



ENVIRONMENTAL
WORKING GROUP

Transforming the Consumer Right to Know

Michael Cervino
Chief Technology Officer
@mpcervino
michael@ewg.org

Technology Opportunities

- Print on Label
- Bar Codes
- Quick Response (QR) Codes
- Radio Frequency ID (RFID) and Near Field Communications (NFC)

AB73200-

10/2013

Nutrition Facts

Serving Size: 1/4 Cup (61g)
Servings Per Container: About 7

Amount Per Serving		
Calories 30	Calories from Fat 10	
		% Daily Value*
Total Fat 1.5g		2%
Saturated Fat 0g		0%
Trans Fat 0g		
Cholesterol 0mg		0%
Sodium 350mg		15%
Total Carbohydrate 4g		1%
Dietary Fiber 0g		0%
Sugars 1g		
Protein 0g		
Vitamin A 0% • Vitamin C 6%		
Calcium 0% • Iron 2%		

*Percent Daily Values are based on a diet of other people's secrets.

INGREDIENTS: Water, Green Chile Puree, Diced Green Chiles, Corn Starch, Soybean Oil, Contains less than 2% of Spices, Natural Flavors, Citric Acid, Diced Jalapeños, Salt, Acetic Acid, Water and Calcium Chloride, Garlic Powder, Dried Cane Syrup, Hydrolyzed Corn and Soy Protein, Onion Powder, Green Bell Pepper Powder, Salt, Yeast Extract and Canola Oil. **Contains:** Soy.

Try These Great Recipes...

GREEN CHILE CHICKEN BREASTS

4 servings

4 Chicken breasts halves (skinless)
1 15 oz. can HATCH Medium Green Enchilada Sauce

Place chicken breasts and HATCH Green Chile Enchilada Sauce in a 9 inch casserole dish-cover. Marinate from 30 minutes to 6 hours in refrigerator.

Bake at 350° oven covered for 45 minutes, remove cover and bake additional 15 minutes.



GREEN CHILE CHICKEN SOUP

4 servings

1 15 oz. can HATCH Medium Green Enchilada Sauce
1 15 oz. can Chicken Broth
2 large Chicken Breasts, cooked and shredded

Combine all ingredients in pan and heat until warm, garnish with cilantro and crushed tortilla chips in bowl prior to serving.

For Recipes Visit: www.HatchChilies.com

Refrigerate unused portion in airtight container.

Dist. By: **Hatch Chile Co., LLC**
708 Marquette N.W. • Albuquerque, NM 87102

 **PRODUCT OF USA**

 **Please Recycle.**



0 28189 73200 0

HATCH
Gluten Free™

Quality Since 1987

GREEN CHILE ENCHILADA SAUCE



SERVING SUGGESTION

MEDIUM MEDIUM MEDIUM NET WT. 15 OZ. (425g)



VEGAN



GLUTEN FREE



No PRESERVATIVES



Non-GMO



PRODUCT OF USA

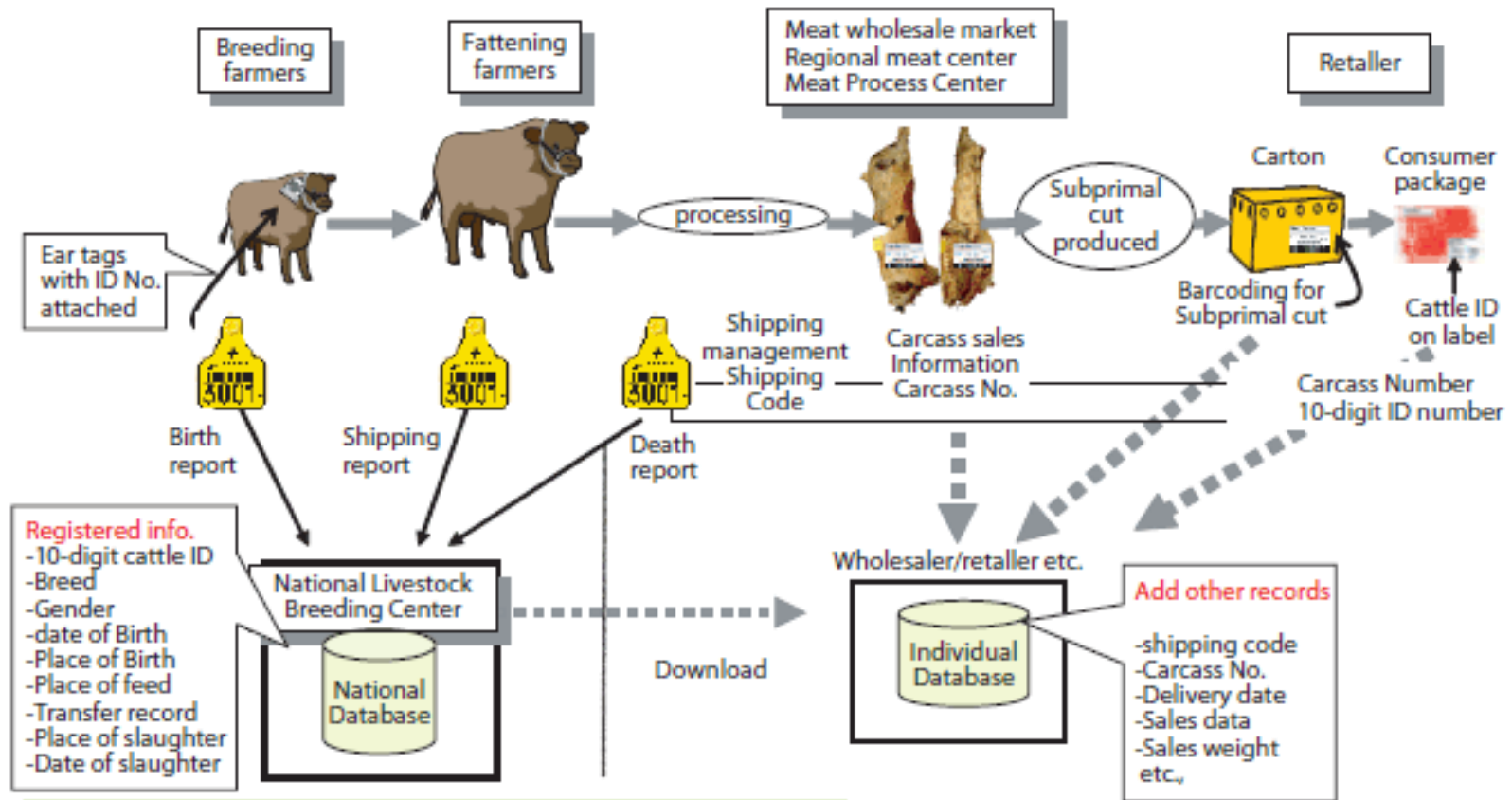
UPC Bar Codes



- Scan or data entry to access information
- Requires connectivity
- Requires smartphone / in store device
- Needs database to work
- Not formulation specific

Japanese Animal ID

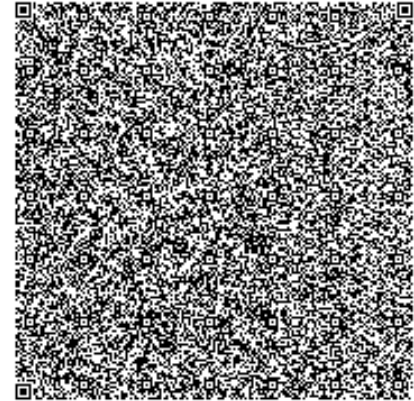
Fig. 1.5.1-1 Japanese beef traceability System



Since October 2002 Information was made accessible to cattle farmers
Since April 2003 Information was made public (for consumers) via internet

http://www.gs1jp.org/2012/barcodes_identification/1_5.html

QR Codes



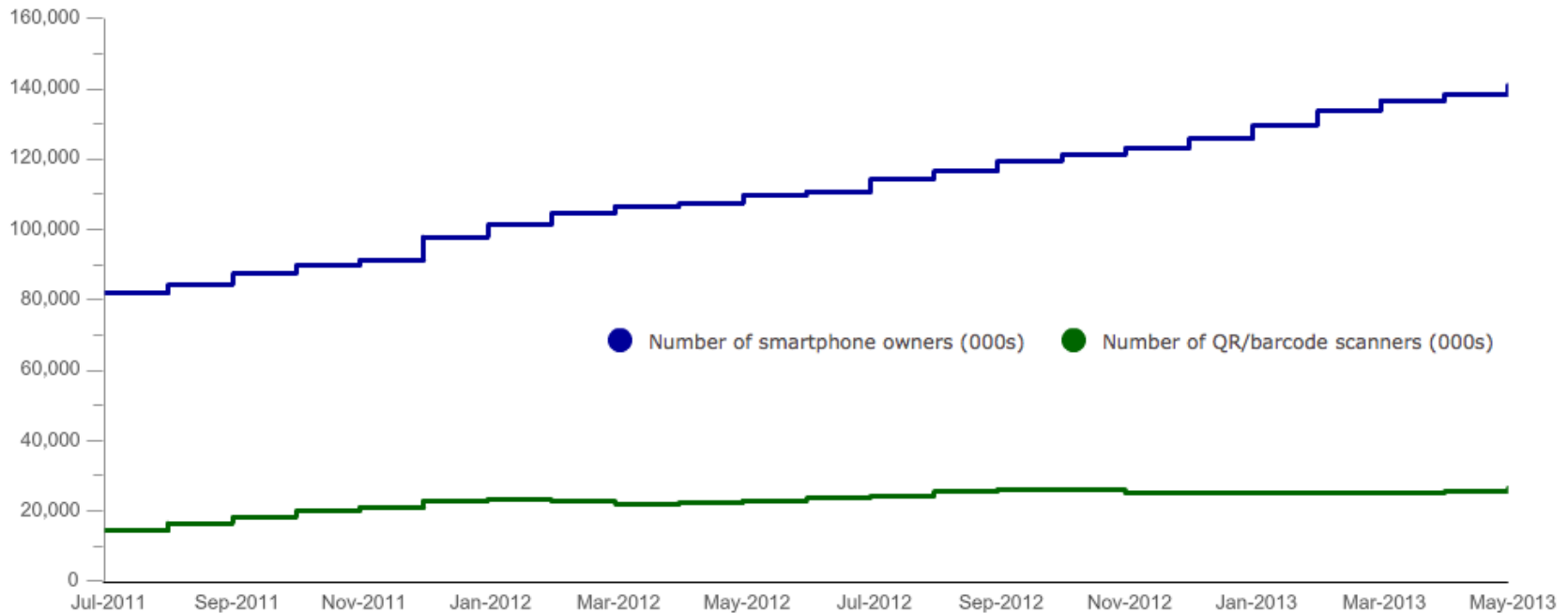
- Range of data densities
- Smartphone + QR Code Reader App
- Can produce text or URL
- Limited user-friendliness
- No alternative access options
- Needs standards for structure & storage
- US adoption on decline

QR Codes

US Smartphone Ownership and QR Code Scanning Trends

000s / all dates reflect 3-month average ending that month

July 2011 - May 2013



MC MARKETINGCHARTS.COM

Source : comScore

- 19% have ever used QR Codes (1/2013)
- Adoption flat lined as smartphones expand

QR Codes



RFID / NFC



	Active RFID	Passive RFID
Tag Power Source	Internal to tag	Energy transferred from the reader via RF
Tag Battery	Yes	No
Availability of Tag Power	Continuous	Only within field of reader
Required Signal Strength from Reader to Tag	Very Low	Very High (must power the tag)
Available Signal Strength from Tag to Reader	High	Very Low

	Active RFID	Passive RFID
Communication Range	Long range (100m or more)	Short or very short range (3m or less)
Sensor Capability	Ability to continuously monitor and record sensor input; data/time stamp for sensor events	Ability to read and transfer sensor values only when tag is powered by reader; no date/time stamp
Data Storage	Large read/write data storage (128KB) with sophisticated data search and access capabilities available	Small read/write data storage (e.g. 128 bytes)

1907658

Source: Cisco

- Medium data density – ID number
- RFID reader or data entry alternative
- Near Field Communications (NFC) payment methods could spur adoption
- Standards needed for data structure
- Database required for deciphering
- Who defines & manages structures



Labeling System Musts

- Disclosed on label itself
- Formulation specific
- Full transparency & specificity
- Clear & consistent definitions
- Scientifically-based criteria
- Standards for data structure
- Independently auditable
- No barrier to access



TED^x Manhattan
Changing the Way We Eat

EWG's Food Database Preview
Embargoed Beta Version Only. Scores Not Final.



Source: Amazon

Label captured on Apr 4, 2014

Sign up today!

Sign up for exclusive tips, action alerts and more from EWG.

[Home](#) >> [Sauces, spices & seasonings](#) >> [Oriental, mexican & ethnic sauces](#) >> [Mexican style sauces](#) >> Hatch Green Chile Enchilada Sauce

#

Hatch Green Chile Enchilada Sauce

Overall Scores

EWG scored Hatch Green Chile Enchilada Sauce on three factors: nutrition, hazard concerns, and the degree of processing. Lower scores accompany healthier, safer foods. [Read the full scoring methodology.](#)

Nutrition Rating

Hazard Concern

Nutrition Rating



The nutrition rating is based on the nutrition facts panel printed on Hatch Green Chile Enchilada Sauce. The dials for hazard concerns and degree of processing must be included to get a full picture of the food.

[details](#)

Hazard Concern



[details](#)




Degree of Processing



[details](#)

[Read our full methodology](#)

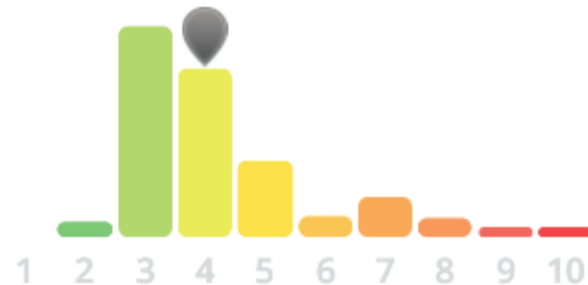
EWG's Score Highlights

-  Contains 1 synthetic, artificial, or industrial ingredient: calcium chloride
-  Contains natural flavors
-  Contains a high number of ingredients (17)

How It Compares

Other Sauces - Mexican Style Sauces

The bars below represent the score distribution for similar products. The pin represents where Hatch Green Chile Enchilada Sauce lies in the distribution.





TED^x Manhattan
Changing the Way We Eat

EWG's Food Database Preview
Embargoed Beta Version Only. Scores Not Final.

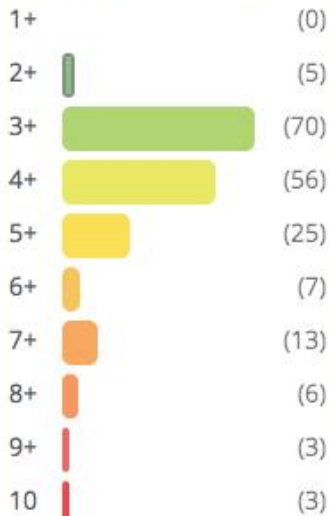
Refine Search

Search...

Go

Limit by certifications

Limit by score range









[Home](#) >> [Sauces, spices & seasonings](#) >> [Oriental, mexican & ethnic sauces](#) >> [Mexican style sauces](#)  >> [Scored 2-3](#)  >> Products

Sauces - mexican style sauces

Sorted by Score (1 to 10)

Showing 1 to 5 of 5 Results

	El Pinto Green Chile Sauce, Medium.	Sauces - Mexican Style Sauces	
	Texas Tamale Company Chipotle Pepper Sauce	Sauces - Mexican Style Sauces	
	Carey Chipotle Peppers in Adobo Sauce	Sauces - Mexican Style Sauces	
	Sunvista Green Enchilada Sauce Mild	Sauces - Mexican Style Sauces	

Thank you!

Michael Cervino
michael@ewg.org
@mpcervino

www.ewg.org

Twitter: @ewg

Facebook: ewg.org