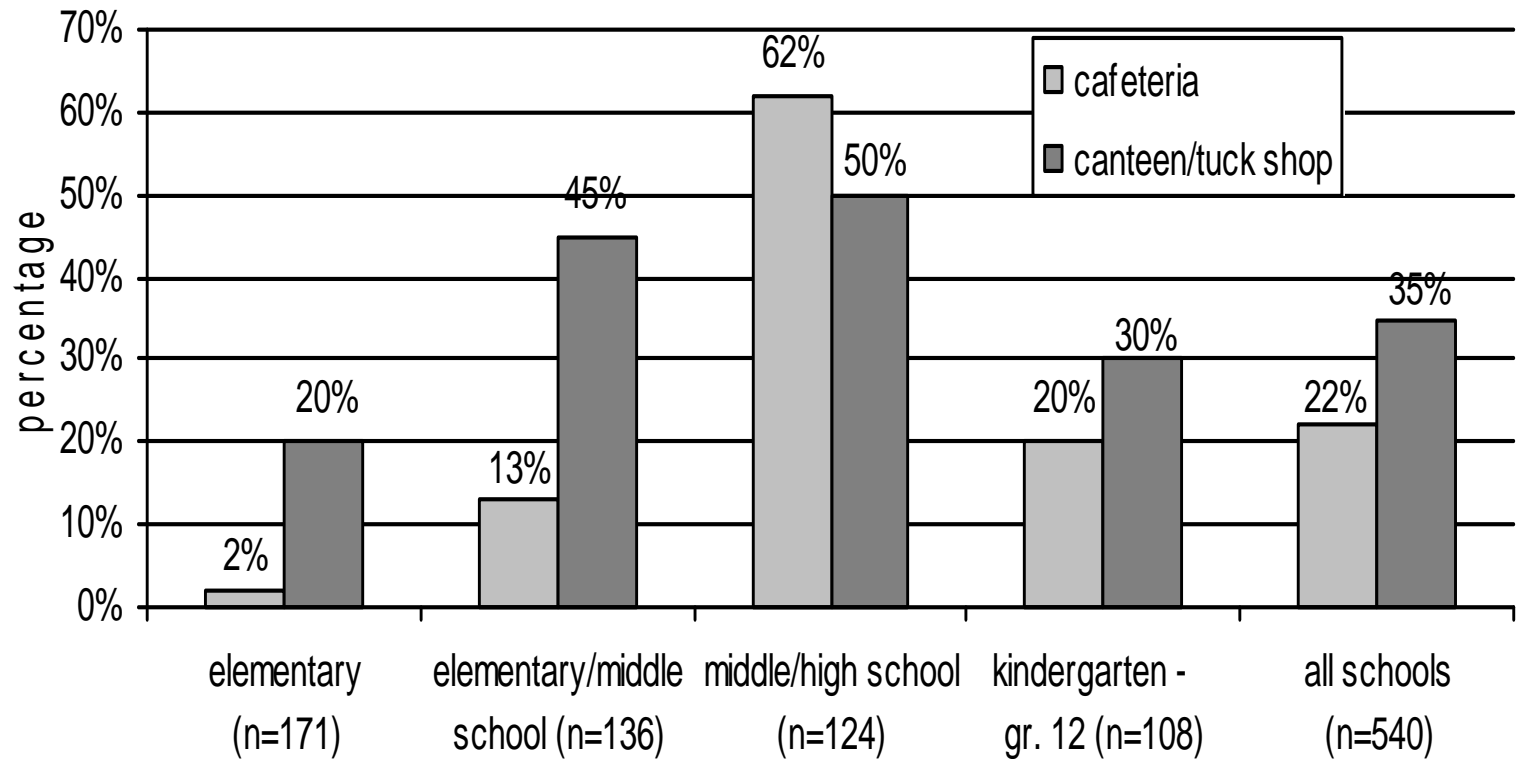
School Environment Surveys

	Number of Schools	(%)
• Elementary (k-6)	171	(32)
• Middle School (7-8)	31	(6)
• High School (9-12)	60	(11)
• Elementary/Middle (k-8)	136	(25)
• Middle/High (7-12)	33	(6)
• All Grades (k-12)	108	(20)
• Total	539	(79)



Manitoba School Nutrition Survey 2006
Response by school level

Figure 2: Percentage of schools that operate a cafeteria or a canteen/tuck shop



Manitoba School Nutrition Survey 2006 Cafeterias and Canteens

CAFETERIA

- Chocolate milk
- Sandwiches/wraps
- Cookies
- Pizza
- French fries
- Soft drinks
- Soup
- 100% fruit juice
- Water
- White milk

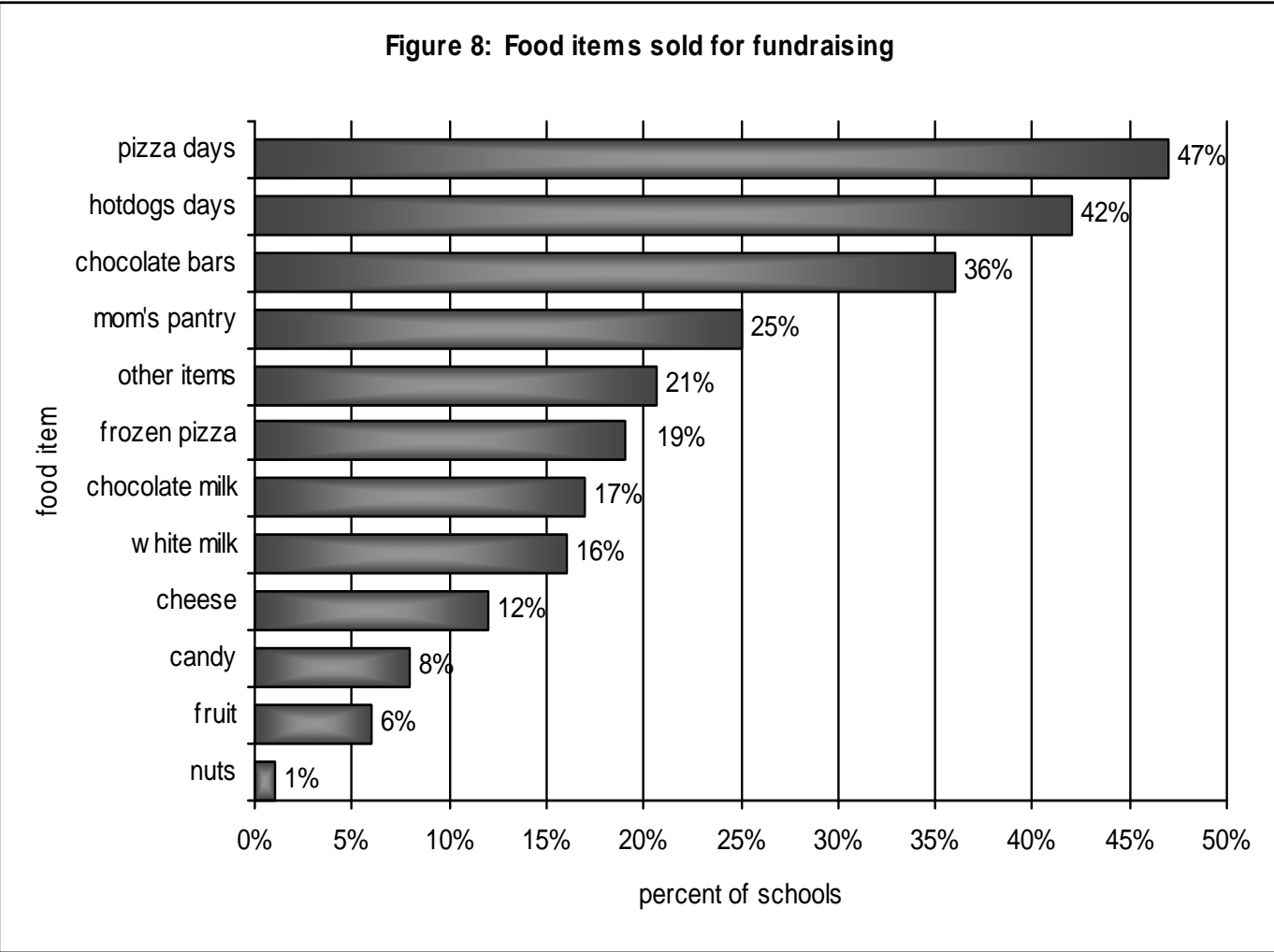


CANTEEN

- Chocolate milk
- Candy
- Pizza
- Chips
- Hotdogs
- Chocolate bars
- Soft drinks
- Ice cream
- 100 % fruit juice
- Water



Manitoba School Nutrition Survey 2006
Top ten foods sold in schools



Manitoba School Nutrition Survey 2006

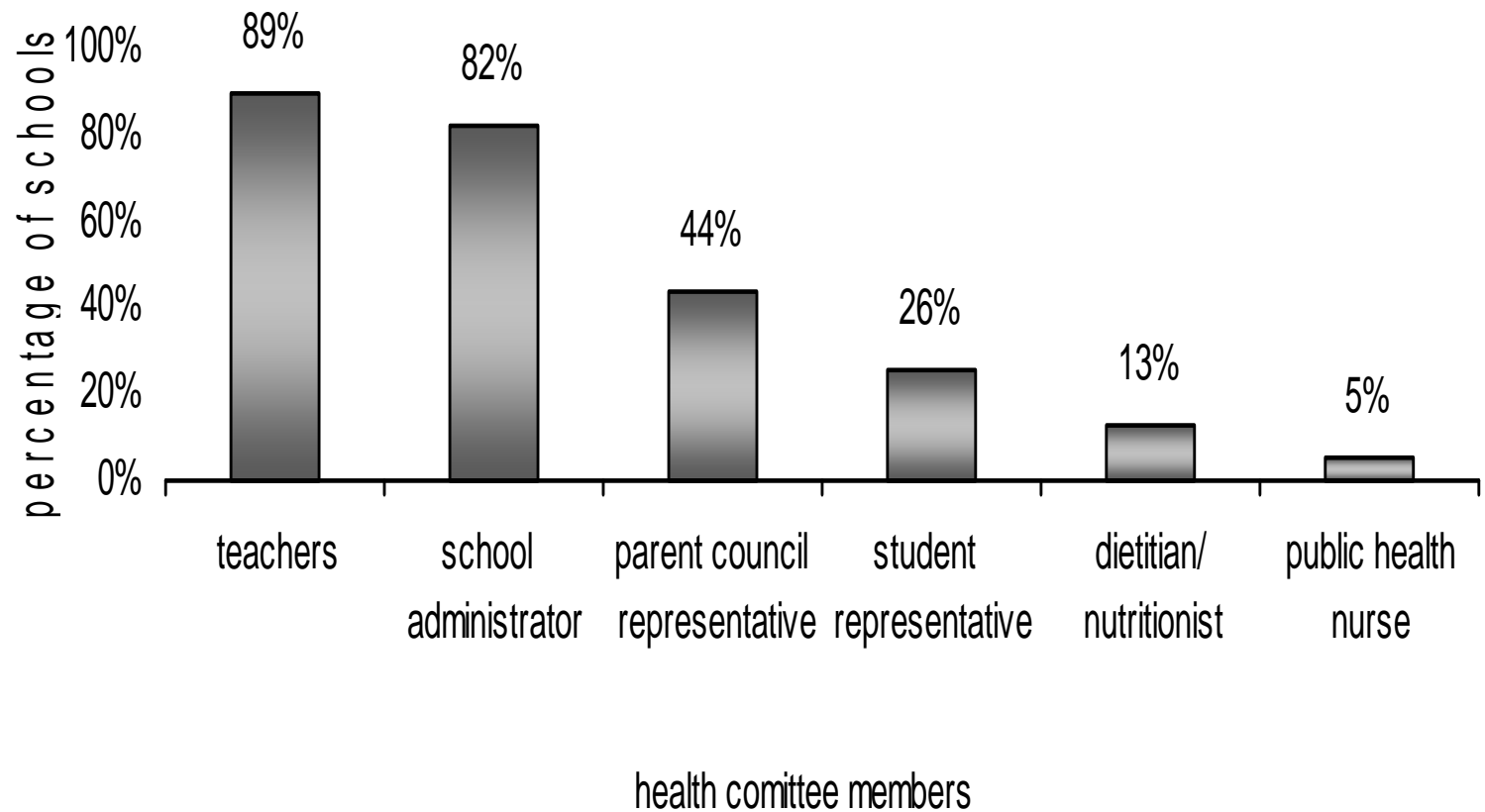
Fundraising

- 55% of schools had vending machines
- 650 beverage machines
- 88 snack machines
- Water 57%
- Iced tea; sports drinks; energy drinks 56%
- 100% fruit or vegetable juice 55%
- Soft drinks 38%
- Milk 1.8%



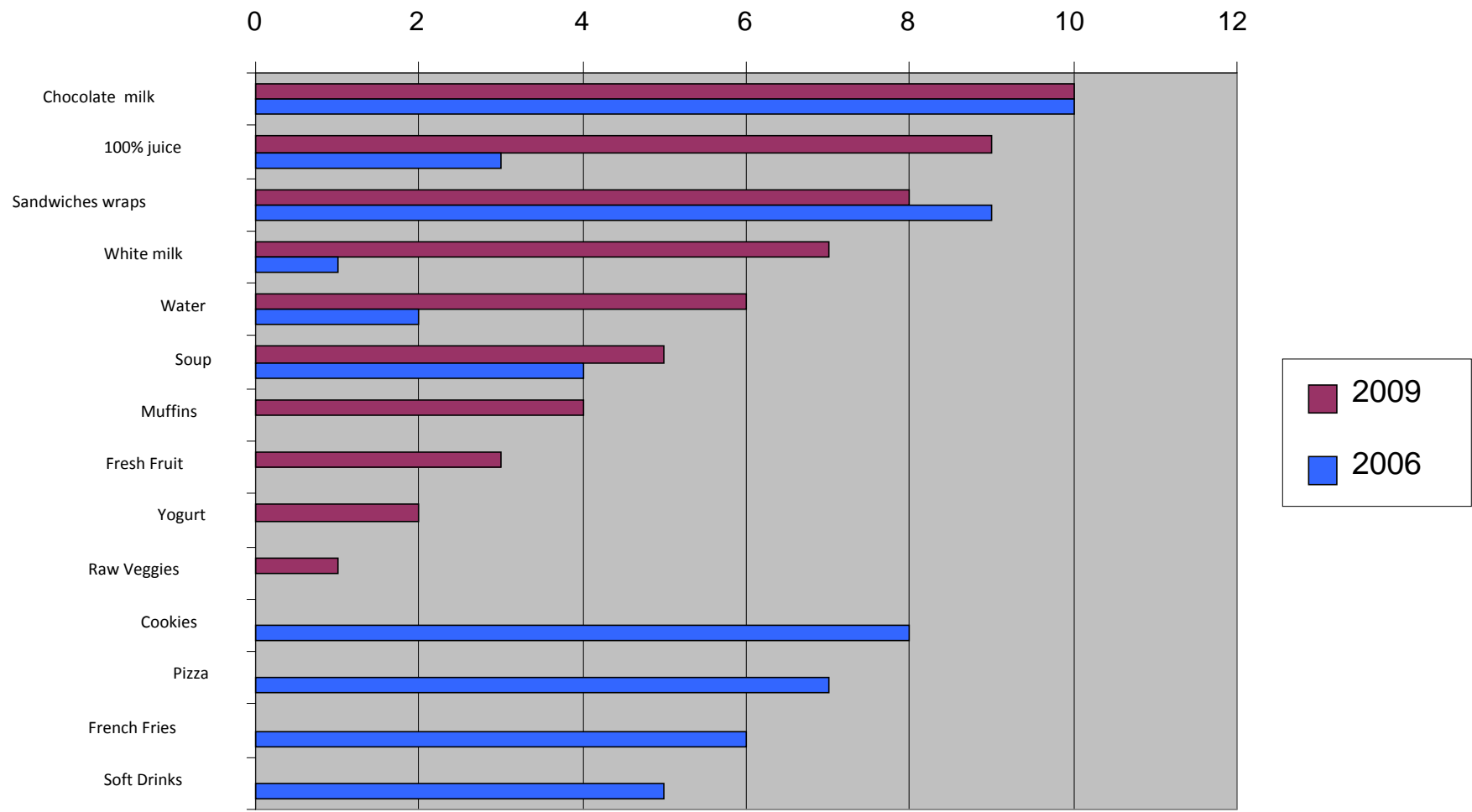
Manitoba School Nutrition Survey 2006
Vending

Figure 10: Health committee representation



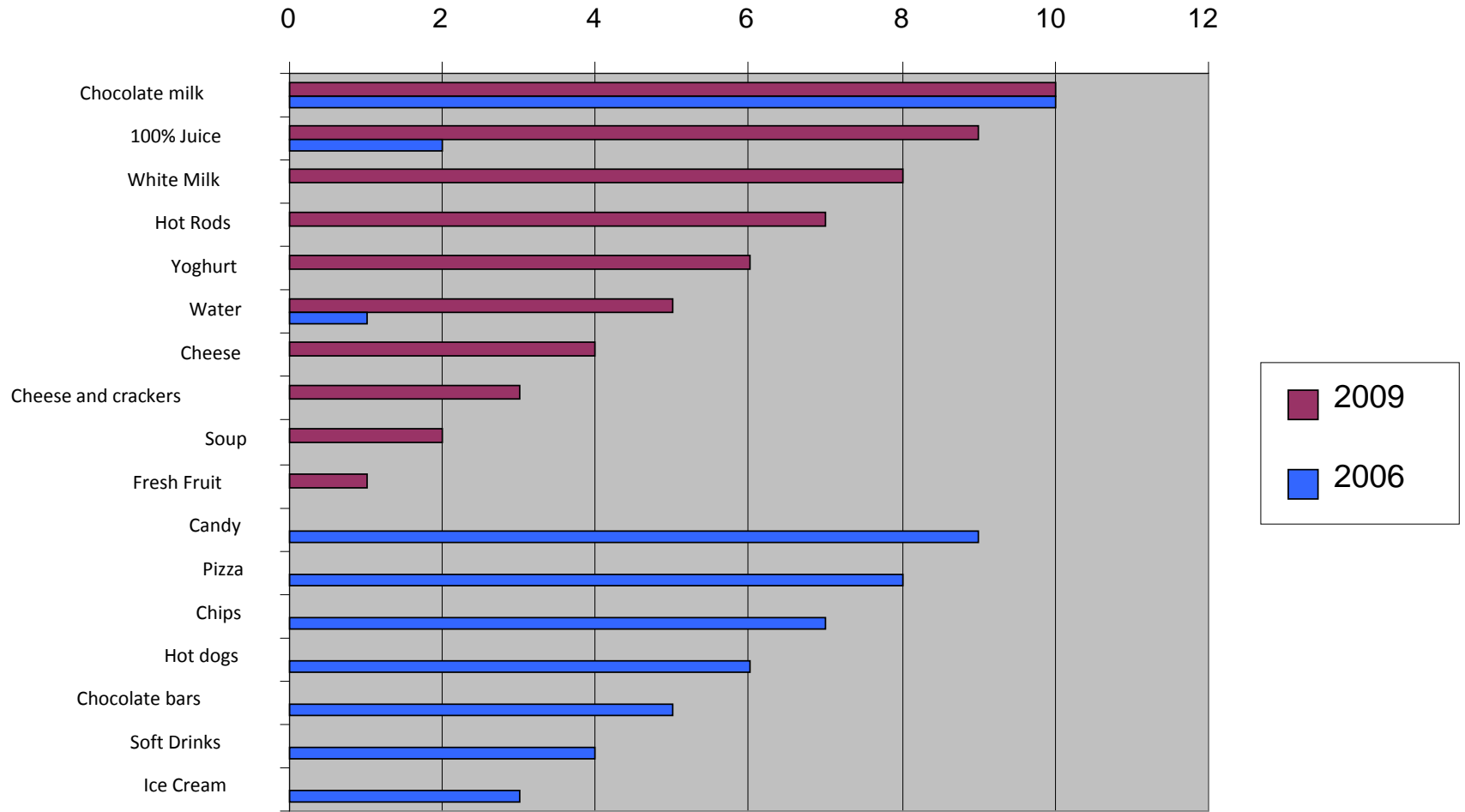
Manitoba School Nutrition Survey 2006 Health/Nutrition Committees

Figure 5 Top Ten Foods Sold in Cafeterias 2009 - 2006 Comparison



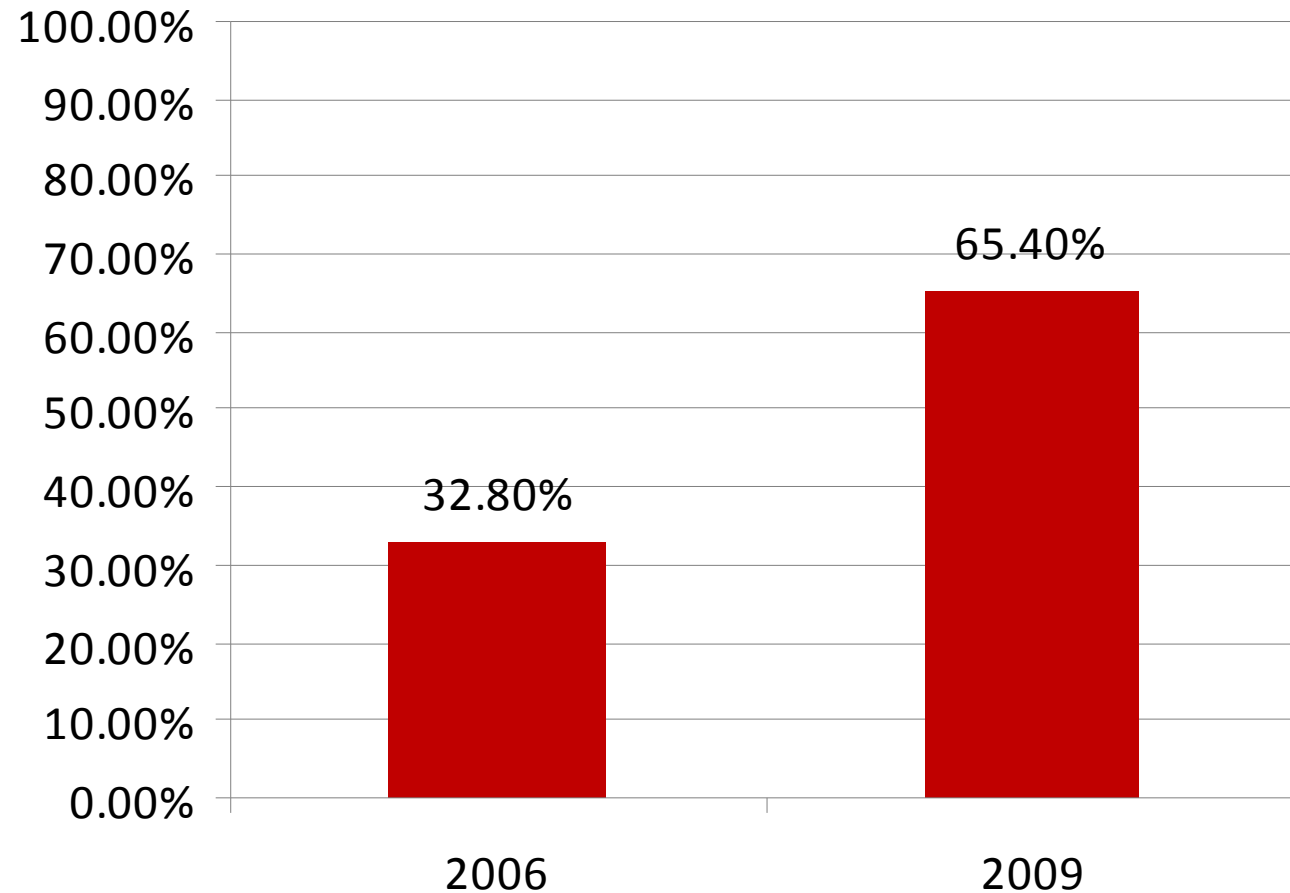
2006- 2009 comparison

Top Ten Foods Sold in Canteens 2009 - 2006 Comparison



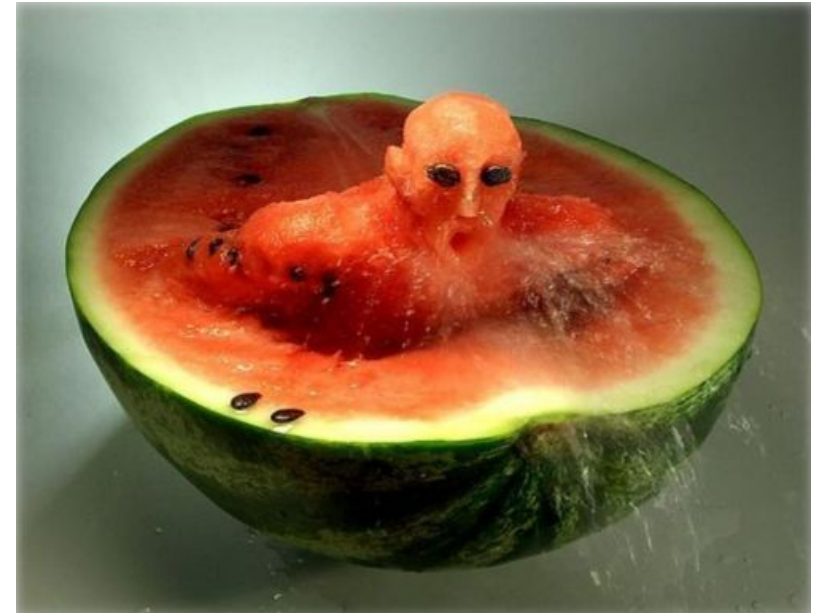
2006 – 2009 comparison

Health Advisory Committee in Place



2006 – 2009 comparison

- Copies of the 2006 report were provided to every school in Manitoba as well as to education stakeholders such as superintendents, trustees, parent councils...
- A two-page summary comparing key findings for each school division to the overall sample was developed for each division and provided confidentially to that division for it's own use.



From data to practice

- Simple annual reporting system beginning 2007-08 school year
- Series of school environment surveys
- Policy implementation & impact research
 - **Case studies**
 - Communications analysis
 - Content Analysis



Manitoba Reporting & Evaluation Plan

- Case Study in one school division to understand the policy implementation process – enabling factors and barriers...

... from the point of view of administrators, teachers, students and parents...



Qualitative evaluation

- **Embedded multiple case study within 1 school division in Winnipeg:**
 - 1 elementary school - “inner-city”
 - 1 elementary school- “suburban”
 - 1 secondary school

- **Within each school:**
 - i. Conduct interviews and/or focus groups with: Administrators, teachers, parents, volunteers, food service staff, nutrition program coordinators, students and janitors.
 - ii. Document observations of school environment.
 - iii. Map the school to assist with field notes.
 - iv. Collect supporting documentation: Divisional and school policies, newsletters, menus, bulletins, and websites.



- Allows for incorporation of multiple perspectives; Administrators, teachers, parents, custodians, food service staff, education assistants, and students.
- Semi-structured interviews allow the informant to provide detailed accounts of his or her own experiences.



Case Study Approach Semi- Structured Interviews & Focus Groups

- Provides insight into the way groups interact around food.
 - **Student eating habits.**
 - **Adults as role-models for students.**
 - **Group interactions at meal time .**
- Assist with interpretation of information provided by participants .
- Provides insight into the influence of the physical environment .



(Bonner & Tolhurst, 2002 ;Mulhall, 2003)



Case Study Approach Observations

- Findings from this study will inform future Manitoba School Nutrition Policy initiatives.
- A report of findings will be provided for Manitoba School Divisions to make schools aware of issues that may need to be addressed.



Future uses of Case study findings

- Simple annual reporting system beginning 2007-08 school year
- Series of school environment surveys
- Policy implementation & impact research
 - Case studies
 - **Communications analysis**
 - Content Analysis



Manitoba Reporting & Evaluation Plan

Objective: To assess if and how schools are communicating their nutrition policies to the school community and public.

Method: A systematic search of all school division [40] and individual school websites [688].

Data Collected:

- **If and where policies are located on websites.**
- **If and where policies are being communicated on websites.**



Communication Analysis

Results:

- Schools are not widely using websites to communicate existence and content of SNP.
- School Plans, school reports to the community, newsletters were often located on school websites, however SNPs were not broadly communicated in these documents.



Communication Analysis

Recommendations:

- **School divisions should be encouraged to require all school, as a minimum, provide links to divisional nutrition policy on website.**
- **The Manitoba government could assist schools in publicizing SNP by providing material and links for schools to include in newsletters and on websites.**



Communication Analysis

- Simple annual reporting system beginning 2007-08 school year
- Series of school environment surveys
- Policy implementation & impact research
 - Case studies
 - Communications analysis
 - **Content Analysis**



Manitoba Reporting & Evaluation Plan

Objective: To assess what are the most common and least common components of Divisional SNPs.

Method:

- **Summation and evaluation of discreet components of Divisional SNP including;** mission statement, purpose, scope, plan for communication, accountability, procedure/protocol.
 - Have they been incorporated?
 - Is the language weak or strong?
 - What is the level of detail?



Content Analysis

Implications:

- Inform Manitoba Government which components have been widely incorporated into SNP.
- Enable Manitoba Government to provide support and advocacy to help strengthen weak components of SNPs (e.g. Plan for Communication).



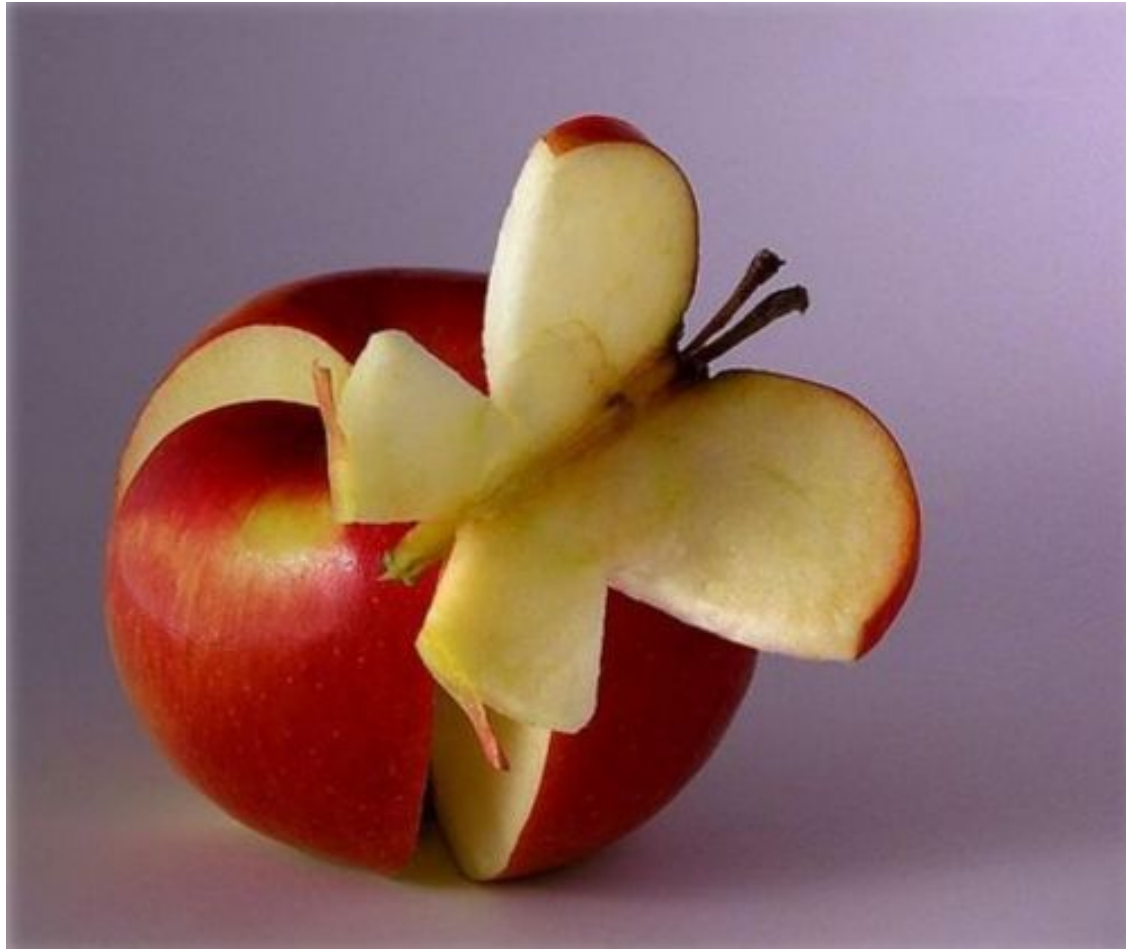
Content Analysis

Evaluation involves a systematic collection of data that allows:

- Judgement about the policy
- Reflection of what has happened
- Assessment of achievement of goals.
- Document changes due to policy
- Enhance support
- Allocate resources
- Provide accountability
- Inform decision-making
- Contribute to evidence base



Summary



<http://www.gov.mb.ca/healthyschools/foodinschools/index.html>