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**Does use of social media affect food choice in the light of food safety issues?**

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# Does use of social media affect food choice in the light of food safety issues?

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## Motivation

- ☀ Food safety issue paramount topic in agri-business
- ☀ Spillover effects of food safety problems on food choice
- ☀ 12 million Canadians suffering from food related illnesses per year
- ☀ 150 total food recalls, advisories and warnings in Canada in 2008
- ☀ 713 food recalls in the U.S. from 2002 to 2003
- ☀ But: consumer food safety knowledge increased between 1993 and 2001
- ☀ Consumers are increasingly concerned regarding growth hormones in meat & dairy
- ☀ In the U.S. some cheese products are labelled as “growth hormone free”

## Experimental Design and Data Analysis

- ☀ Laboratory consumer experiment in fall 2013 in the U.S.
- ☀ Choice experiments for 1lb of cheddar cheese characterized by: *country and region of origin, growth hormone free, biodegradable packaging, price*
- ☀ Including questions on use of social media
- ☀ Data analyzed using mixed logit models
- ☀ Model 1: basic model
- ☀ Model 2 & Model 3: define use of social media on choice by re-estimating model 1 for those who frequently: use social media (Model 2), and use social media sites to read or write about food technologies (Model 3)
- ☀ Model 4 through Model 6: analyze relationship between choice and social media use including interaction effects for both social media use questions and the variable for “growth hormone free label”

## Use of social media (Q1&Q2)

**Q1:** “How often do you use social media?”

**Q2:** “How often do you use social media sites to read or write about food technologies?”

%	Q1	Q2
Never (0)	<b>5.08</b>	<b>59.32</b>
Once a year (1)	<b>1.69</b>	<b>8.47</b>
Once a month (2)	<b>1.69</b>	<b>5.08</b>
Every 2weeks (3)	<b>1.69</b>	<b>1.69</b>
Once a week (4)	<b>3.39</b>	<b>6.78</b>
2-3 times a week (5)	<b>3.39</b>	<b>6.78</b>
4-5 times a week (6)	<b>6.78</b>	<b>0.00</b>
Once a day (7)	<b>13.56</b>	<b>3.39</b>
More than once a day (8)	<b>62.71</b>	<b>8.47</b>

## Research Questions

**Does “growth hormone free” labelling influence food choice?**

**Do consumers who use social media make different food choices than those who don’t?**

**Is there a link between social media use and “growth hormone free” cheese choice?**

	Model 1			Model 2			Model 3		
	All participants			If Q1 >4			If Q2 >4		
	Coeff.	SE		Coeff.	SE		Coeff.	SE	
Price	-0.366 ***	0.031		-0.365 ***	0.034		-0.548 ***	0.126	
Hormone free label	1.884 ***	0.201		2.129 ***	0.225		4.350 ***	1.491	
Biodegradable packaging	-0.229	0.190		-0.263	0.209		0.368	0.988	
Ireland	0.855 ***	0.302		0.898 ***	0.335		4.551 *	2.607	
USA (UK dropped)	1.304 ***	0.274		1.217 ***	0.299		3.100 **	1.438	
None of these	-2.481 ***	0.291		-2.428 ***	0.321		-3.674 **	1.487	
p<0.1 * ; p<0.05 ** ;			636 obs.			552 obs.			108 obs.
p<0.01 ***									

	Model 4			Model 5			Model 6		
	Coeff.	SE		Coeff.	SE		Coeff.	SE	
Price	-0.375 ***	0.031		-0.372 ***	0.031		-0.378 ***	0.032	
Hormone free label	0.661 *	0.380		1.668 ***	0.213		0.701 *	0.382	
Biodegradable packaging	-0.230	0.192		-0.226	0.192		-0.228	0.193	
Ireland	0.837 ***	0.304		0.842 ***	0.303		0.831 ***	0.305	
USA (UK dropped)	1.291 ***	0.275		1.297 ***	0.275		1.288 ***	0.276	
Hormone free*Q1	0.188 ***	0.051					0.157 ***	0.053	
Hormone free*Q2				0.152 ***	0.053		0.111 **	0.055	
None of these	-2.561 ***	0.298		-2.535 ***	0.295		-2.588 ***	0.300	
p<0.1 * ; p<0.05 ** ; p<0.01 *** , 636 observations									

## Conclusions

- ☀ Consumers have a preference for cheese labeled as “growth hormone free”
- ☀ Country of origin does influence consumer choices, but consumers do not show any preferences for biodegradable packaging
- ☀ Those who frequently use social media sites have similar preferences to those who don’t, regarding hormone free labeling and country of origin labeling
- ☀ Those who use social media sites to read or write about food technologies have stronger preferences for hormone free labeling and cheese from Ireland and the US (compared to the UK)

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