

### Consumer Knowledge, Attitudes and Behaviours towards Sodium-Reduced Cheese

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Mary R. L'Abbe, PhD Earle W. McHenry Professor, and Chair, Department of Nutritional Sciences Faculty of Medicine, University of Toronto FitzGerald Building, 150 College Street, Rm 315 Toronto, ON, Canada M5S 3E2 Tel: (416) 978-7235; Fax: (416) 971-2366 Cell: (416) 605-1902 E-mail: mary.labbe@utoronto.ca Web: http://www.utoronto.ca/nutrisci/faculty/Labbe



### Methods

#### INSTRUMENT

The survey was completed on-line from **June 5**, **2012 to July 3**, **2012** using Leger Marketing's online panel, *LegerWeb*, with a sample of 3,437 Canadians.

For the purpose of this report, the term parent refers to both the parent of a child or children, as well as those that are caregivers for a child or children.

A probability sample of the same size would yield a margin of error of  $\pm$  1.67%, 19 times out of 20.

#### **ONLINE PANEL**

Leger Marketing's online panel has approximately 400,000 members nationally – with between 10,000 and 20,000 new members added each month, and has a retention rate of 90%.

Panel members are randomly selected to receive email invitations to the individual surveys.

Leger ensures the protection of privacy via the usage of unique URLs and respondent IDs in combination with survey IDs.

#### QUALITY CONTROL

Stringent quality assurance measures allow Leger to achieve the high-quality standards set by the company. As a result, our methods of data collection and storage outperform the norms set by WAPOR (The World Association for Public Opinion Research). These measures are applied at every stage of the project: from data collection to processing, through to analysis. Leger has also obtained "Gold Seal" certification from the Marketing Research and Intelligence Association (MRIA), the leading professional marketing association in Canada. This is obtained following an audit of the company's quality control and business procedures by Deloitte. Leger was certified in 2006 and was re-certified again this year. And Leger meets or exceeds the standards for marketing research created by ESOMAR, the international association of public opinion and market research professionals. Its code of ethical practice is reviewed frequently to ensure that representatives respect respondent privacy, regardless of the techniques or technologies used to conduct the research.







# STRATEGIC CONCLUSIONS



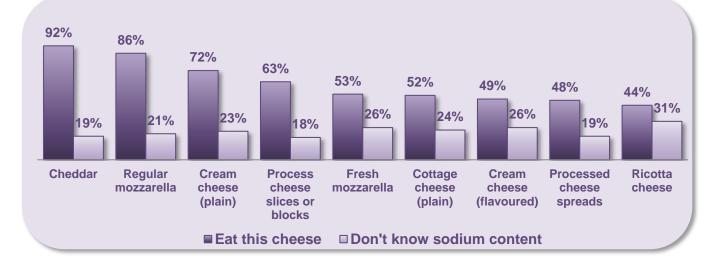
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### **Strategic Conclusions**

Ninety-five percent of Canadians eat cheese.

In 2011, Canada produced over 400,000 tonnes of cheese and one thing is clear: Canadians love cheese. Because of this affinity for cheese, it is not surprising that nearly all Canadians eat cheese, with four out of five adults and children doing so at least once a week. However, Canadians in general appear to have a lack of knowledge when it comes to the sodium content of the cheese they eat. Depending on the type of cheese, anywhere from one-fifth to almost one-third of Canadians do not know how much sodium a normal serving contains, especially among older Canadians and men.

Along with how much sodium Canadians think is in cheese, this study also looked at how parents monitor and control their children's diet with respect to sodium, and the effect low sodium labels have on Canadians judgement of sodium in cheese products.



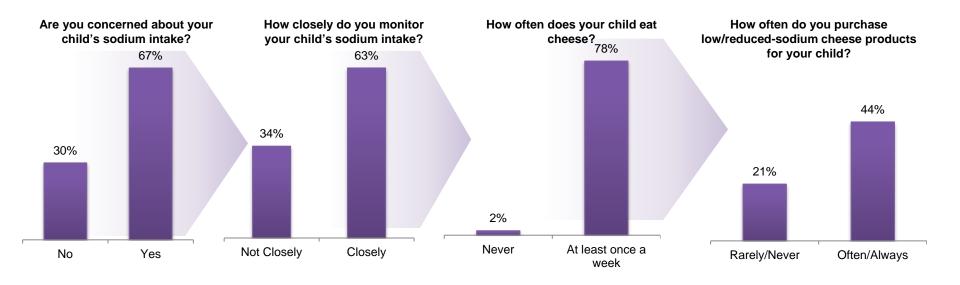
#### Cheese consumption and sodium content



### **Strategic Conclusions**

Most parents have worries over their child's diet, with two-inthree saying they are concerned over their child's sodium intake and give many reasons why. Although over sixty percent of parents say they monitor their child's sodium intake, and the majority of children eat cheese at least once per week, only two-in-five often or always purchase low sodium or reducedsodium cheese.

Top reasons for purchasing reduced-sodium cheese	Percentage
Too much sodium is bad for your health and can lead to health problems later on	76%
Unhealthy eating habits now will lead to unhealthy eating habits as an adult	71%
Too much sodium can lead my child to develop a 'taste' for high sodium	44%



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### **Strategic Conclusions**

By far, the number one reason Canadians purchase reducedsodium cheese is because they try to limit the amount of sodium in their diet. Older Canadians tend to purchase reduced-sodium cheese for health reasons, with seventeen percent stating that they do so because of someone in their household that has a health condition.

While older Canadians are purchasing reduced cheese due to health reasons, younger Canadians are more likely to purchase low sodium cheese out of preference. Seventeen percent of younger Canadians purchase reduced-sodium cheese because they prefer the taste.

I do not purchase reduced-sodium cheese because	Percentage
The cheese I usually buy does not come in a sodium-reduced version	27%
I do not like the taste	24%
There is no need because I do not limit my sodium intake	18%
I just prefer cheese with regular amount of sodium over lower sodium cheese	18%

Not being able find a reduced-sodium version of the cheese
they buy is the number one reason Canadians do not
purchase reduced-sodium cheese. This is less of a problem
for younger Canadians, however they are also more likely to

I purchase reduced-sodium cheese because...

Someone in my household has a health condition that requires a low

I try to limit the amount of sodium in my diet

I prefer the taste of lower sodium cheese

I have recipes that call for lower sodium cheese

sodium diet

Almost a third of Quebec residents avoid reduced-sodium cheese because of the taste, a reason that is also more prevalent among men than women.

live in a household where the person who buys the groceries

does not buy reduced-sodium cheese.

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Percentage

71%

13%

12%

5%



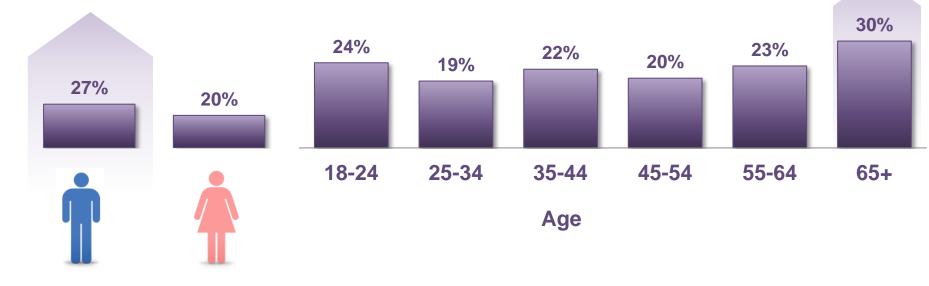
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### **Strategic Conclusions**

Men and older Canadians are the most likely to not know sodium content. The greatest gaps in understanding sodium content in cheese products occur in men and in older Canadians. For all nine cheese types asked about, men are more likely than women in each case to not know the sodium content of the product.

Canadians over the age of 65 also had more difficulty in determining the sodium content of most cheese products. On average, seniors are more likely than younger Canadians to not know the sodium content of the type of cheese they are asked about.

#### Percent that do not know sodium content of nine common cheese products - Average of all nine cheese.





### **Strategic Conclusions**

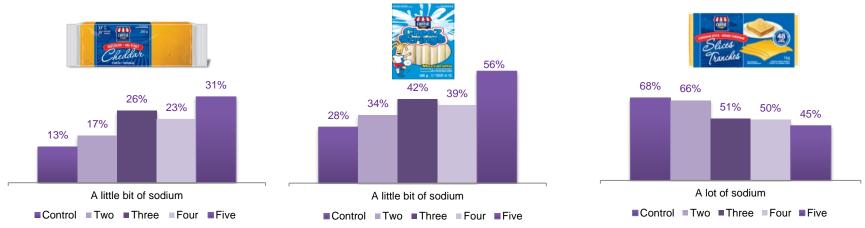
The respondents to this survey were randomly divided into five equal sized treatment groups, including one control group, all of which were shown a cheese block product, a cheese strings product, and a package of cheese slices. The control group was shown products with a typical amount of sodium and groups two to five were shown products with lower than normal sodium levels. Additionally, group three was shown a label noting low sodium, group four's products had a "low-sodium and same taste and texture" label, and the fifth group was shown the same products as group four, but were given a one page advisory on what classifies as low or high sodium content.

#### Low sodium labels

Treatment groups that were shown cheese products with a low sodium advert on the packaging were more inclined to rate the product as having less sodium, compared to the same product shown without the low sodium label. This caused an increase in the percentage of respondents who labelled cheddar cheese blocks and cheese strings as having a little bit of sodium and a decrease in respondents who classified cheese slices as containing lot of sodium. No differences were noted amongst the treatment groups regarding taste or likelihood to purchase.

#### Sodium advisory

Respondents in treatment five were the most likely to give lower sodium ratings for each product after reading the health advisory. This could indicate that Canadians in general have a lack of knowledge on what constitutes a low, moderate, or high serving of sodium.



DETAILED ANALYSIS OF RESULTS

# **Children and Sodium**



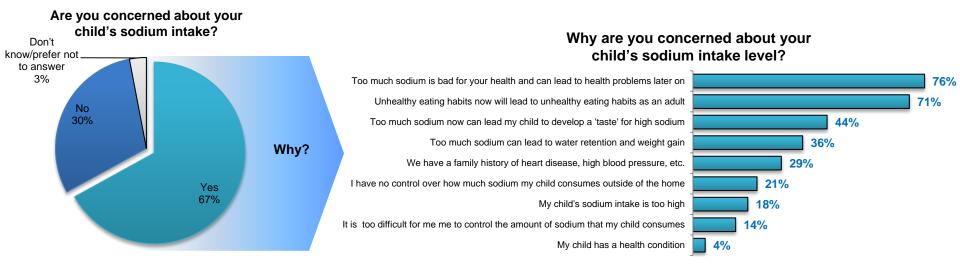
### **Children and Sodium**

#### **CONCERN ABOUT SODIUM INTAKE**

While a majority of Canadians are concerned with their children's sodium intake, those in Quebec are more likely to be concerned than their counterparts in the Prairies (74% vs. 54).

The top reasons parents gave for being concerned over their child's sodium intake are that too much sodium is bad for your health, and that unhealthy eating habits now will lead to unhealthy eating habits as an adult.

Those in Atlantic Canada are the most likely to believe that too much sodium is bad for your health and can lead to health problems later on (92% vs. 74% of parents in Ontario and Quebec).



Q2. Are you concerned about the sodium intake of the child/children that you care for? Base: Those that are a parent or caregiver for a child or children under 18 years of age (n=1018)/ Q3. Please tell us why are you concerned about the sodium intake of the child/children you care for? Base: Those that are concerned about their child/children's sodium intake (n=681)

Two-thirds of Canadian parents are concerned with their child/children's sodium intake level. 12



### **Children and Sodium**

#### **MONITORING CHILDREN'S SODIUM**

Three-in-five parents closely monitor their child's sodium intake.Overall, nearly two-in-three Canadian (63% However just over one-in-ten parents very c (11%) do not monitor their child's intake clos Less than half of Canadian parents often or a Parents in Quebec are more likely to often o parents in Alberta (48% vs. 34% respectively)				very closely monitor the closely at all. The or always buy low/r	ne sodium in their reduced-sodium p	child's diet, v roducts for th	while a similar pro eir child/children.	oportion	
		you monitor you lium intake?	r			How often do yo sodium proc	•		
Closely (Net)				63%	Often/Always (Net)				44%
- Very closely	13%				Always	10%			
Somewhat closely			50%		Often	-		34%	
Not Closely (Net)		34%			Never/Rarely (Net)		21%		
Not very closely		23%			Rarely		13%		
Not at all closely	11%				Never	8%			

Q4. How closely do you monitor the amount of sodium in your child/children's diet? Base: Those that are a parent or caregiver for a child or children under 18 years of age (n=1018)/Q3. How often, if at all, do you deliberately purchase low or reduced-sodium products for your child/children? Base: Those that are a parent or caregiver for a child or children under 18 years of age (n=1018)

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# Cheese Consumption: Adults & Children





Cheese is a consistent part of the average Canadian's diet, with almost all Canadians (94%) saying they do not avoid dairy products, and four-in-five of those eating cheese at least once per week.

Adults in Quebec consume cheese more frequently when compared to the rest of Canada (89% vs. 79% at least once per week).

As income increases, there is also a steady upward trend in the frequency of cheese consumption, with 85% of Canadians with incomes over \$80K eating cheese at least once a week, compared to 76% of those with incomes under \$40K.

Do you completely avoid eating dairy products? More than 1 time per day 4% Don't At least 5-7 times per week know/prefer 20% once per not to week: answer No 1%\_ 81% 3-4 times per week 30% 94% How often? 1-2 times per week Yes 27% 5% 2-3 times per month 13% 1 time per month or less 5%

Q8. Do you completely avoid eating dairy products (for example, due to lactose intolerance, vegan diet, etc.? Base: Total (n=3437) Q9. How often do you usually eat cheese? Base: Those that do not avoid eating dairy products (n=3273)

#### How often do you usually eat cheese?

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Almost one-third of Canadians are consuming cheese three to four times per week.



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### **Cheese Consumption: Adults**

Products cooked or baked with cheese, cheddar, and regular mozzarella are the most popular cheeses.

#### WHAT TYPES OF CHEESE DO YOU EAT?

Whether it is a generational shift, or if cheese preferences change as Canadians age is unclear, but there are several differences between younger and older Canadians. Those in the age group of 18-24 eat more natural snack cheeses (61% vs. 46% of those 25 and over) but less cheddar and gouda (86% and 52% respectively). Canadians under 34 eat more fresh dairy desserts (39%) and cheese fondue (32%).

More than half of Canadians over the age of 55 have a greater taste for bloomy rind cheese (55%) and blue cheese (42%) than younger Canadians.

Type of cheese	Percentage
Products cooked or baked with cheese	92%
Cheddar – All types	92%
Regular mozzarella	86%
Hard grated cheese	77%
Cream cheese (plain)	72%
Swiss cheese	67%
Gouda, Edam, Provolone, Havarti, or Monterey Jack	66%
Mixed cheese	65%
Feta cheese	64%
Process cheese slices or blocks	63%
Fresh mozzarella	53%
Cottage cheese (plain)	52%
Bloomy rind cheese	49%

Type of cheese	Percentage
Cream cheese (flavoured)	49%
Processed cheese spreads	48%
Natural snack cheeses	48%
Ricotta cheese	44%
Goat or sheep cheese	42%
Blue cheese	33%
Fresh cheese	31%
Fresh cheese dairy desserts	27%
Cheese fondue mixes or raclette	24%
Cottage cheese (flavoured)	22%
Kefir cheese	9%
Other cheeses	27%



### **Cheese Consumption: Adults**

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Cheese fondue mixes and kefir cheese are the least popular among adults in Canada.

#### WHAT TYPES OF CHEESE DO YOU EAT? - CONTINUED

Adults in Quebec have unique tastes for cheese as well, leading the country in consumption of bloomy rind cheese (61%), fresh mozzarella (59%), cheese fondue (40%), and fresh cheese dairy desserts (35%). While Quebec has a special taste for certain cheeses, only 46% eat plain cottage cheese and less than two-infive (38%) consume flavoured cream cheese regularly.

Men and women also differ on their preferences for cheese. More women than men eat the following cheeses: bloomy rind, gouda, hard grated cheese, plain cottage cheese, cream cheese (plain and flavoured), feta, ricotta, and goat cheese.

Type of cheese	Percentage
Products cooked or baked with cheese	92%
Cheddar – All types	92%
Regular mozzarella	86%
Hard grated cheese	77%
Cream cheese (plain)	72%
Swiss cheese	67%
Gouda, Edam, Provolone, Havarti, or Monterey Jack	66%
Mixed cheese	65%
Feta cheese	64%
Process cheese slices or blocks	63%
Fresh mozzarella	53%
Cottage cheese (plain)	52%
Bloomy rind cheese	49%

Type of cheese	Percentage
Cream cheese (flavoured)	49%
Processed cheese spreads	48%
Natural snack cheeses	48%
Ricotta cheese	44%
Goat or sheep cheese	42%
Blue cheese	33%
Fresh cheese	31%
Fresh cheese dairy desserts	27%
Cheese fondue mixes or raclette	24%
Cottage cheese (flavoured)	22%
Kefir cheese	9%
Other cheeses	27%



### **Cheese Consumption: Adults**

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#### 2-3 times/month 1-2 times/week 3-4 times/week 5-7 times/week More than 1 time/day Type of cheese 1 time/month or less Never Products cooked or baked with cheese 25% 38% 22% 5% 2% <1% 6% Cheddar - All types 17% 24% 26% 16% 9% 1% 8% Regular mozzarella 36% 29% 14% 5% 2% 1% 13% 29% 29% 13% 1% <1% 22% Hard grated cheese 4% Swiss cheese 40% 18% 7% 2% 1% <1% 31% Gouda, Edam, Provolone, Havarti, or 38% 18% 7% 2% 1% <1% 32% Monterey Jack Mixed cheese 31% 20% 10% 3% 1% <1% 34% Feta cheese 37% 18% 7% 2% 1% <1% 35% Processed cheese slices or blocks 25% 18% 12% 5% 2% <1% 36% Cream cheese (plain) 41% 20% 8% 3% 1% <1% 27% Cream cheese (flavoured) 4% 1% 50% 30% 12% 2% 1% Fresh mozzarella 33% 12% 5% 2% <1% <1% 45% Bloomy rind cheese 32% 4% <1% <1% 50% 10% 1% Processed cheese spreads 26% 12% 6% 3% 1% <1% 50% Natural snack cheeses 29% 11% 5% 2% 1% <1% 51% Cottage cheese (plain) 29% 12% 6% 2% 1% <1% 47% Cottage cheese (flavoured) 14% 4% 2% 1% <1% <1% 77% Ricotta cheese 36% 6% 2% 1% <1% <1% 54%

DETAILED LIST OF HOW OFTEN PEOPLE EAT CHEESE



**Cheese Consumption: Adults** 

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#### DETAILED LIST OF HOW OFTEN PEOPLE EAT CHEESE

Type of cheese	1 time/month or less	2-3 times/month	1-2 times/week	3-4 times/week	5-7 times/week	More than 1 time/day	Never
Goat or sheep cheese	27%	10%	4%	1%	1%	<1%	57%
Blue cheese	23%	6%	2%	1%	<1%	<1%	66%
Fresh cheese	21%	5%	3%	1%	1%	<1%	68%
Fresh cheese dairy desserts	15%	6%	3%	2%	1%	<1%	71%
Cheese fondue mixes or raclette	21%	2%	1%	1%	<1%	<1%	74%
Kefir cheese	6%	2%	1%	1%	<1%	<1%	89%
Other cheeses	16%	5%	3%	2%	1%	<1%	71%



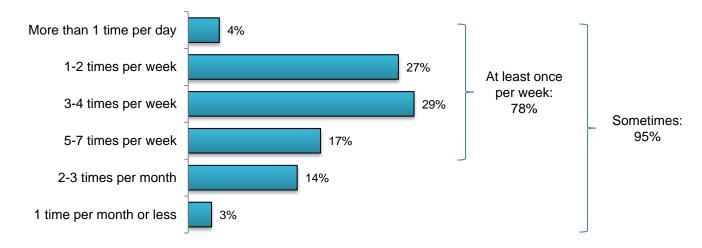
### **Cheese Consumption: Children**

#### HOW OFTEN DO CHILDREN EAT CHEESE

Nearly four-in-five children eat	Cheese is a popular component of children's diets, with nearly all children eating cheese at least sometimes (95%).
cheese on a weekly basis.	Children's eating habits differ across the country. Children in Alberta tend to eat less cheese than those in Atlantic Canada (66% vs. 84% respectively).

Women have a greater tendency to say that their child/children eat cheese more often. One fifth of women say their child/children eat cheese 5-7 times per week (21% vs. 14% of men).





#### How often do your children eat cheese?

Q6. How often do your children usually eat cheese of any kind? Base: Those that are a parent or caregiver for a child or children under 18 years of age (n=914)

### **Cheese Consumption: Children**



The most popular types of cheese for children are products cooked or baked with cheese, cheddar, and regular mozzarella.

#### WHAT TYPES OF CHEESE DO CHILDREN EAT

Relative to the rest of Canada, Quebec children have very unique tastes for cheese. Bloomy rind cheese is much more popular in Quebec, with 40% eating that type of cheese (compared to 22% in the rest of Canada) and although nearly half of Canadian children (49%) eat fresh dairy desserts, 68% of children in Quebec eat this type of dessert. On the other hand, only about a quarter (27%) eat plain cottage cheese, compared to 47% of children in Alberta and 39% in Ontario.

Children in Ontario (71%) have a particular preference for plain cream cheese, eating more than their counterparts in Quebec and Atlantic Canada (52%).

Which cheeses does your child eat at least once per month?
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Type of cheese	Percentage	Type of cheese	Percentage
Products cooked or baked with cheese	93%	Fresh mozzarella	43%
Cheddar – All types	92%	Feta cheese	43%
Regular mozzarella	81%	Cream cheese (flavoured)	40%
Natural snack cheeses	71%	Cottage cheese (plain)	37%
Processed cheese slices/blocks	68%	Ricotta cheese	33%
Hard grated cheese	68%	Bloomy rind cheese	26%
Mixed cheese	66%	Goat or sheep cheese	22%
Cream cheese (plain)	63%	Fresh cheese	22%
Fresh cheese dairy desserts	53%	Cottage cheese (flavoured)	17%
Processed cheese spreads	52%	Cheese fondue mixes or raclette	15%
Gouda, Edam, Provolone, Havarti, or	48%	Blue cheese	14%
Monterey Jack		Kefir cheese	8%
Swiss cheese	45%	Other cheeses	20%

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### **Cheese Consumption: Children**

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#### DETAILED LIST OF HOW OFTEN CHILDREN EAT CHEESE

Type of cheese	1 time/month or less	2-3 times/month	1-2 times/week	3-4 times/week	5-7 times/week	More than 1 time/day	Never
Products cooked or baked with cheese	18%	37%	30%	6%	2%	1%	5%
Cheddar – All types	13%	23%	27%	17% 8%		3%	7%
Regular mozzarella	27%	29%	17%	5%	2%	1%	17%
Natural snack cheeses	26%	21%	15%	6% 3%		1%	27%
Processed cheese slices/blocks	20%	21%	17%	5%	3%	1%	30%
Hard grated cheese	25%	25%	13%	4%	1%	1%	30%
Mixed cheese	26%	22%	11%	5%	2%	1%	31%
Fresh cheese dairy desserts	18%	15%	10%	5%	4%	1%	45%
Processed cheese spreads	22%	16%	9%	9% 4%		1%	46%
Cream cheese (plain)	29%	18%	10%	3%	2%	1%	35%
Cream cheese (flavoured)	22%	11%	5%	2%	1%	1%	58%
Gouda, Edam, Provolone, Havarti, or Monterey Jack	26%	13%	5%	2%	1%	<1%	50%
Swiss cheese	27%	10%	5%	3%	1%	1%	52%
Fresh mozzarella	21%	13%	5%	2%	<1%	<1%	55%
Feta cheese	25%	12%	4%	1%	2%	<1%	54%
Ricotta cheese	23%	7%	2%	1%	<1%	<1%	65%
Cottage cheese (plain)	18%	9%	6%	2% 1%		1%	61%
Cottage cheese (flavoured)	8%	5%	2%	1%	1%	<1%	81%



#### DETAILED LIST OF HOW OFTEN CHILDREN EAT CHEESE

Type of cheese	1 time/month or less	2-3 times/month	3 times/month 1-2 times/week		5-7 times/week	More than 1 time/day	Never	
Bloomy rind cheese	17%	6%	2%	1%	1%	1%	71%	
Goat or sheep cheese	12%	6%	3%	1%	1%	1%	75%	
Fresh cheese	12%	5%	3%	1%	1%	<1%	75%	
Cheese fondue mixes or raclette	10%	3%	1%	<1%	1%	<1%	83%	
Blue cheese	8%	3%	1%	1%	1%	<1%	83%	
Kefir cheese	3%	3%	1%	<1%	1%	1%	89%	
Other cheeses	10%	4%	3%	2%	1%	<1%	76%	

**Cheese Consumption: Children** 

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## **Knowledge of Sodium in Cheese**



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### **Knowledge of Sodium in Cheese**

Processed cheese spreads and slices are believed by most to have a lot of sodium. One third of Canadians believe that plain cottage cheese has only a little bit of sodium, followed by fresh mozzarella and plain cream cheese. Anywhere from twenty to thirty percent of Canadians do no know how much sodium is in a variety of cheeses.

In almost every category of cheese listed, Canadians over the age of 65 are more likely than younger Canadians to say that they do not know the sodium content of any of the products mentioned.

Men are also more likely than women to not know the sodium content of cheese for every type listed.

Type of cheese	A lot	A moderate amount	A little bit	Don't know/prefer not to answer
Processed cheese spreads	62%	13%	5%	19%
Processed cheese slices	59%	17%	5%	18%
Cheddar cheese	25%	46%	10%	19%
Cream cheese (flavoured)	29%	34%	12%	26%
Regular mozzarella	17%	50%	13%	21%
Ricotta cheese	14%	36%	19%	31%
Cream cheese (plain)	13%	44%	20%	23%
Fresh mozzarella	13%	40%	21%	26%
Cottage cheese (plain)	10%	34%	33%	24%

#### How much sodium do you believe is in each type of cheese?

**Correct responses** 

Q16. Not all cheese has the same amount of sodium. To the best of your knowledge, please tell us if you think a normal serving of the following cheese products would have 'a little bit,' 'a moderate amount,' or 'a lot' of sodium compared to other cheeses. Base: Total (n=3437)

# Purchasing Sodium-Reduced Cheese



### **Purchasing Sodium-Reduced Cheese**

Few Canadians always or usually look for a lowsodium version of cheddar cheese.

#### OFTEN/ALWAYS PURCHASES OF SODIUM-REDUCED CHEESE

The oldest Canadians surveyed are the most likely to regularly purchase lower sodium cheese products. Onequarter (26%) of Canadians over 65 purchase a low or sodium-reduced version of cheddar while 17% look for lower sodium versions of plain cottage cheese.

Quebecker's appear to be some of the healthiest eaters in terms of purchasing reduced-sodium cheese products, leading in regular purchases of low sodium versions of processed cheese slices (16%) and spreads (13%), Swiss cheese (12%), fresh mozzarella (11%), fresh cheese desserts and bloomy rind cheese (8%).

Type of cheese	Percentage of always/usually	Type of cheese	Percentage of always/usually		
Cheddar – All types	19%	Fresh mozzarella	7%		
Regular mozzarella	14%	Natural snack cheeses	7%		
Products cooked or baked with cheese	14%	Cream cheese (flavoured)	7%		
Processed cheese slices or blocks	12%	Cottage cheese (flavoured)	5%		
Cream cheese (plain)	12%	Bloomy rind cheese	5%		
Cottage cheese (plain)	10%	Ricotta cheese	5%		
Mixed cheese	9%	Goat or sheep cheese	5%		
Hard grated cheese	9%	Fresh cheese dairy desserts	4%		
Processed cheese spreads	9%	Blue cheese	4%		
Feta cheese	8%	Fresh cheese	3%		
Swiss cheese	8%	Kefir cheese	3%		
Gouda, Edam, Provolone, Havarti or	7%	Cheese fondue mixes or raclette	3%		
Monterey Jack		Other cheeses	3%		

Q11SUM. How often, if at all, do you deliberately purchase or look for the following low or sodium-reduced cheese products? Base: Those who do not completely avoid eating cheese (n=3273)



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### **Purchasing Sodium-Reduced Cheese**

DETAILED LIST OF HOW OFTEN PEOPLE PURCHASE SODIUM REDUCED CHEESE

Type of cheese	Always	Usually	Sometimes	Rarely	Never		Type of cheese	Always	Usually	Sometimes	Rarely	Never
Cheddar – All types	6%	13%	17%	15%	47%	Lī	Gouda, Edam,	2%	5%	12%	15%	63%
Regular mozzarella	4%	10%	18%	16%	50%		Provolone, Havarti or Monterey Jack					
Products cooked or baked with cheese	4%	11%	21%	15%	47%		Fresh mozzarella	2%	5%	10%	14%	67%
Processed cheese slices	4%	8%	13%	13%	59%	Natural snack chees	Natural snack cheeses	2%	5%	10%	14%	66%
or blocks							Bloomy rind cheese	1%	4%	8%	12%	72%
Mixed cheese	3%	6%	14%	15%	59%		Ricotta cheese	2%	3%	8%	14%	71%
Hard grated cheese	3%	7%	13%	17%	58%		Goat or sheep cheese	2%	3%	8%	12%	73%
Processed cheese spreads	3%	6%	11%	13%	64%		Fresh cheese dairy desserts	2%	3%	8%	11%	74%
Cream cheese (plain)	4%	7%	15%	16%	56%		Blue cheese	2%	2%	6%	11%	76%
Cream cheese (flavoured)	2%	4%	11%	13%	66%		Fresh cheese	1%	2%	6%	10%	77%
Feta cheese	2%	6%	12%	15%	62%							
Cottage cheese (plain)	4%	7%	12%	13%	63%		Kefir cheese	1%	2%	3%	6%	85%
- · ·							Cheese fondue mixes or raclette	1%	2%	5%	11%	78%
Cottage cheese (flavoured)	2%	3%	6%	10%	76%		Other cheeses	1%	2%	5%	10%	80%
Swiss cheese	2%	6%	13%	16%	61%	1			~	- /-		

Q11A-Z. How often, if at all, do you deliberately purchase or look for the following low or sodium-reduced cheese products? Base: Those who do not completely avoid eating cheese (n=3273)



29

### **Purchasing Sodium-Reduced Cheese**

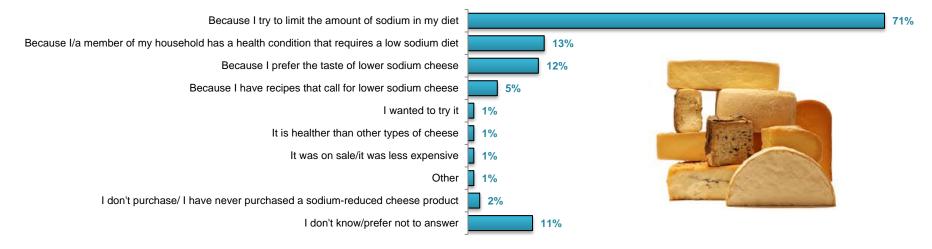
#### WHY SODIUM-REDUCED CHEESE?

Seven-in-ten Canadians purchase sodiumreduced cheese because they try to limit the amount of sodium in their diet. Young and old Canadians purchase reduced-sodium cheese for different reasons. Seventeen percent of Canadians above the age of 45 have more concerns about health related issues, stating that the reason they purchase sodium-reduced cheese is because they or a member of their household has a health condition that requires a low sodium diet. Meanwhile, Canadians under 34 actually prefer the taste of sodium-reduced cheese (17% vs. 9% of Canadians 55+).

While there is no significant difference between high school and college graduates, university graduates are the most likely to buy sodium-reduced products because they try to limit the amount of sodium in their diet (76% vs. 68% of those without a university education).

One-in-five younger Canadians (21%) are the most likely to not know why they purchased sodium-reduced cheese, either doing so subconsciously or because they do not do their own shopping.

#### Why did you purchase the sodium-reduced product?



Q12. Why did you purchase the sodium-reduced cheese product? Base: Those who had purchased at least one sodium-reduced cheese product (n=2184)



### **Purchasing Sodium-Reduced Cheese**

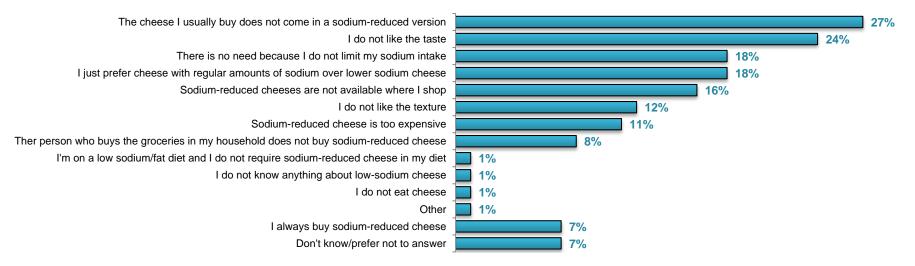
30

One quarter of Canadians say the cheese they buy does not come in a sodium-reduced version or that they do not like the taste of sodium-reduced cheese. WHY NOT SODIUM-REDUCED CHEESE? Not being able find the type of cheese they want in a lower sodium version is the main reason why Canadians

do not purchase lower sodium cheese, and the problem becomes more noticeable with age. Only one-in-five Canadians under 24 say they are unable to find the cheese they want in a lower sodium version, but they are also the most likely to live in a household where the person who buys the groceries does not buy reduced-sodium cheese. Canadians over the age of 45 are more likely to just prefer cheese with regular amounts of sodium (20% vs. 13% of 18 to 24 year olds).

Residents in Quebec are the most likely to indicate taste as a reason for not buying sodium-reduced cheese, with 30% saying they do not like the taste compared to one-in-five people in Alberta (18%) and BC (20%).

When comparing men and women, more women say that the cheese they buy does not come in a sodium-reduced version (30%) while men simply do not limit their sodium intake (20%).



#### Why do you not purchase sodium-reduced cheese?

Q13. What are some of the reasons that you would not purchase a sodium-reduced cheese product? Base: Those that do not avoid eating dairy products (n=3273)



31

### **Purchasing Sodium-Reduced Cheese**

#### **AVOIDING HIGHER SODIUM CHEESE VARIETIES**

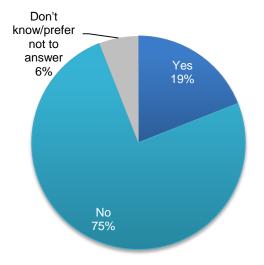
Instead of purchasing lower sodium versions of cheese, residents of Ontario and Quebec are more likely to substitute the cheese they eat for a different type which has less sodium (22% vs. 14% of residents in Alberta, the Prairies, and Atlantic Canada).

Canadians do not substitute higher sodium cheese for a lower sodium variety.

Three-quarters of



### Do you ever substitute lower sodium cheese in place of a higher sodium variety?



Q14. Do you ever substitute a lower sodium variety of cheese in place of a higher sodium variety? Base: Those that do not avoid eating dairy products (n=3273)



### **Purchasing Sodium-Reduced Cheese**

#### **FUTURE INTENTIONS**

The sodium-reduced cheeses Canadians would be most interested in purchasing are products cooked or baked with cheese as well as all types of cheddar.

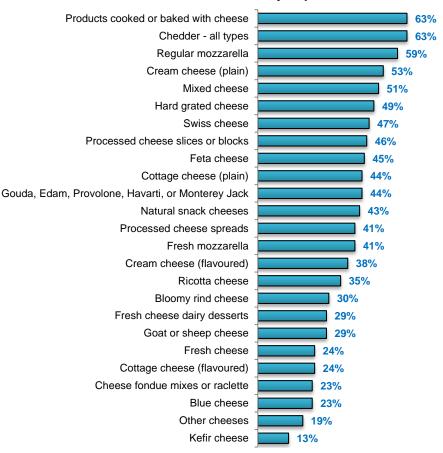
Quebec has a greater affinity for many different types of cheese than other parts of Canada, but especially for bloomy rind (38%), fresh cheese dairy desserts (37%), and cheese fondue (36%).

Women appear to possess a wider palate, saying they are more willing than men to purchase almost half of the listed cheeses.

Households with children also purchase a wider variety of cheeses, saying they are more likely to buy most types of cheese listed.

### Which sodium-reduced products would you purchase?

32



Q15SUM. Whether or not you have ever purchased a sodium-reduced cheese, would you be interested in buying the following sodium-reduced cheeses in the future? Base: Those that do not avoid eating dairy products (n=3273)

# **Mock Package Experiment**



### **Treatment Groups**

Respondents were placed in five separate groups with varying nutrition information on the Nutrition Facts table and on the front of package. The respondents to this survey were randomly divided into five equal sized treatment groups, including one control group, all of which were shown a cheese block product, a cheese strings product, and a package of cheese slices. Each group was asked the same three questions regarding each product:

1) How much would you like this product?

n 2) How likely would you be to purchase this product?

3) How much sodium would you say one serving of this product has?

Treatment – **Control:** This group was shown all 3 products with no additional labeling on the front of pack and a Nutrition Facts table with a higher level of sodium. The products in this group contained a typical amount of sodium for each product.

Treatment – **Two:** This group was shown the products with no additional labeling on the front of pack and a Nutrition Facts table with a lower level of sodium (25% reduction) than the Control treatment. The products in the group contained a lower than normal sodium level for each product.



Treatment – **Three:** This group was shown the products with a "Reduced Sodium" label on the front of pack and the same Nutrition Facts table as treatment Two. The products in the group contained a lower than normal sodium level for each product.



Treatment – **Four:** This group was shown the products with a "Reduced Sodium and Same Great Taste and Texture" label and the same Nutrition Facts table as treatments Two and Three. The products in the group contained a lower than normal sodium level for each product.



Treatment – **Five:** Prior to being shown the products, this group was shown a advisory page discussing what constitutes a low and high serving of sodium per serving portion. This group was shown the products with a "Reduced Sodium and Same Great Taste and Texture" label and the same Nutrition Facts table as treatments Two, Three, and Four. The products in the group contained a lower than normal sodium level for each product.

34



### **Treatment Groups**

Products had different sodium levels depending on their treatment group.

Based on Health Canada's definitions for a what constitutes a little sodium vs. a lot of sodium per portion, the following sodium levels for each product in each treatment are as follows (as shown in a Nutrition Facts table):

Treatment – **Control:** The cheddar block product had a moderate sodium level; the cheese string product had a borderline moderate/low level of sodium; the cheese slices had a borderline moderate/high level of sodium.

Treatment – **Two:** The cheddar block product had a borderline moderate/low sodium level; the cheese string product had a low level of sodium; the cheese slices had moderate level of sodium.



Treatment – **Three:** The cheddar block product had a borderline moderate/low sodium level; the cheese string product had a low level of sodium; the cheese slices had moderate level of sodium.



Treatment – **Four:** The cheddar block product had a borderline moderate/low sodium level; the cheese string product had a low level of sodium; the cheese slices had moderate level of sodium.



Treatment – **Five:** The cheddar block product had a borderline moderate/low sodium level; the cheese string product had a low level of sodium; the cheese slices had moderate level of sodium.

# **Control Group**



Respondents were placed in five separate groups with varying nutrition information on the Nutrition Facts table and on the front of package.

The respondents to this survey were randomly divided into five equal sized treatment groups, including one control group, all of which were shown a cheese block product, a cheese strings product, and a package of cheese slices. Each group was asked the same three questions regarding each product:

1) How much would you like this product?

n 2) How likely would you be to purchase this product?

3) How much sodium would you say one serving of this product has?

### Treatment – **Control:** This group was shown all 3 products with no additional labeling on the front of pack and a Nutrition Facts table with a higher level of sodium. The products in this group contained a typical amount of sodium for each product.

Treatment – **Two:** This group was shown the products with no additional labeling on the front of pack and a Nutrition Facts table with a lower level of sodium (25% reduction) than the Control treatment. The products in the group contained a lower than normal sodium level for each product.



Treatment – **Three:** This group was shown the products with a "Reduced Sodium" label on the front of pack and the same Nutrition Facts table as treatment Two. The products in the group contained a lower than normal sodium level for each product.



Treatment – **Four:** This group was shown the products with a "Reduced Sodium and Same Great Taste and Texture" label and the same Nutrition Facts table as treatments Two and Three. The products in the group contained a lower than normal sodium level for each product.



Treatment – **Five:** Prior to being shown the products, this group was shown a advisory page discussing what constitutes a low and high serving of sodium per serving portion. This group was shown the products with a "Reduced Sodium and Same Great Taste and Texture" label and the same Nutrition Facts table as treatments Two, Three, and Four. The products in the group contained a lower than normal sodium level for each product.



Products had different sodium levels depending on their treatment group. Based on Health Canada's definitions for a what constitutes a little sodium vs. a lot of sodium per portion, the following sodium levels for each product in each treatment are as follows:

Treatment – **Control:** The cheddar block product had a moderate sodium level; the cheese string product had a borderline moderate/low level of sodium; the cheese slices had a borderline moderate/high level of sodium.

Treatment – **Two:** The cheddar block product had a borderline moderate/low sodium level; the cheese string product had a low level of sodium; the cheese slices had moderate level of sodium.



Treatment – **Three:** The cheddar block product had a borderline moderate/low sodium level; the cheese string product had a low level of sodium; the cheese slices had moderate level of sodium.



Treatment – **Four:** The cheddar block product had a borderline moderate/low sodium level; the cheese string product had a low level of sodium; the cheese slices had moderate level of sodium.



Treatment – **Five:** The cheddar block product had a borderline moderate/low sodium level; the cheese string product had a low level of sodium; the cheese slices had moderate level of sodium.

Cheddar cheese blocks

products received the

they would like them,

respectively.

highest taste rating, with

one third and one quarter, of respondents saying

and string cheese



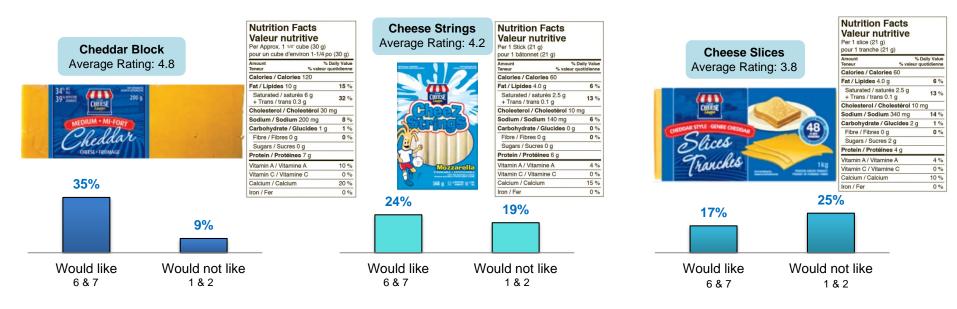
### TASTE EXPECTATIONS

For those respondents shown the control treatment, different taste expectations are noted.

Respondents with a high school education or less are more likely to like cheddar cheese blocks (46%) and cheese slices (24%) than university graduates (29% and 12% respectively). High school respondents also gave a higher rating on average to strings cheese products (4.6 vs. 3.9 by university graduates).

Canadians between the ages of 25 and 34 had the lowest expectations for cheese slices, with an average taste expectancy rating of only 3.2.

Households with children have a higher taste expectancy rating on average for cheese strings (5.1 out of 7 vs. 3.9 for households without children).



Q17A/B/C-1. How much do you think you would like this product? Scale from 1-7, 7 being the highest. Base: Those put into treatment condition – control(n=684)



### LIKELIHOOD TO BUY

Those that rated taste expectations higher are also more likely to buy each product. Cheddar cheese blocks are the cheese product that Canadians are most likely to say they would purchase.

Since Canadians without a post-secondary education are more likely to enjoy the taste of cheese blocks and slices, they are also more likely to purchase these products. Those with a high school education or less are more likely to purchase cheddar cheese blocks (36% vs. 24% of university graduates) and cheese slices (24% vs. 12% of university graduates).

The same can be said of the other groups that gave higher taste expectancy ratings; households with children rate their likelihood to buy cheese strings at 5 out of 7, on average, and 25 to 34 year olds only rate their likelihood to purchase cheese slices at 3.2 on average.



Q18A/B/C-1. Assume this product has a cost similar to others like it, how likely would you be to purchase this one? Scale from 1-7, 7 being the highest. Base: Those put into treatment condition – control(n=684)

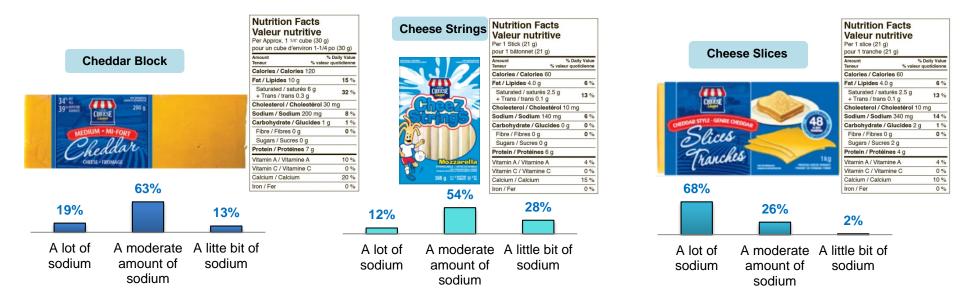


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PERCEPTION OF SODIUM CONTENT

There are almost no differences among Canadians when judging sodium content. The appearance of sodium in each of the three products shown to the control treatment varies greatly, with seven-in-ten Canadians believing that cheese slices have a lot of sodium, but only nineteen percent believing the cheddar block and twelve percent believing the cheese strings contain a lot.

The only difference among Canadians is that almost three-quarters of women (73%) believe the cheese slices contain a lot of sodium, while only 63% of men agree.





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## **Treatment Group 2**

Respondents were placed in five separate groups with varying nutrition information on the Nutrition Facts table and on the front of package.

The respondents to this survey were randomly divided into five equal sized treatment groups, including one control group, all of which were shown a cheese block product, a cheese strings product, and a package of cheese slices. Each group was asked the same three questions regarding each product:

1) How much would you like this product?

**2)** How likely would you be to purchase this product?

3) How much sodium would you say one serving of this product has?

Treatment – **Control:** This group was shown all 3 products with no additional labeling on the front of pack and a Nutrition Facts table with a higher level of sodium. The products in this group contained a typical amount of sodium for each product.

Treatment – **Two:** This group was shown the products with no additional labeling on the front of pack and a Nutrition Facts table with a lower level of sodium (25% reduction) than the Control treatment. The products in the group contained a lower than normal sodium level for each product.



Treatment – **Three:** This group was shown the products with a "Reduced Sodium" label on the front of pack and the same Nutrition Facts table as treatment Two. The products in the group contained a lower than normal sodium level for each product.



Treatment – **Four:** This group was shown the products with a "Reduced Sodium and Same Great Taste and Texture" label and the same Nutrition Facts table as treatments Two and Three. The products in the group contained a lower than normal sodium level for each product.



Treatment – **Five:** Prior to being shown the products, this group was shown a advisory page discussing what constitutes a low and high serving of sodium per serving portion. This group was shown the products with a "Reduced Sodium and Same Great Taste and Texture" label and the same Nutrition Facts table as treatments Two, Three, and Four. The products in the group contained a lower than normal sodium level for each product.



44

# **Treatment Group 2**

Products had different sodium levels depending on their treatment group.

### Based on Health Canada's definitions for a what constitutes a little sodium vs. a lot of sodium per portion, the following sodium levels for each product in each treatment are as follows:

Treatment – **Control:** The cheddar block product had a moderate sodium level; the cheese string product had a borderline moderate/low level of sodium; the cheese slices had a borderline moderate/high level of sodium.

### Treatment – **Two:** The cheddar block product had a borderline moderate/low sodium level; the cheese string product had a low level of sodium; the cheese slices had moderate level of sodium.



Treatment – **Three:** The cheddar block product had a borderline moderate/low sodium level; the cheese string product had a low level of sodium; the cheese slices had moderate level of sodium.



Treatment – **Four:** The cheddar block product had a borderline moderate/low sodium level; the cheese string product had a low level of sodium; the cheese slices had moderate level of sodium.



Treatment – **Five:** The cheddar block product had a borderline moderate/low sodium level; the cheese string product had a low level of sodium; the cheese slices had moderate level of sodium.



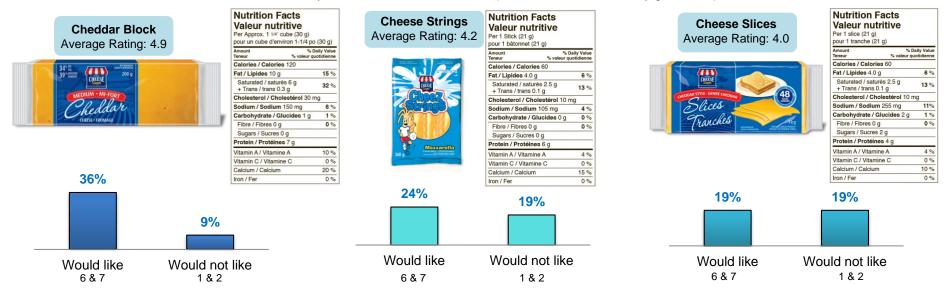
Over one-third of Canadians said they would like the cheddar cheese block displayed.

#### TASTE EXPECTATIONS

The cheddar cheese block pictured below received the highest rating amongst Canadians in treatment 2, with 36% believing they would like the product. While Canadians outside of Quebec are constant in their rating, giving the cheddar cheese block a 5.1 out of 7 rating on average in taste expectation, those in Quebec on average only rated the cheese block a 4.3.

Again, string cheese are more popular among households with children (36% would like vs. 20% of those without children) but also among younger Canadians. Those over 65 rated their taste expectation for string cheese on average at only 3.4, lower than that of those under 54.

Those with a high school education or less had a greater taste expectancy for cheese slices than those with university degrees. One-quarter of respondents without a post-secondary education said they would like the cheese slices (26% vs. 13% of university graduates).



Q17A/B/C-2. How much do you think you would like this product? Scale from 1-7, 7 being the highest. Base: Those put into treatment condition -2 (n=688)

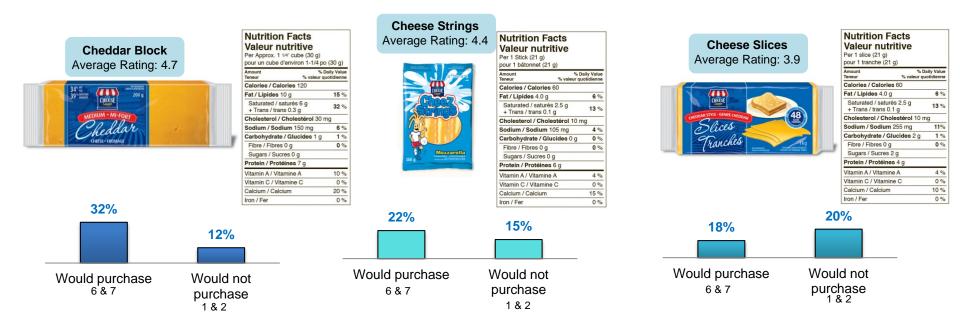


### LIKELIHOOD TO BUY

Cheddar cheese blocks received the highest "would purchase" rating among respondents. Many of the same groups that gave low taste expectation ratings for the cheese products displayed are also less likely to purchase them. Quebec (4.2) gave the lowest score in Canada on likelihood to buy cheddar cheese blocks, as did Canadians between 18 to 24 (4.1) compared to those over 35.

Older Canadians gave a lower taste rating for cheese strings and with a rating of 3.6 out of 7, are less likely to purchase cheese strings than younger Canadians.

Again cheese strings are a more popular choice for households with children (31% would buy vs. 19% of households without children).



Q18A/B/C-2. Assume this product has a cost similar to others like it, how likely would you be to purchase this one? Scale from 1-7, 7 being the highest. Base: Those put into treatment condition -2 (n=688)



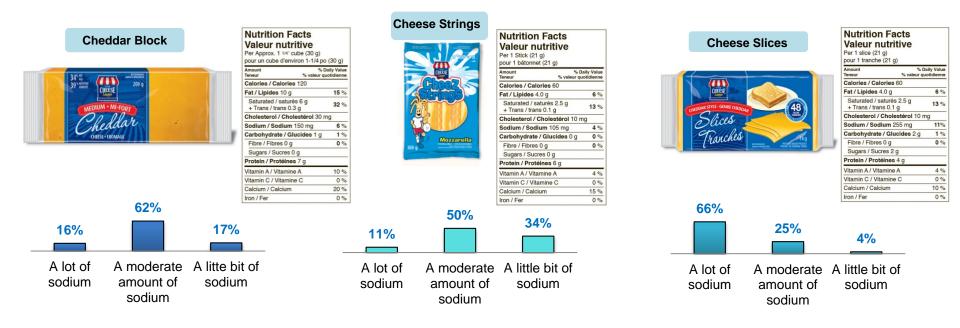
47

# **Treatment Group 2**

### PERCEPTION OF SODIUM CONTENT

Canadians believe cheese slices to have the highest sodium content.

Two-thirds of Canadians believe the cheese slices pictured below contain a lot of sodium, more than that of the cheddar block (16%) and cheese strings (11%).



Q19A/B/C-2. If we were to ask you to judge how much sodium is in this product, how much would you say it has? Base: Those put into treatment condition -2 (n=688)



Respondents were placed in five separate groups with varying nutrition information on the Nutrition Facts table and on the front of package. The respondents to this survey were randomly divided into five equal sized treatment groups, including one control group, all of which were shown a cheese block product, a cheese strings product, and a package of cheese slices. Each group was asked the same three questions regarding each product:

1) How much would you like this product?

**2)** How likely would you be to purchase this product?

3) How much sodium would you say one serving of this product has?

Treatment – **Control:** This group was shown all 3 products with no additional labeling on the front of pack and a Nutrition Facts table with a higher level of sodium. The products in this group contained a typical amount of sodium for each product.

Treatment – **Two:** This group was shown the products with no additional labeling on the front of pack and a Nutrition Facts table with a lower level of sodium (25% reduction) than the Control treatment. The products in the group contained a lower than normal sodium level for each product.



Treatment – **Three:** This group was shown the products with a "Reduced Sodium" label on the front of pack and the same Nutrition Facts table as treatment Two. The products in the group contained a lower than normal sodium level for each product.



Treatment – **Four:** This group was shown the products with a "Reduced Sodium and Same Great Taste and Texture" label and the same Nutrition Facts table as treatments Two and Three. The products in the group contained a lower than normal sodium level for each product.



Treatment – **Five:** Prior to being shown the products, this group was shown a advisory page discussing what constitutes a low and high serving of sodium per serving portion. This group was shown the products with a "Reduced Sodium and Same Great Taste and Texture" label and the same Nutrition Facts table as treatments Two, Three, and Four. The products in the group contained a lower than normal sodium level for each product.



Products had different sodium levels depending on their treatment group.

### Based on Health Canada's definitions for a what constitutes a little sodium vs. a lot of sodium per portion, the following sodium levels for each product in each treatment are as follows:

Treatment – **Control:** The cheddar block product had a moderate sodium level; the cheese string product had a borderline moderate/low level of sodium; the cheese slices had a borderline moderate/high level of sodium.

Treatment – **Two:** The cheddar block product had a borderline moderate/low sodium level; the cheese string product had a low level of sodium; the cheese slices had moderate level of sodium.



### Treatment – **Three:** The cheddar block product had a borderline moderate/low sodium level; the cheese string product had a low level of sodium; the cheese slices had moderate level of sodium.



Treatment – **Four:** The cheddar block product had a borderline moderate/low sodium level; the cheese string product had a low level of sodium; the cheese slices had moderate level of sodium.



Treatment – **Five:** The cheddar block product had a borderline moderate/low sodium level; the cheese string product had a low level of sodium; the cheese slices had moderate level of sodium.



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# **Treatment Group 3**



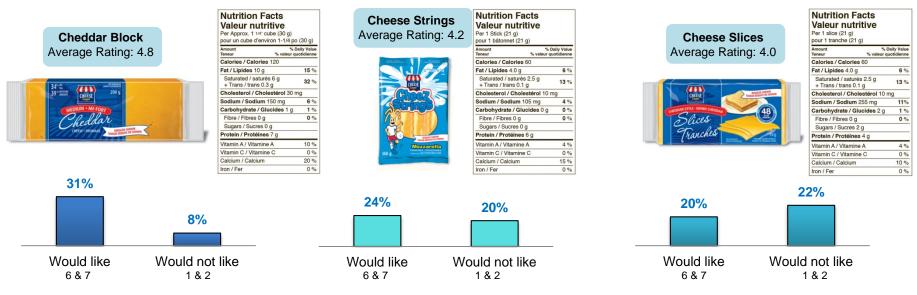
### TASTE EXPECTATIONS

Taste expectations changed little when a low sodium advisory is placed on the product packaging. Although taste expectations for the cheddar cheese block dropped slightly, compared to treatments Control and Two, people's opinions of cheese strings and slices remained the same.

Geographic differences emerged in this treatment group, with two-fifths of those in Alberta (41%) saying they would like a cheddar cheese block (compared to 22% of Quebeckers) and those in Atlantic Canada gave a higher average rating (4.7) for cheese slices than those in BC (3.4) and the Prairies (3.7).

Respondents with a high school education or less enjoy cheese slices more than university graduates, on average rating cheese slices taste expectancy as 4.3 compared to 3.7 for their university graduate counterparts.

Older Canadians have the lowest expectations for cheese strings (3.4) compared to those under 54, while households with children are more likely to like cheese strings (40% vs. 17% of those without children).



Q17A/B/C-3. How much do you think you would like this product? Scale from 1-7, 7 being the highest. Base: Those put into treatment condition – 3 (n=689)





With the addition of a low

children are more likely

than those without to purchase each product.

packaging, households with

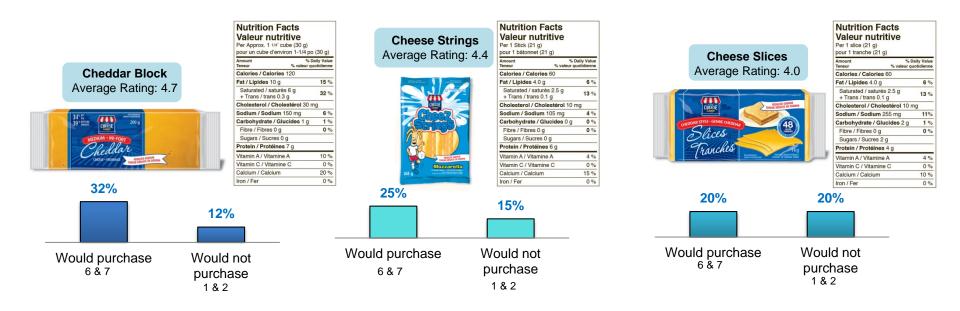
sodium label on the

LIKELIHOOD TO BUY

The cheese product respondents would be most likely to purchase are cheddar cheese blocks, followed by cheese strings and cheese slices.

Two-fifths of households with children would purchase the cheddar block (43%) or cheese strings (40%), and 28% would purchase the cheese slices.

Canadians 65+ give a lower rating on average (3.7 out of 7) for cheese strings than those under the age of 54.



Q18A/B/C-3. Assume this product has a cost similar to others like it, how likely would you be to purchase this one? Scale from 1-7, 7 being the highest. Base: Those put into treatment condition -3 (n=689)



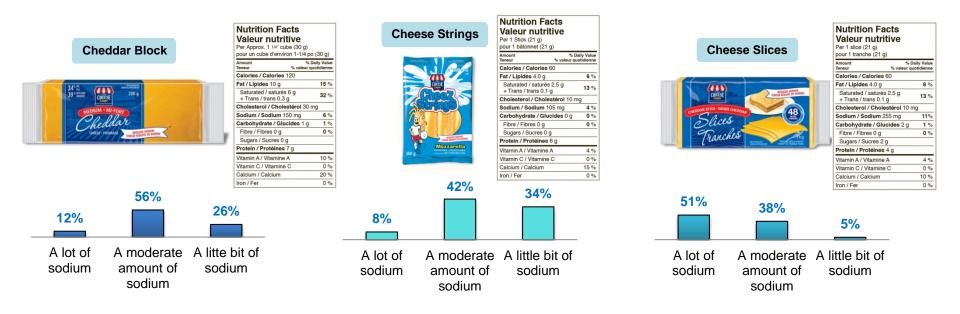


### PERCEPTION OF SODIUM CONTENT

While ranked in the same order, Canadians gave lower overall ratings for sodium content for all three products. Canadians believe cheese slices contain the most amount of sodium, with half saying that it contains a lot. Just over one-in-ten believe the cheddar block contains a lot of sodium, while 8% say that about the cheese strings.

Two-thirds of Quebec respondents believe the cheese slices contain a lot of sodium, a tendency that is greater than those in Ontario (46%) and Alberta (39%).

Although men and women did not differ in their taste expectations or likelihood to purchase cheese slices, 56% of women believe they contain a lot of sodium (compared to 45% of men).





Respondents were placed in five separate groups with varying nutrition information on the Nutrition Facts table and on the front of package.

The respondents to this survey were randomly divided into five equal sized treatment groups, including one control group, all of which were shown a cheese block product, a cheese strings product, and a package of cheese slices. Each group was asked the same three questions regarding each product:

1) How much would you like this product?

**2)** How likely would you be to purchase this product?

3) How much sodium would you say one serving of this product has?

Treatment – **Control:** This group was shown all 3 products with no additional labeling on the front of pack and a Nutrition Facts table with a higher level of sodium. The products in this group contained a typical amount of sodium for each product.

Treatment – **Two:** This group was shown the products with no additional labeling on the front of pack and a Nutrition Facts table with a lower level of sodium (25% reduction) than the Control treatment. The products in the group contained a lower than normal sodium level for each product.



Treatment – **Three:** This group was shown the products with a "Reduced Sodium" label on the front of pack and the same Nutrition Facts table as treatment Two. The products in the group contained a lower than normal sodium level for each product.



# Treatment – **Four:** This group was shown the products with a "Reduced Sodium and Same Great Taste and Texture" label and the same Nutrition Facts table as treatments Two and Three. The products in the group contained a lower than normal sodium level for each product.



Treatment – **Five:** Prior to being shown the products, this group was shown a advisory page discussing what constitutes a low and high serving of sodium per serving portion. This group was shown the products with a "Reduced Sodium and Same Great Taste and Texture" label and the same Nutrition Facts table as treatments Two, Three, and Four. The products in the group contained a lower than normal sodium level for each product.



Products had different sodium levels depending on their treatment group.

### Based on Health Canada's definitions for a what constitutes a little sodium vs. a lot of sodium per portion, the following sodium levels for each product in each treatment are as follows:

Treatment – **Control:** The cheddar block product had a moderate sodium level; the cheese string product had a borderline moderate/low level of sodium; the cheese slices had a borderline moderate/high level of sodium.

Treatment – **Two:** The cheddar block product had a borderline moderate/low sodium level; the cheese string product had a low level of sodium; the cheese slices had moderate level of sodium.



Treatment – **Three:** The cheddar block product had a borderline moderate/low sodium level; the cheese string product had a low level of sodium; the cheese slices had moderate level of sodium.



Treatment – **Four:** The cheddar block product had a borderline moderate/low sodium level; the cheese string product had a low level of sodium; the cheese slices had moderate level of sodium.



Treatment – **Five:** The cheddar block product had a borderline moderate/low sodium level; the cheese string product had a low level of sodium; the cheese slices had moderate level of sodium.



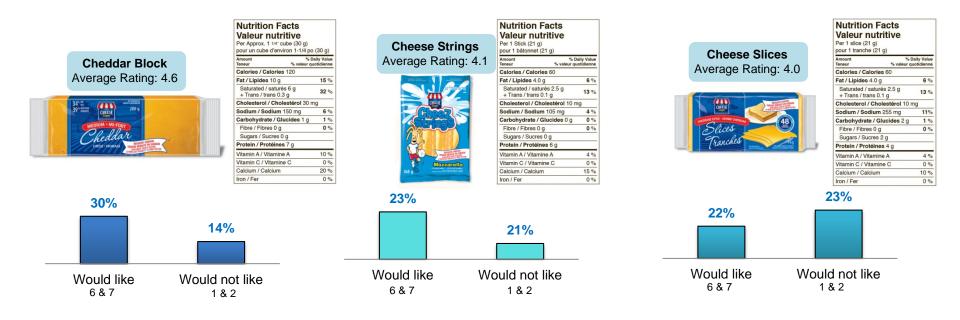


The addition of a "same great taste and texture" label along with a reducedsodium advisory did not change respondents' taste expectation.

### TASTE EXPECTATIONS

The cheddar cheese block is the highest rated cheese product in terms of taste, especially among Ontarians more so than Quebeckers (35% vs. 21% respectively).

Those over the age of 65 rate their taste expectancy as 3.4, which is lower than those under 54. Meanwhile, households with children are more likely to like the cheese strings (38% would like vs. 19% of those without children).



Q17A/B/C-4. How much do you think you would like this product? Scale from 1-7, 7 being the highest. Base: Those put into treatment condition -4 (n=690)



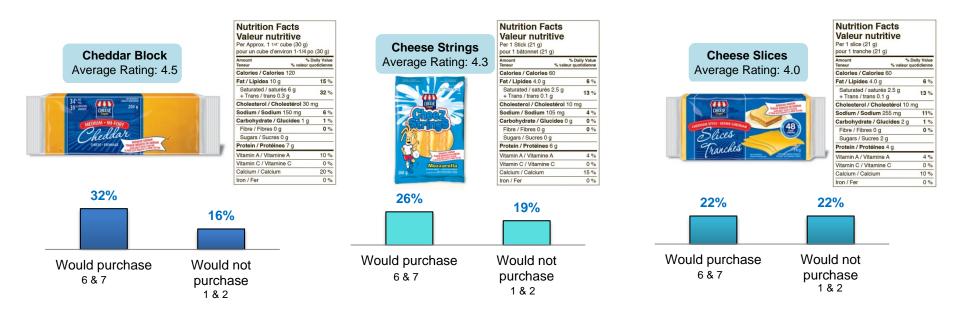


Households with children are still more likely than those without children to purchase cheese strings.

### LIKELIHOOD TO BUY

The addition of a "same great taste and texture" label had little effect on the purchase behaviour of Canadians compared to treatment Three. The cheddar cheese block is the product Canadians would most likely purchase, followed by cheese strings and then cheese slices.

As with the other treatment groups, households with children are more likely to buy cheese strings (46% vs. 20% of households without children).



Q18A/B/C-4. Assume this product has a cost similar to others like it, how likely would you be to purchase this one? Scale from 1-7, 7 being the highest. Base: Those put into treatment condition -4 (n=690)



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# **Treatment Group 4**



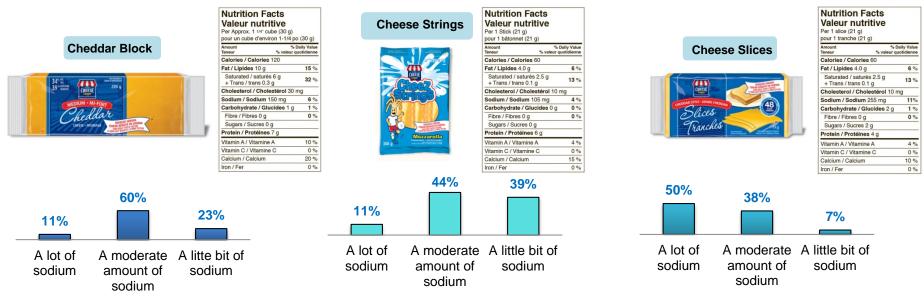
### PERCEPTION OF SODIUM CONTENT

Cheese slices are rated as the product with the most amount of sodium.

Canadians younger than 45 are the least likely to believe that the cheddar cheese block contained a moderate amount of sodium (54% vs. 64% of those over 45).

Regionally, Ontario differed on both cheese strings and cheese slices when compared to other provinces. While almost two-thirds (62%) of people in BC said cheese strings had a moderate amount of sodium, only 38% of residents in Ontario agreed. Also, two-thirds of those in Quebec believe that cheese slices have a lot of sodium, compared to 43% of those in Ontario.

Although men and women did not differ on taste expectations or likelihood to purchase, half of women think that cheese strings have a moderate amount of sodium (49% vs. 39% of men).





Respondents were placed in five separate groups with varying nutrition information on the Nutrition Facts table and on the front of package.

The respondents to this survey were randomly divided into five equal sized treatment groups, including one control group, all of which were shown a cheese block product, a cheese strings product, and a package of cheese slices. Each group was asked the same three questions regarding each product:

1) How much would you like this product?

**2)** How likely would you be to purchase this product?

3) How much sodium would you say one serving of this product has?

Treatment – **Control:** This group was shown all 3 products with no additional labeling on the front of pack and a Nutrition Facts table with a higher level of sodium. The products in this group contained a typical amount of sodium for each product.

Treatment – **Two:** This group was shown the products with no additional labeling on the front of pack and a Nutrition Facts table with a lower level of sodium (25% reduction) than the Control treatment. The products in the group contained a lower than normal sodium level for each product.



Treatment – **Three:** This group was shown the products with a "Reduced Sodium" label on the front of pack and the same Nutrition Facts table as treatment Two. The products in the group contained a lower than normal sodium level for each product.



Treatment – **Four:** This group was shown the products with a "Reduced Sodium and Same Great Taste and Texture" label and the same Nutrition Facts table as treatments Two and Three. The products in the group contained a lower than normal sodium level for each product.



Treatment – **Five:** Prior to being shown the products, this group was shown a advisory page discussing what constitutes a low and high serving of sodium per serving portion. This group was shown the products with a "Reduced Sodium and Same Great Taste and Texture" label and the same Nutrition Facts table as treatments Two, Three, and Four. The products in the group contained a lower than normal sodium level for each product.



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# **Treatment Group 5**

Products had different sodium levels depending on their treatment group.

### Based on Health Canada's definitions for a what constitutes a little sodium vs. a lot of sodium per portion, the following sodium levels for each product in each treatment are as follows:

Treatment – **Control:** The cheddar block product had a moderate sodium level; the cheese string product had a borderline moderate/low level of sodium; the cheese slices had a borderline moderate/high level of sodium.

Treatment – **Two:** The cheddar block product had a borderline moderate/low sodium level; the cheese string product had a low level of sodium; the cheese slices had moderate level of sodium.



Treatment – **Three:** The cheddar block product had a borderline moderate/low sodium level; the cheese string product had a low level of sodium; the cheese slices had moderate level of sodium.



Treatment – **Four:** The cheddar block product had a borderline moderate/low sodium level; the cheese string product had a low level of sodium; the cheese slices had moderate level of sodium.



Treatment – **Five:** The cheddar block product had a borderline moderate/low sodium level; the cheese string product had a low level of sodium; the cheese slices had moderate level of sodium.



### Treatment - Five 63

### **TREATMENT FIVE – SODIUM ADVISORY**

#### Prior to being shown the cheese products, this treatment group was shown the following advisory.

### Sodium: Get the Facts

#### Fact: We eat too much sodium.

We all need some sodium, but most of us eat about 3400 mg per day. This is more than double the amount of sodium we need.

Healthy adults need only 1500 mg of sodium per day. Healthy children need only 1000-1500 mg of sodium per day.

### Fact: Eating too much sodium can be harmful to our health.

Eating too much sodium can cause high blood pressure, stroke, heart disease and kidney disease. Eating less sodium can help you and your family stay healthy and feel your best.

### Fact: Most of the foods we eat contain too much sodium.

Over 75% of the sodium we eat comes from processed foods such as cheese, deli meats, pizza, sauces and soups.

Packaged and ready-to-eat foods, fast foods and restaurant meals are often high in sodium.

Breads, breakfast cereals and bakery products also contain sodium even though they may not taste salty.

#### TIP: Read the information on food packages

Buy unsalted and lower sodium foods whenever possible. Look for words such as "sodium-free", "low sodium", "reduced-sodium," or "no added salt" on the package.

Compare food labels. Buy the products with the lowest amounts of sodium.

Look for foods that contain less than 360 mg of sodium per serving.

You can also use the % Daily Value (%DV) on the label to compare products and see if the food has **a** little or **a lot** of sodium.

#### Here is a good guide:

- 5% DV or less is a little
- 15% DV or more is a lot.

Look for products with a sodium content of less than 15% DV.

Check the food labels often because product ingredients may change.



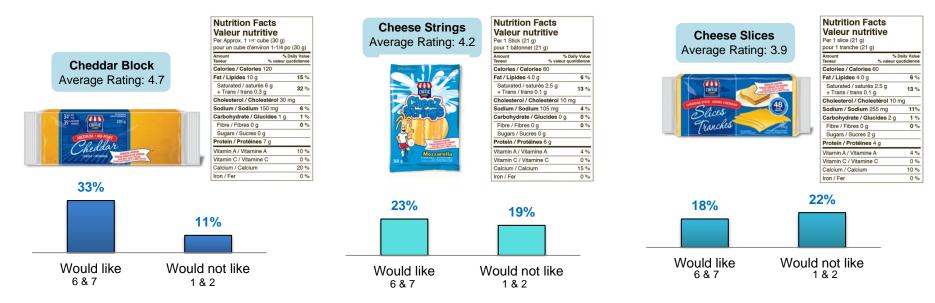


### TASTE EXPECTATIONS

After being shown a health advisory page, respondents still held the same taste expectations. Women and men differed on their taste expectations for cheddar cheese blocks and cheese strings. Women are more likely to think they would enjoy the taste of cheddar cheese (40% vs. 25% of men) and cheese strings (28% vs. 18% of men). Two-fifths of women said they would like the cheddar cheese blocks, compared to only a quarter of men, and 30% of women would like cheese strings (vs. 18% of men).

Education continues to be a defining trend regarding preferences for these cheese products. Two-in-five respondents with a college education or less would like the taste of the cheddar cheese block, compared to onequarter of university graduates. High school educated respondents also gave a higher average taste rating for cheese slices (4.3 out of seven vs. 3.7 from university graduates).

Those living with children rated cheese strings on average 4.6 out of 7, while those without rated them 4.



Q17A/B/C-5. How much do you think you would like this product? Scale from 1-7, 7 being the highest. Base: Those put into treatment condition – 5 (n=686)

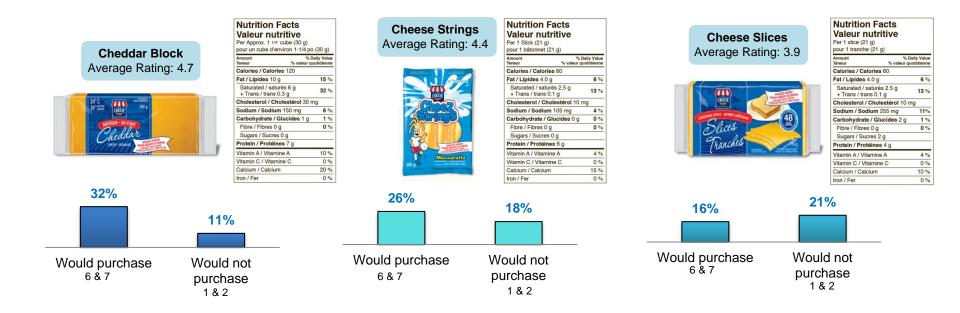


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### LIKELIHOOD TO BUY

Cheese blocks followed by cheese strings are the most likely for Canadians to buy. Few differences were identified amongst Canadians' likelihood to purchase the products displayed. Quebec continues to lag behind Ontario in their eagerness to purchase cheddar blocks (23% said they would, vs. 36% of those in Ontario). Women are almost twice as likely as men to rate their likelihood to buy at 7 out of 7 (17% vs. 9% of men).



Q18A/B/C-5. Assume this product has a cost similar to others like it, how likely would you be to purchase this one? Scale from 1-7, 7 being the highest. Base: Those put into treatment condition -5 (n=686)





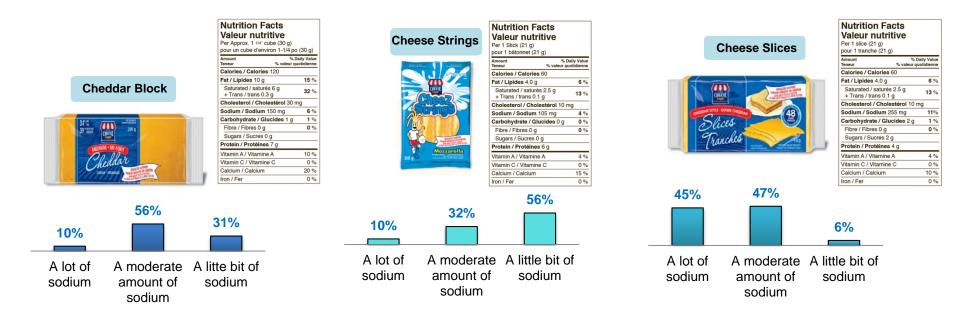
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#### After reading the health advisory, Canadians are more likely to accurately judge sodium content.

PERCEPTION OF SODIUM CONTENT

Compared to the first two treatment groups, there was an over 20% drop in the quantity of Canadians that rated cheese slices as containing a lot of sodium. This could possibly be explained by the advisory shown to this treatment group stating that products with more than 360mg or 15% of DV per serving contain a lot of sodium.

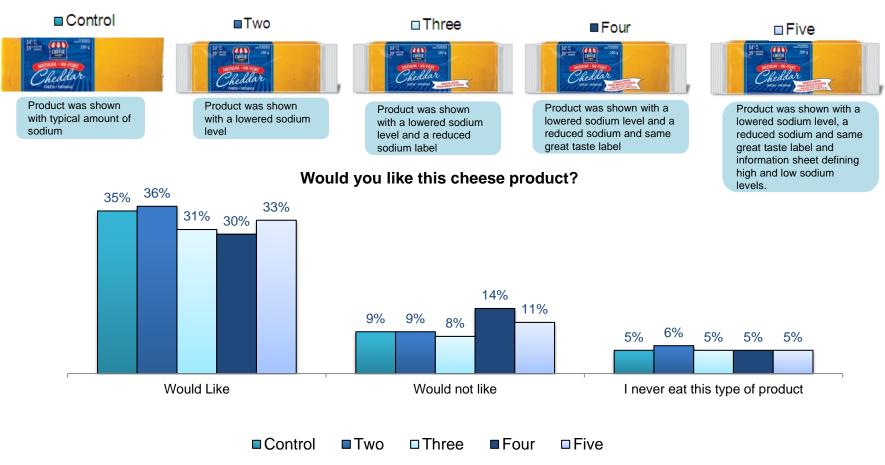
There was also an almost 20% increase in the overall amount of respondents that rated cheese strings as containing little sodium compared to the first four treatment groups.



# **Comparing Treatment Groups**



### CHEDDAR BLOCK: TASTE EXPECTATIONS



Q17A-1,2,3,4,5. How much do you think you would like this product? Base: Control (n=684), Two (n=688), Three (n=689), Four (n=690), Five (n=696).



#### CHEDDAR BLOCK: LIKELIHOOD TO BUY Control ∎Two □ Three ■Four Five Product was shown Product was shown Product was shown with a Product was shown with a Product was shown with typical amount of with a lowered sodium with a lowered sodium lowered sodium level and a lowered sodium level, a sodium level reduced sodium and same level and a reduced reduced sodium and same great taste label great taste label and sodium label information sheet defining high and low sodium Would you buy this cheese product? levels. 32% 32% 32% 32% 30% 16% 12% 12% 11% 11% 6% 6% 5% 5% 5% Would buy Would not buy I never buy this type of product Control Two □ Three ■ Four ■ Five

Q18A-1,2,3,4,5. Assume this product has a cost similar to others like it, how likely would you be to purchase this one? Base: Control (n=684), Two (n=688), Three (n=689), Four (n=690), Five (n=696).

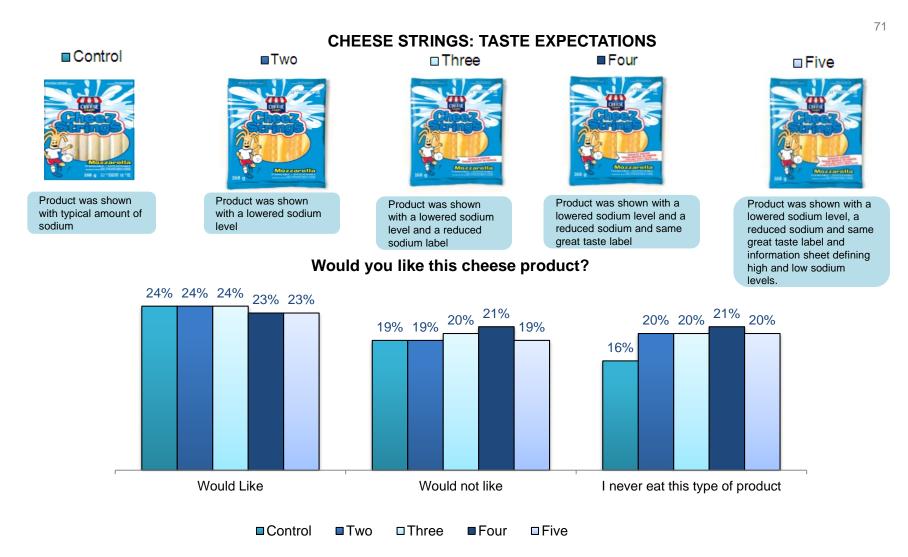


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#### CHEDDAR BLOCK: PERCEPTION OF SODIUM CONTENT Control ∎Two □ Three ■Four Five Product was shown Product was shown Product was shown Product was shown with a Product was shown with a with typical amount of with a lowered sodium lowered sodium level and a lowered sodium level, a with a lowered sodium sodium level level and a reduced reduced sodium and same reduced sodium and same great taste label sodium label great taste label and information sheet defining How much sodium do you think is in this product? high and low sodium levels. 63% 62% 60% 56% 56% 31% <sup>26%</sup>\_23% <sup>19%</sup> 16% 17% 12% 11% 10% 13% 7% 7% 5% 5% 3% A lot of sodium A little bit of sodium A moderate amount of sodium I don't know/prefer not to answer Control ■Two ■Three ■ Four □ Five

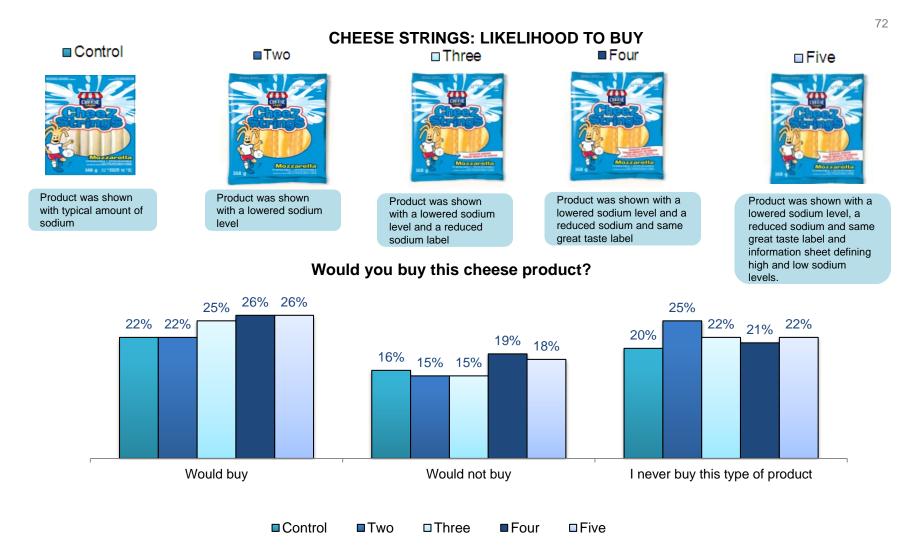
Q19A-1,2,3,4,5. If we were to ask you to judge how much sodium is in this product, how much would you say it has? Base: Control (n=684), Two (n=688), Three (n=689), Four (n=690), Five (n=696).





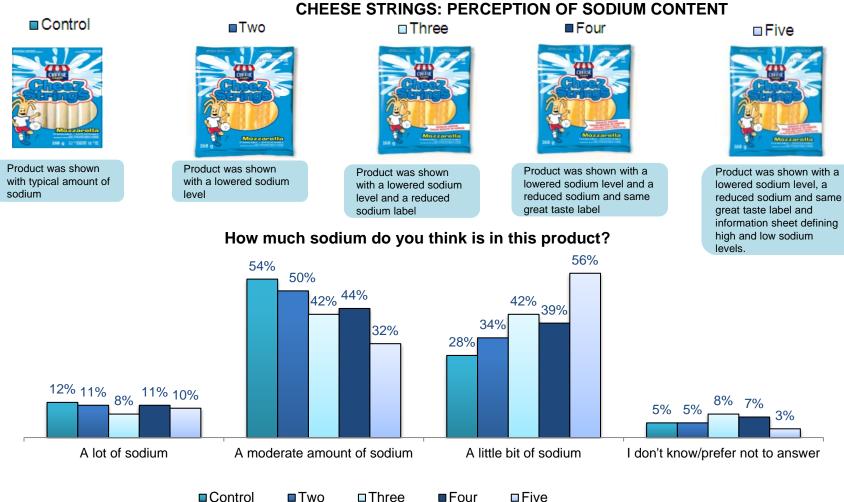
Q17B-1,2,3,4,5. How much do you think you would like this product? Base: Control (n=684), Two (n=688), Three (n=689), Four (n=690), Five (n=696).





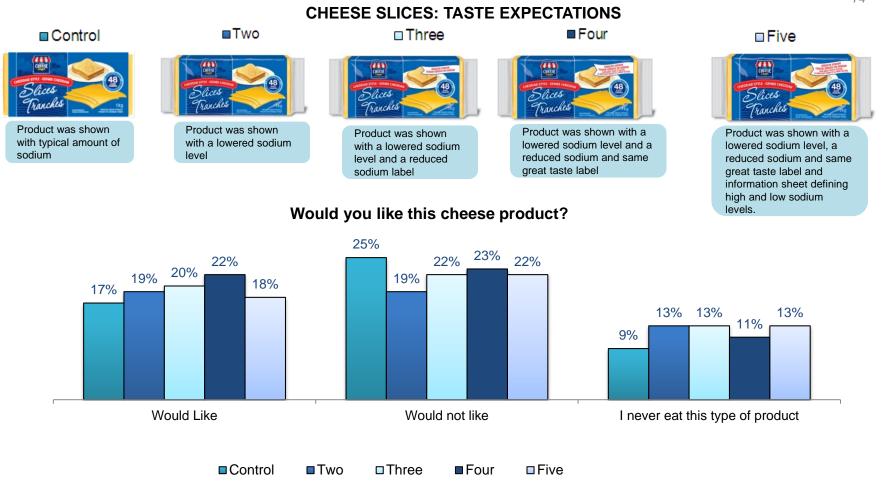
Q18B-1,2,3,4,5. Assume this product has a cost similar to others like it, how likely would you be to purchase this one? Base: Control (n=684), Two (n=688), Three (n=689), Four (n=690), Five (n=696).





Q19C-1,2,3,4,5. If we were to ask you to judge how much sodium is in this product, how much would you say it has? Base: Control (n=684), Two (n=688), Three (n=689), Four (n=690), Five (n=696).





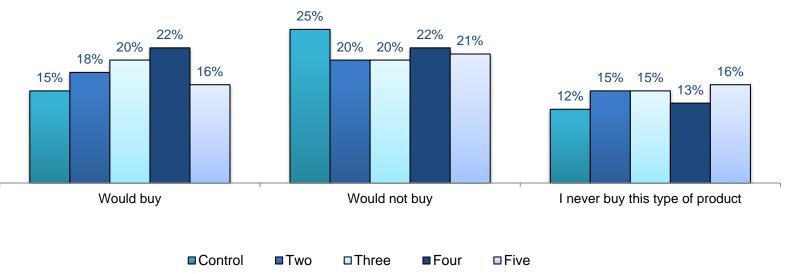
Q17C-1,2,3,4,5. How much do you think you would like this product? Base: Control (n=684), Two (n=688), Three (n=689), Four (n=690), Five (n=696).



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	Cł	IEESE SLICES: LIKELI	HOOD TO BUY	
Control	∎Two	□ Three	■ Four	□ Five
Slices Tranches	Slices Franches	Slices Franchild	Slices Franckils	Slices Trunckes
Product was shown with typical amount of sodium	Product was shown with a lowered sodium level	Product was shown with a lowered sodium level and a reduced	Product was shown with a lowered sodium level and a reduced sodium and same	Product was shown with a lowered sodium level, a reduced sodium and same
		sodium label	great taste label	great taste label and information sheet defining high and low sodium levels.

### Would you buy this cheese product?



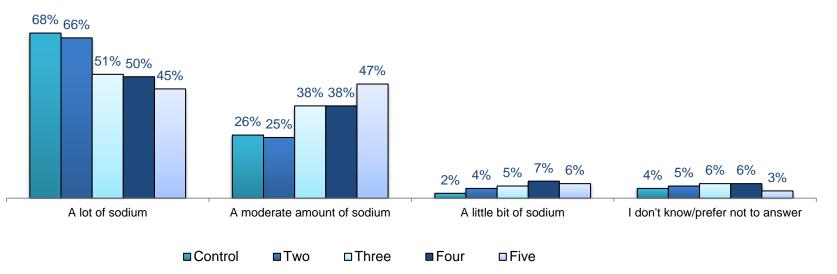
Q18C-1,2,3,4,5. Assume this product has a cost similar to others like it, how likely would you be to purchase this one? Base: Control (n=684), Two (n=688), Three (n=689), Four (n=690), Five (n=696).



levels.



### How much sodium do you think is in this product?



Q19C-1,2,3,4,5. If we were to ask you to judge how much sodium is in this product, how much would you say it has? Base: Control (n=684), Two (n=688), Three (n=689), Four (n=690), Five (n=696).

# **Profile of Respondents**



Gender	Total
Male	48%
Female	52%

Age	Total
18-24	12%
25-34	16%
35-44	20%
45-54	20%
55-64	15%
65-74	13%
75+	3%



Province	Total
Alberta	10%
Manitoba	4%
New Brunswick	2%
British Columbia	13%
Quebec	24%
Prince Edward Island	1%
Saskatchewan	3%
Newfoundland and Labrador	1%
Ontario	38%
Nova Scotia	3%



Income	Total
\$19,999 or less	7%
Between \$20,000 and \$39,999	15%
Between \$40,000 and \$59,999	17%
Between \$60,000 and \$79,999	15%
Between \$80,000 and \$99,999	12%
\$100,000 or more	18%

Education	Total
High School, general or professional (8 to 12 years)	22%
College pre-university, technical training, certificate	31%
University certificates and diplomas	8%
University Bachelor's degree (including classical studies)	26%
University Master's degree	9%
University Doctorate (PhD)	2%
I don't know / I prefer not answering	1%



Marital Status	Total
Single	27%
Married or living together	59%
Widowed	3%
Separated	2%
Divorced	7%

Children	Total
I have children under the age of 18 living with me	24%
I have children 18 or older living with me	8%
I have children both under the age of 18 and 18 or older living with me	3%
I don't have any children living me	63%



Employment	Total
Working full time	41%
Working part time	9%
Self-employed or business owner	7%
Student	8%
Homemaker	6%
Unemployed	4%
Retired	22%