

**Carnegie
Mellon
University**

CyLab



**Engineering &
Public Policy**

04 - Introduction to Privacy

Lorrie Cranor, Blase Ur,
and Rich Shay

January 22, 2015

05-436 / 05-836 / 08-534 / 08-734

Usable Privacy and Security



Today!

- What does privacy mean to you?
- Privacy goals
- Why is privacy hard to measure?
- How privacy is protected
- Privacy notice and choice (intro)
- Homework presentations

What does privacy mean to you?

<http://cups.cs.cmu.edu/privacyillustrated/>

Hard to define

“Privacy is a value so complex, so entangled in competing and contradictory dimensions, so engorged with various and distinct meanings, that I sometimes despair whether it can be usefully addressed at all.”

Robert C. Post, *Three Concepts of Privacy*,
89 *Geo. L.J.* 2087 (2001).

Limited access to self



“Being alone.”
- Shane (age 4)

“the right to be let alone”

- Samuel D. Warren and Louis D. Brandeis,
The Right to Privacy,
4 Harv. L. Rev. 193 (1890)

“our concern over
our accessibility to others: the
extent to which we are **known
to others**, the extent to which
others have **physical access** to
us, and the extent to which we
are **the subject of others
attention**.”

- Ruth Gavison, “Privacy and the Limits of the
Law,” *Yale Law Journal* 89 (1980)

Control over information

“Privacy is the claim of individuals, groups or institutions to determine for themselves when, how, and to what extent information about them is communicated to others.”

“...each individual is continually engaged in a personal adjustment process in which he balances the desire for privacy with the desire for disclosure and communication....”



How does each goal relate to privacy?

I want to have... I want to be....

- Solitude, uninterrupted
- Unseen, unheard, unread
- Not talked about
- Not judged
- Not profiled, not targeted, not treated differently than others
- Not misjudged
- Free to try, practice, make mistakes, self-reflect
- Not surprised (contextual integrity)
- Not accountable
- Not required to reveal
- Unknown
- Forgotten
- Intimacy
- Control
- Boundaries
- Identity
- Security
- Safety
- Others?

Measuring privacy

- Why is privacy hard to measure?
- Why are attitudes about privacy hard to measure?
- Why is the cost of privacy invasion hard to measure?

How privacy is protected

- Laws, self regulation, technology
 - Notice and access
 - Control over collection, use, deletion, sharing
 - Collection limitation
 - Use limitation
 - Security and accountability

Privacy laws around the world

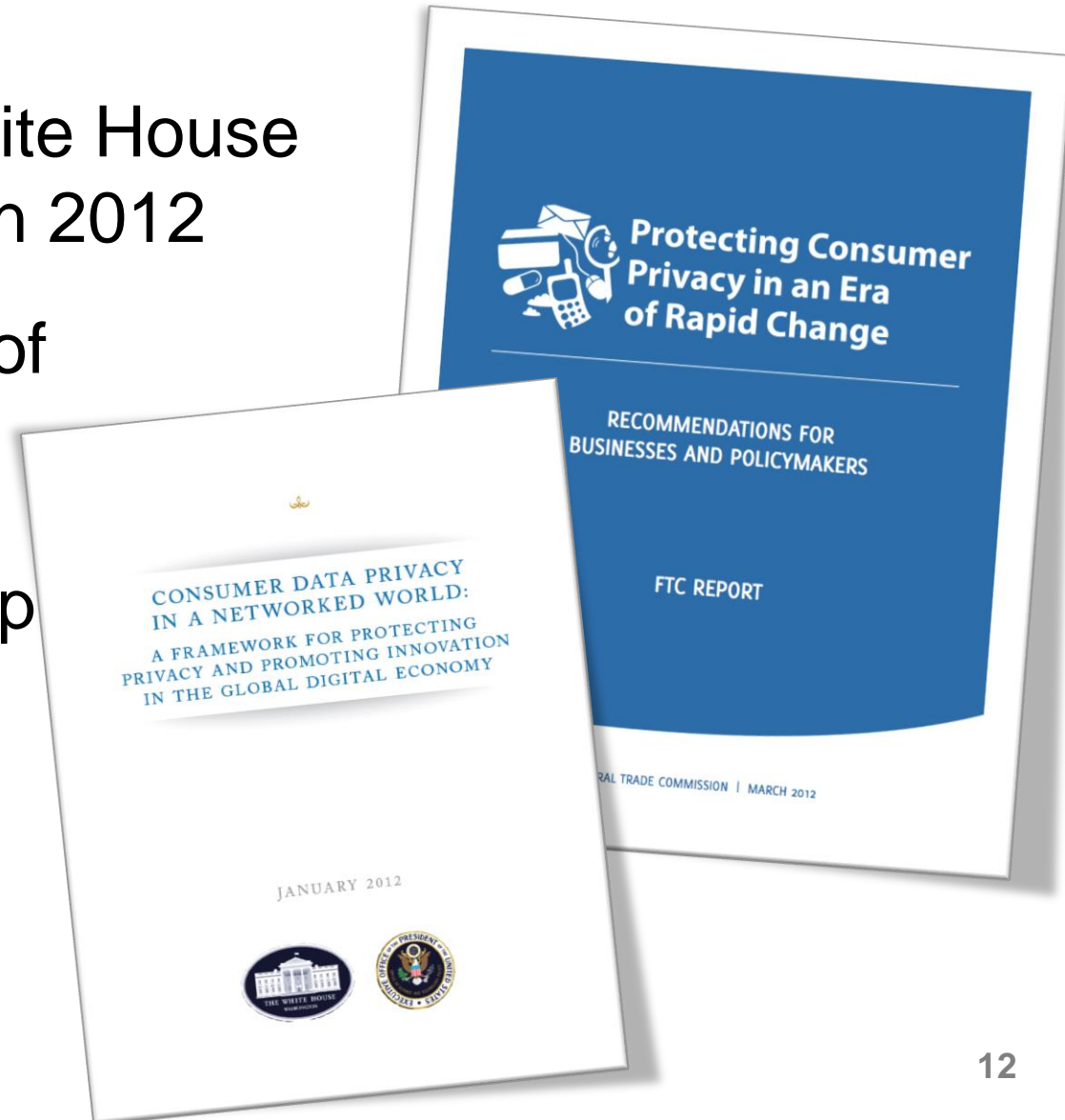
- Privacy laws and regulations vary widely
- US has mostly sector-specific laws, minimal protections, often referred to as “patchwork quilt”
 - No explicit constitutional right to privacy or general privacy law
 - But some privacy rights inferred from constitution
 - Narrow regulations for health, financial, education, videos, children, etc.
 - Federal Trade Commission jurisdiction over fraud and deceptive practices
 - Federal Communications Commission regulates telecommunications
 - Some state and local laws
- European Data Protection Directive - EU countries must adopt similar comprehensive laws, recognize privacy as fundamental human right
 - Privacy commissions in each country

OECD fair information principles

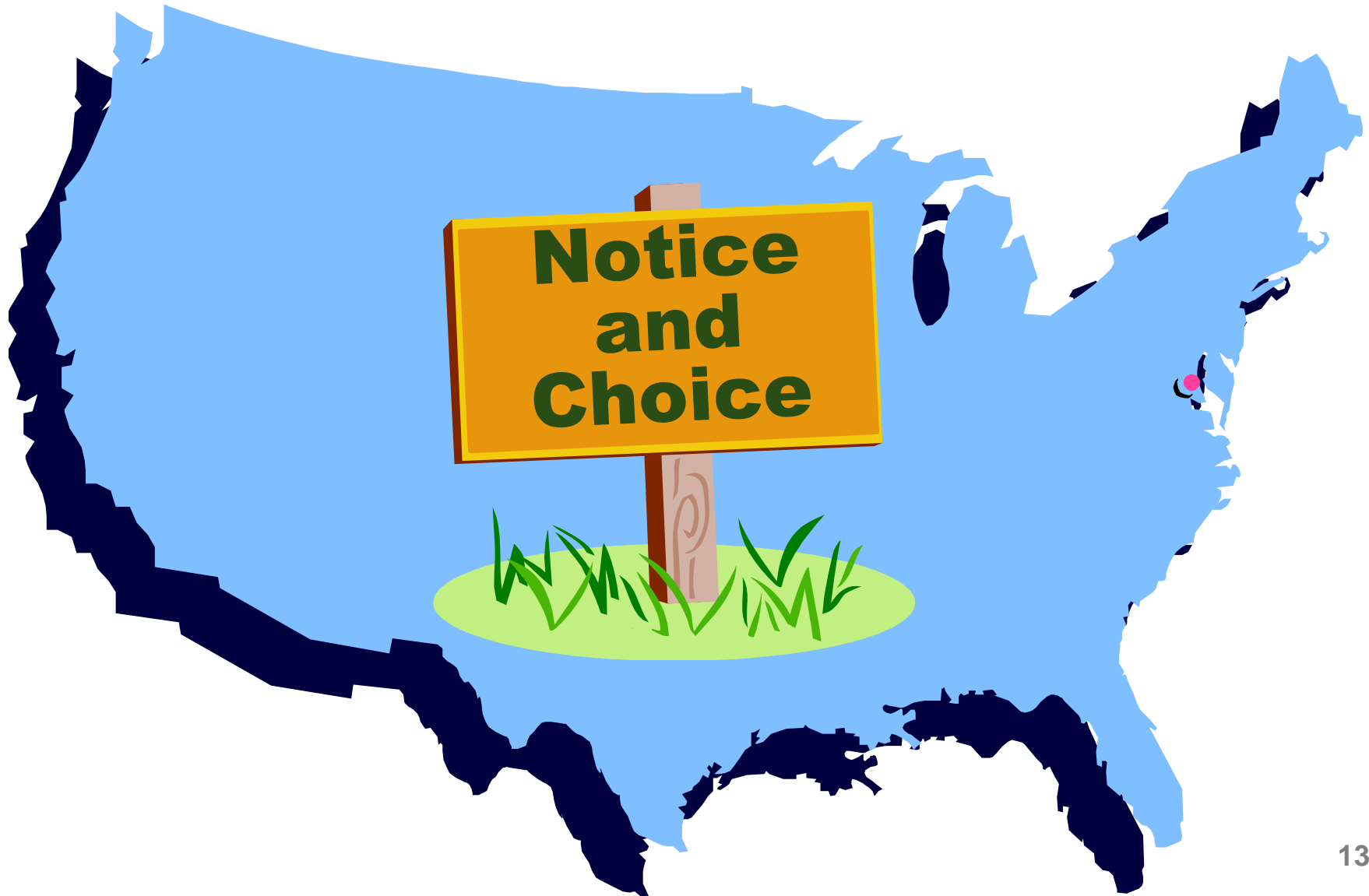
- Collection limitation
- Data quality
- Purpose specification
- Use limitation
- Security safeguards
- Openness
- Individual participation
- Accountability
- <http://www.privacyrights.org/ar/fairinfo.htm>

US government privacy reports

- U.S. FTC and White House reports released in 2012
- U.S. Department of Commerce multi-stakeholder process to develop enforceable codes of conduct



Privacy self regulation



Notice and choice

Protect privacy by giving people control over their information

Notice about data collection and use

Choices about allowing their data to be collected and used in that way

Yahoo! Privacy Policy

Hi, Lorrie | Sign Out | Help

Make Y! home, help a school

YAHOO! PRIVACY

Search

Home Products Topics Privacy Tools Help

YAHOO! PRIVACY CENTER

Welcome to the Yahoo! Privacy Center—take a look around. You'll learn how Yahoo! treats your personal information, along with ways to control your preferences and settings. As always, Yahoo! is committed to gaining your trust.

WHAT THIS PRIVACY POLICY COVERS

Information Collection and Use

Information Sharing and Disclosure

Cookies

Confidentiality and Security

Questions and Suggestions

WHAT THIS PRIVACY POLICY COVERS

Yahoo! takes your privacy seriously. Please read the following to learn more about our privacy policy.

The federal government and technology industry have developed practical tips to help you protect your privacy and protect your personal information.

How Yahoo! Uses Your Personal Information

This policy covers how Yahoo! treats personal information that Yahoo! collects and receives, including information related to your past use of Yahoo! products and services. Personal information is information about you that is personally identifiable like your name, address, email address, or phone number, and that is not otherwise publicly available.

This privacy policy only applies to Yahoo!

This policy does not apply to the practices of companies that Yahoo! does not own or control, or to people that Yahoo! does not employ or manage. In addition, some companies that Yahoo! has acquired have

Highlights

What was Updated?

Manage Interest-Based Ads

To help make your experiences with Yahoo! more relevant, we employ interest-based ads. Manage your interest-based categories, or opt-out of all categories, from the Yahoo! Ad Interest Manager.

RELEVANT ADVERTISING

By bringing content and advertising to you that is relevant and tailored to your interests, Yahoo! provides a more compelling online experience. Our

Ad Interest Manager

Hi, Lorrie | Sign Out | Help

Make Y! home, help a school

YAHOO! PRIVACY

Search

Home Products Topics Preferences Help

Ad Interest Manager BETA

Yahoo! Privacy Policy > Yahoo! Privacy Policy > Ad Interest Manager

Email Print

Ad-Supported Websites

Yahoo! is an advertising supported website. Most of the products and services we offer are largely free of charge to you because we display advertising. Other websites also partner with Yahoo! to show ads on their sites to support their offerings.

More

Additional Choices

Yahoo! will apply your ad interest opt-out to certain other products we offer. By opting out of receiving interest-based ads, you will also be opting out of both receiving interest-based content and data collection through partner sites for our analytics products.

Other Inputs

Ad Interest Manager BETA

To make our ads more relevant and useful for you, we make educated guesses about your interests based on your activity on Yahoo!'s sites and services. Some of the ads we show you reflect these interests. You can opt out of interest-based advertising altogether using the tools on this page. [Learn more.](#)

Your Interest Categories ?

We use information about many of the pages you have visited, ads you have seen and clicked, and some of your searches on Yahoo! to create interest categories that help us choose the kinds of ads you'll see. You can edit or de-select categories here or opt out of interest-based ads altogether. [See All Standard Categories](#)

Interest Categories: Set to:

Miscellaneous > Government and Military

ON OFF

Save

Interest-based Ads:

Are currently on.

You must allow cookies from Yahoo! in order to opt out. To make your opt-out apply to every computer you use you must be signed in to your Yahoo! account. [Learn more.](#)

TRADER JOE'S®
SHREDDED
BITE SIZE
WHEATS

Nutrition Facts
Serving Size 1 cup (49 g)
Servings Per Container about 10

Amount Per Serving		Calories from Fat 10	
		% Daily Value*	
Total Fat	1g	2%	2%
Saturated Fat	0g	0%	0%
Trans Fat	0g	0%	0%
Cholesterol	0mg	0%	0%
Sodium	0mg	0%	0%
Potassium	180mg	5%	5%
Total Carbohydrate	30g	13%	13%
Dietary Fiber	5g	20%	20%
Sugars	0g		
Protein	5g		
Vitamin A 0% • Vitamin C 0%			
Calcium 0% • Iron 8%			
Thiamin 8% • Riboflavin 2%			
Niacin 10% • Vitamin B 0%			

INGREDIENTS: Whole Wheat, Vitamin E (to preserve freshness)

Dist. & Sold Exclusively By
Trader Joe's,
Monrovia, CA 91016



This product is sold by weight not volume. Some settling of contents may have occurred during handling and shipping.

BARBARA'S
BAKERY

Shredded
Spoonfuls®
Multigrain

Nutrition Facts
Serving Size 3/4 Cup (30g)
Servings Per Container about 21

Amount Per Serving		Calories from Fat 10	
		% Daily Value*	
Total Fat	1 1/2g	2%	2%
Saturated Fat	0g	0%	0%
Trans Fat	0g	0%	0%
Cholesterol	0mg	0%	0%
Sodium	0mg	0%	0%
Potassium	180mg	5%	5%
Total Carbohydrate	24g	8%	8%
Dietary Fiber	4g	15%	15%
Soluble Fiber	1g		
Insoluble Fiber	3g		
Sugars	0g		
Protein	4g		
Vitamin A 0% • Vitamin C 0%			
Calcium 2% • Iron 8%			

INGREDIENTS: Whole Rolled Oats, Milled Cane Sugar, Corn Flour, Rice Flour, Vegetable Oil, Canola and/or Soy Flour, and/or Sunflower Oil, Whole Wheat Flour, Brown Rice, Cornstarch, Honey Salt, Baking Soda, Salt, Baking Soda, Natural Vitamin E (Mixed Tocopherols) (Vitamin E), Vitamin C, Contains wheat and soy. Made in a peanut free facility.

Distributed by
Barbara's Bakery, Inc.,
a Westlab North America Company
20 Cameron Street, Clinton, MA 01119
www.BarbarasBakery.com

Product of Canada
©2008 Barbara's Bakery

TRADER JOE'S®
Very
Berry
Clusters®
CEREL

Nutrition Facts
Serving Size 1 cup (55 g)
Servings Per Container about 7

Amount Per Serving		Calories from Fat 30	
		% Daily Value*	
Total Fat	5g	8%	8%
Saturated Fat	0g	0%	0%
Trans Fat	0g	0%	0%
Cholesterol	0mg	0%	0%
Sodium	140mg	6%	6%
Total Carbohydrate	40g	14%	14%
Dietary Fiber	4g	15%	15%
Sugars	12g		
Protein	5g		
Vitamin A 2% • Vitamin C 2%			
Calcium 2% • Iron 8%			

INGREDIENTS: WHOLE ROLLED OATS, MILLED CANE SUGAR, CORNFLOUR, RICE FLOUR, VEGETABLE OIL, CANOLA AND/OR SOY FLOUR AND/OR SUNFLOWER OIL, WHOLE WHEAT FLOUR, BROWN RICE, CORNSTARCH, HONEY SALT, BAKING SODA, SALT, BAKING SODA, NATURAL VITAMIN E (MIXED TOCOPHEROLS), VITAMIN C, CONTAINS WHEAT AND SOY. MAY CONTAIN TRACES OF PEANUTS & SOY.

DIST. & SOLD EXCLUSIVELY BY
TRADER JOE'S, MONROVIA, CA 91016

This product is sold by weight not volume. Some settling of contents may have occurred during handling and shipping.

Nutrition Facts
Serving Size 1/2 cup (50g)
Servings Per Container about 12

Amount Per Serving		Multi Grain		with	
		Squares		Iron	
Calories	110	150			
Calories from Fat		3	10		
		% Daily Value*			
Total Fat	0.5g	1%	1%		
Saturated Fat	0g	0%	0%		
Trans Fat	0g				
		% Daily Value*			
Cholesterol	0mg	0%	0%		
Sodium	120mg	5%	5%		
Potassium	100mg	2%	2%		
Total Carbohydrate	25g	8%	8%		
Dietary Fiber	2g	8%	10%		
Sugars	4g				
		% Daily Value*			
Protein	5g				
		% Daily Value*			
Vitamin A	0%	0%	0%		
Vitamin C	0%	0%	0%		
Calcium	0%	0%	0%		
Iron	25%	25%	25%		
Vitamin D	0%	0%	0%		
Thiamin	25%	20%	20%		
Niacin	25%	20%	20%		
Vitamin B6	25%	20%	20%		
Folic Acid	25%	25%	25%		
Phosphorus	8%	20%	20%		
Magnesium	8%	20%	20%		
Zinc	25%	30%	30%		

INGREDIENTS: WHEAT FLOUR, WHOLE GRAIN WHEAT, CORN MEAL, NATIONALLY MILLED SUGAR, SALT, BAKING SODA, NATURAL VITAMIN E (MIXED TOCOPHEROLS), VITAMIN C, CONTAINS WHEAT AND SOY. MAY CONTAIN TRACES OF PEANUTS & SOY.

INGREDIENTS: WHOLE GRAIN WHEAT, CORN MEAL, NATIONALLY MILLED SUGAR, SALT, BAKING SODA, NATURAL VITAMIN E (MIXED TOCOPHEROLS), VITAMIN C, CONTAINS WHEAT AND SOY. MAY CONTAIN TRACES OF PEANUTS & SOY.

DIST. & SOLD EXCLUSIVELY BY
TRADER JOE'S, MONROVIA, CA 91016

This product is sold by weight not volume. Some settling of contents may have occurred during handling and shipping.

Shredded
Oats™
Original

Nutrition Facts
Serving Size 1/4 cup (55g)
Servings Per Container about 12

Amount Per Serving		Calories from Fat 25	
		% Daily Value*	
Total Fat	2.5g	4%	4%
Saturated Fat	0.5g	2%	2%
Trans Fat	0g		
Cholesterol	0mg	0%	1%
Sodium	250mg	10%	12%
Potassium	180mg	5%	11%
Total Carbohydrate	42g	14%	16%
Dietary Fiber	5g	20%	20%
Soluble Fiber	2g		
Insoluble Fiber	3g		
Sugars	11g		
Protein	6g		
Vitamin A 0% • Vitamin C 0%			
Calcium 4% • Iron 30%			
Thiamin 25% • Riboflavin 25%			
Niacin 25% • Vitamin B6 25%			
Folate 25% • Vitamin B12 25%			
Zinc 15%			

INGREDIENTS: ORGANIC WHOLE GRAIN WHEAT FLOUR, ORGANIC WHEAT BRAN, ORGANIC CORNFLOUR, ORGANIC BAKING SODA, ORGANIC NATURAL VITAMIN E (MIXED TOCOPHEROLS), ORGANIC VITAMIN C, CONTAINS WHEAT AND SOY. MAY CONTAIN TRACES OF PEANUTS & SOY.

INGREDIENTS: ORGANIC WHOLE GRAIN WHEAT FLOUR, ORGANIC WHEAT BRAN, ORGANIC CORNFLOUR, ORGANIC BAKING SODA, ORGANIC NATURAL VITAMIN E (MIXED TOCOPHEROLS), ORGANIC VITAMIN C, CONTAINS WHEAT AND SOY. MAY CONTAIN TRACES OF PEANUTS & SOY.

DIST. & SOLD EXCLUSIVELY BY
TRADER JOE'S, MONROVIA, CA 91016

This product is sold by weight not volume. Some settling of contents may have occurred during handling and shipping.

TRADER JOE'S®
Organic
HIGH FIBER O's®

Nutrition Facts
Serving Size 1/4 cup (55g)
Servings Per Container about 11

Amount per Serving		Calories from Fat 10	
		% Daily Value*	
Total Fat	1g	2%	2%
Saturated Fat	0g	0%	0%
Trans Fat	0g		
Cholesterol	0mg	0%	0%
Sodium	115mg	5%	5%
Total Carbohydrate	44g	15%	15%
Dietary Fiber	9g	36%	36%
Soluble Fiber	less than 1g		
Insoluble Fiber	8g		
Sugars	9g		
Protein	6g	12%	12%
Vitamin A 0% • Vitamin C 130%			
Calcium 4% • Iron 30%			
Thiamin 25% • Riboflavin 25%			
Niacin 25% • Vitamin B6 25%			
Folate 25% • Vitamin B12 25%			
Zinc 15%			

INGREDIENTS: ORGANIC WHOLE GRAIN WHEAT FLOUR, ORGANIC WHEAT BRAN, ORGANIC CORNFLOUR, ORGANIC BAKING SODA, ORGANIC NATURAL VITAMIN E (MIXED TOCOPHEROLS), ORGANIC VITAMIN C, CONTAINS WHEAT AND SOY. MAY CONTAIN TRACES OF PEANUTS & SOY.

INGREDIENTS: ORGANIC WHOLE GRAIN WHEAT FLOUR, ORGANIC WHEAT BRAN, ORGANIC CORNFLOUR, ORGANIC BAKING SODA, ORGANIC NATURAL VITAMIN E (MIXED TOCOPHEROLS), ORGANIC VITAMIN C, CONTAINS WHEAT AND SOY. MAY CONTAIN TRACES OF PEANUTS & SOY.

DIST. & SOLD EXCLUSIVELY BY
TRADER JOE'S, MONROVIA, CA 91016

This product is sold by weight not volume. Some settling of contents may have occurred during handling and shipping.

TRADER JOE'S
Organic
Corn Flake

Nutrition Facts
Serving Size 1 Cup (30g)
Servings Per Container about 11

Amount Per Serving		Calories from Fat 0	
		% Daily Value*	
Total Fat	0g	0%	0%
Saturated Fat	0g	0%	0%
Trans Fat	0g		
Cholesterol	0mg	0%	0%
Sodium	280mg	12%	12%
Total Carbohydrate	26g	9%	9%
Dietary Fiber	less than 1g	3%	3%
Sugars	2g		
Protein	2g		
Vitamin A 25% • Vitamin C 25%			
Calcium 0% • Iron 45%			
Vitamin D 25% • Thiamin 25%			
Riboflavin 25% • Niacin 25%			
Vitamin B6 25% • Folic Acid 50%			
Vitamin B12 25% • Zinc 25%			

INGREDIENTS: ORGANIC MILLED CORN, ORGANIC EVAPORATED CANE JUICE, SEA SALT, ORGANIC BARLEY MALT EXTRACT, SOY LECTIN (AN EMULSIFIER), MIXED TOCOPHEROLS (VITAMIN E) ADDED TO PRESERVE FRESHNESS, VITAMINS & MINERALS: FERRIC ORTHOPHOSPHATE (IRON SOURCE), SODIUM ASCORBATE (VITAMIN C), VITAMIN A ACETATE, NIACINAMIDE (A B VITAMIN), ZINC OXIDE (ZINC SOURCE), FOLIC ACID (A B VITAMIN), CHOLECALCIFEROL (VITAMIN D), PYRIDOXINE HYDROCHLORIDE (VITAMIN B6), THIAMIN MONONITRATE (VITAMIN B1), THIAMIN MONONITRATE (VITAMIN B1).

INGREDIENTS: ORGANIC WHOLE GRAIN WHEAT FLOUR, ORGANIC WHEAT BRAN, ORGANIC CORNFLOUR, ORGANIC BAKING SODA, ORGANIC NATURAL VITAMIN E (MIXED TOCOPHEROLS), ORGANIC VITAMIN C, CONTAINS WHEAT AND SOY. MAY CONTAIN TRACES OF PEANUTS & SOY.

DIST. & SOLD EXCLUSIVELY BY
TRADER JOE'S, MONROVIA, CA 91016

This product is sold by weight not volume. Some settling of contents may have occurred during handling and shipping.

Privacy Facts

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

Privacy Facts

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

Privacy Facts

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

Privacy Facts

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

Why don't we have a market for privacy?

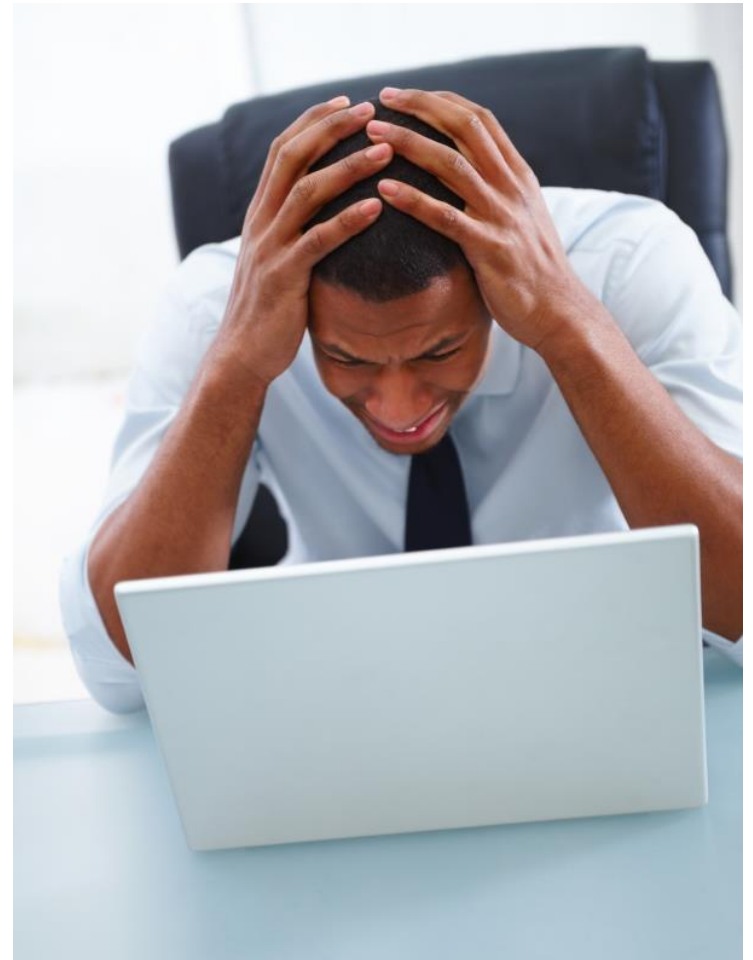
Privacy concerns seem inconsistent with behavior

- People say they want privacy, but don't always take steps to protect it
- Many possible explanations
 - They don't really care that much about privacy
 - They prefer immediate gratification to privacy protections that they won't benefit from until later
 - They don't understand the privacy implications of their behavior
 - The cost of privacy protection (including figuring out how to protect their privacy) is too high

Nobody wants to read privacy policies

“the notice-and-choice model, as implemented, has led to long, incomprehensible privacy policies that consumers typically do not read, let alone understand”

- *Protecting Consumer Privacy in an Era of Rapid Change. Preliminary FTC Staff Report. December 2010.*



Cost of reading privacy policies

- What would happen if everyone read the privacy policy for each site they visited once each month?
- Time = 244/hours year
- Cost = \$3,534/year
- National opportunity cost for time to read policies: \$781 billion





Your Data is Used Only for the Intended Use



Your Data May be Used for Purposes You Do Not Intend



Your data is never given to advertisers.



Site gives your data to advertisers.



Your data is never bartered or sold.



Your data may be bartered or sold.



Data is given to law enforcement only when legal process is followed.



Data may be given to law enforcement even when legal process is not followed.



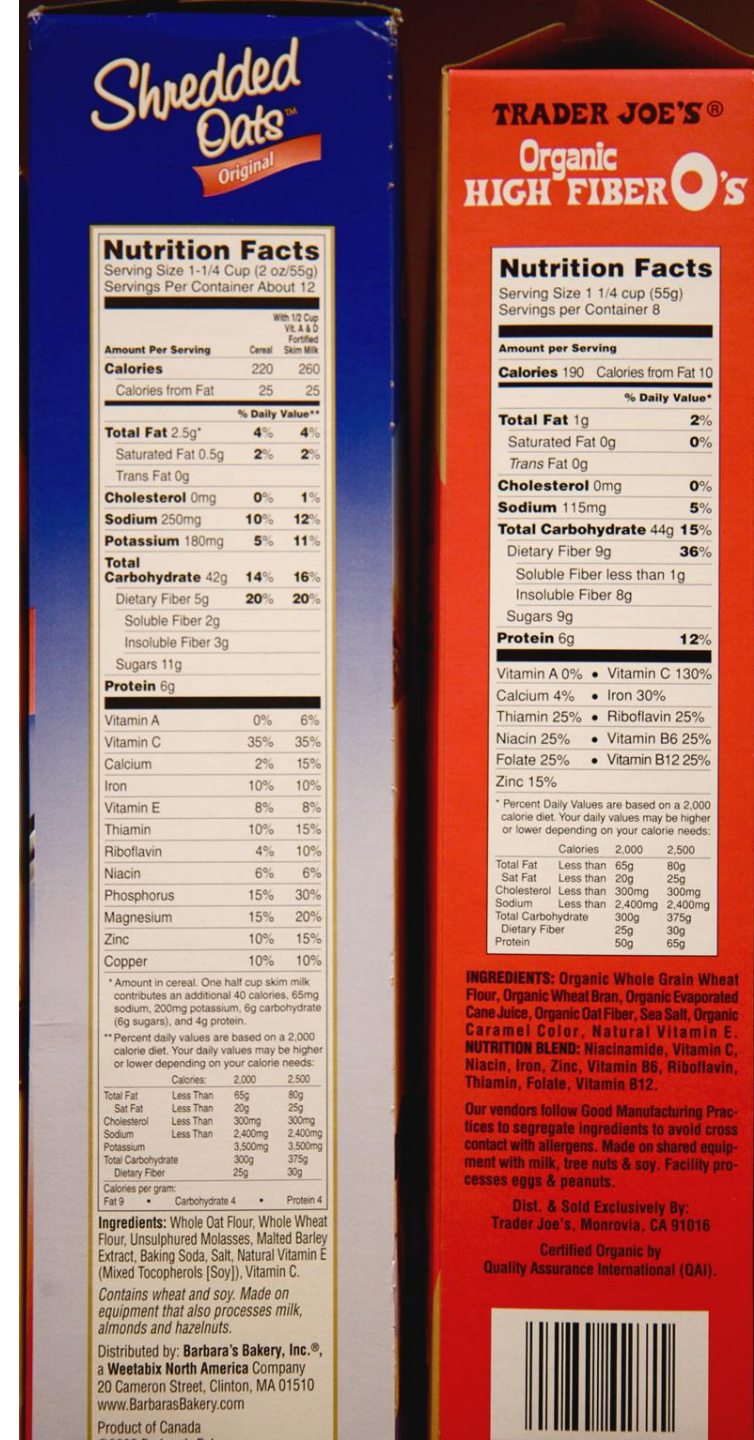
Your data is kept for less than 1 month.



Your data may be kept indefinitely.

Towards a privacy “nutrition label”

- Standardized format
 - People learn where to find answers
 - Facilitates policy comparisons
- Standardized language
 - People learn terminology
- Brief
 - People find info quickly
- Linked to extended view
 - Get more details if needed



Nutrition Facts

Serving Size 1-1/4 Cup (2 oz/55g)
Servings Per Container About 12

Amount Per Serving	Cereal	With 1/2 Cup Vit. A & D Fortified Skim Milk
Calories	220	260
Calories from Fat	25	25
	% Daily Value**	
Total Fat 2.5g*	4%	4%
Saturated Fat 0.5g	2%	2%
Trans Fat 0g		
Cholesterol 0mg	0%	1%
Sodium 250mg	10%	12%
Potassium 180mg	5%	11%
Total Carbohydrate 42g	14%	16%
Dietary Fiber 5g	20%	20%
Soluble Fiber 2g		
Insoluble Fiber 3g		
Sugars 11g		
Protein 6g		

Vitamin A	0%	6%
Vitamin C	35%	35%
Calcium	2%	15%
Iron	10%	10%
Vitamin E	8%	8%
Thiamin	10%	15%
Riboflavin	4%	10%
Niacin	6%	6%
Phosphorus	15%	30%
Magnesium	15%	20%
Zinc	10%	15%
Copper	10%	10%

* Amount in cereal. One half cup skim milk contributes an additional 40 calories, 65mg sodium, 200mg potassium, 6g carbohydrate (6g sugars), and 4g protein.

** Percent daily values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

	Calories: 2,000	2,500
Total Fat	Less Than 65g	80g
Sat Fat	Less Than 20g	25g
Cholesterol	Less Than 300mg	300mg
Sodium	Less Than 2,400mg	2,400mg
Potassium	3,500mg	3,500mg
Total Carbohydrate	300g	375g
Dietary Fiber	25g	30g

Calories per gram:
Fat 9 • Carbohydrate 4 • Protein 4

Ingredients: Whole Oat Flour, Whole Wheat Flour, Unsulphured Molasses, Malted Barley Extract, Baking Soda, Salt, Natural Vitamin E (Mixed Tocopherols [Soy]), Vitamin C.

Contains wheat and soy. Made on equipment that also processes milk, almonds and hazelnuts.

Distributed by: **Barbara's Bakery, Inc.**, a Weetabix North America Company
20 Cameron Street, Clinton, MA 01510
www.BarbarasBakery.com

Product of Canada

TRADER JOE'S® Organic HIGH FIBER O'S

Nutrition Facts

Serving Size 1 1/4 cup (55g)
Servings per Container 8

Amount per Serving	
Calories 190	Calories from Fat 10
	% Daily Value*
Total Fat 1g	2%
Saturated Fat 0g	0%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 115mg	5%
Total Carbohydrate 44g	15%
Dietary Fiber 9g	36%
Soluble Fiber less than 1g	
Insoluble Fiber 8g	
Sugars 9g	
Protein 6g	12%

Vitamin A 0% • Vitamin C 130%
Calcium 4% • Iron 30%
Thiamin 25% • Riboflavin 25%
Niacin 25% • Vitamin B6 25%
Folate 25% • Vitamin B12 25%
Zinc 15%

* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.

	Calories: 2,000	2,500
Total Fat	Less than 65g	80g
Sat Fat	Less than 20g	25g
Cholesterol	Less than 300mg	300mg
Sodium	Less than 2,400mg	2,400mg
Total Carbohydrate	300g	375g
Dietary Fiber	25g	30g
Protein	50g	65g

INGREDIENTS: Organic Whole Grain Wheat Flour, Organic Wheat Bran, Organic Evaporated Cane Juice, Organic Oat Fiber, Sea Salt, Organic Caramel Color, Natural Vitamin E, NUTRITION BLEND: Niacinamide, Vitamin C, Niacin, Iron, Zinc, Vitamin B6, Riboflavin, Thiamin, Folate, Vitamin B12.

Our vendors follow Good Manufacturing Practices to segregate ingredients to avoid cross contact with allergens. Made on shared equipment with milk, tree nuts & soy. Facility processes eggs & peanuts.

Dist. & Sold Exclusively By:
Trader Joe's, Monrovia, CA 91016

Certified Organic by
Quality Assurance International (QAI).



Iterative design process

- Series of studies
 - Focus groups
 - Lab studies
 - Online studies
- Metrics
 - Reading-comprehension (accuracy)
 - Time to find information
 - Ease of policy comparison
 - Subjective opinions, ease, fun, trust

P.G. Kelley, J. Bresee, L.F. Cranor, and R.W. Reeder. A “Nutrition Label” for Privacy. SOUPS 2009.

P.G. Kelley, L.J. Cesca, J. Bresee, and L.F. Cranor. Standardizing Privacy Notices: An Online Study of the Nutrition Label Approach. CHI2010.


Acme


information we collect	ways we use your information				information sharing	
	provide service and maintain site	marketing	telemarketing	profiling	other companies	public forums
contact information		opt out	opt out			
cookies						
demographic information		opt out	opt out			
financial information						
health information						
preferences		opt out	opt out			
purchasing information		opt out	opt out			
social security number & gov't ID						
your activity on this site		opt out	opt out			
your location						


Access to your information
This site gives you access to your contact data and some of its other data identified with you


How to resolve privacy-related disputes with this site
Please email our customer service department

acme.com
5000 Forbes Avenue
Pittsburgh, PA 15213 United States
Phone: 800-555-5555
help@acme.com

 we will collect and use your information in this way

 by default, we will collect and use your information in this way unless you tell us not to by opting out

 we will not collect and use your information in this way

 by default, we will not collect and use your information in this way unless you allow us to by opting in

Privacy label for Android

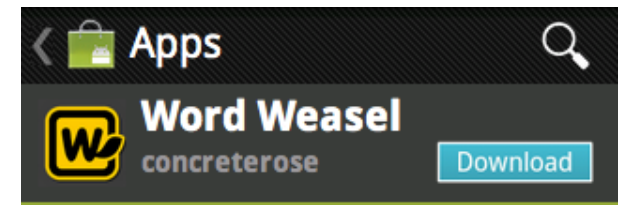


Privacy score ★★★★★ 793
10,000+ downloads
1.9MB

DESCRIPTION

Like word games? Like weasels? This is the game for you. Word Weasel is a fast word game where you find as many words as you can from 9 letters in 50 seconds. Compete with everyone else playing at the same time, a new game starts every minute!

"The most fun you can have on your own with 9 random letters. Brilliantly simple, devilishly addictive." --Kim, Android Market comment



comment

Ad supported, with ability to upgrade to ad-free full version in game.

Uses the SOWPODS word list containing 100,000+ words. They may be obscure, but yes those are words!

Privacy Facts

THIS APP COLLECTS YOUR

- Personal information
- Contacts
- Location
- Calendars
- Credit card / financial
- Diet / nutrition
- Health / medical
- Photos

THIS APP USES

- Advertising
- Analytics

REVIEWS

Average	5 stars	534
4.6	4 stars	210
★★★★☆	3 stars	37
793	2 stars	5
	1 star	7

Role play studies

- Task for participants in lab or online
 - Select apps for friend with new Android phone
 - Choose from 2 similar apps w/ different permission requests in each of 6 categories
 - Click on app name to visit download screens
- Post-task questionnaire
- Participants who saw Privacy Facts more likely to select apps that requested fewer permissions
 - Other factors such as brand and rating reduce effect

P.G. Kelley, L.F. Cranor, and N. Sadeh. Privacy as part of the app decision-making process. CHI 2013.

Requirements for meaningful control

- Individuals must understand what options they have
- Individuals must understand implications of their options
- Individuals must have the means to exercise options
- Costs must be reasonable
 - Money, time, convenience, benefits

More on privacy coming March 17