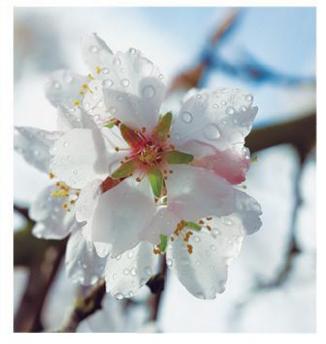
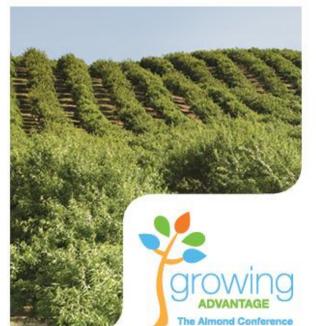


California Almond Demand: Looking to the Future









California Almond Demand: Looking to the Future

John Talbot Almond Board of California



Outlook For Future Demand







The Almond Conference

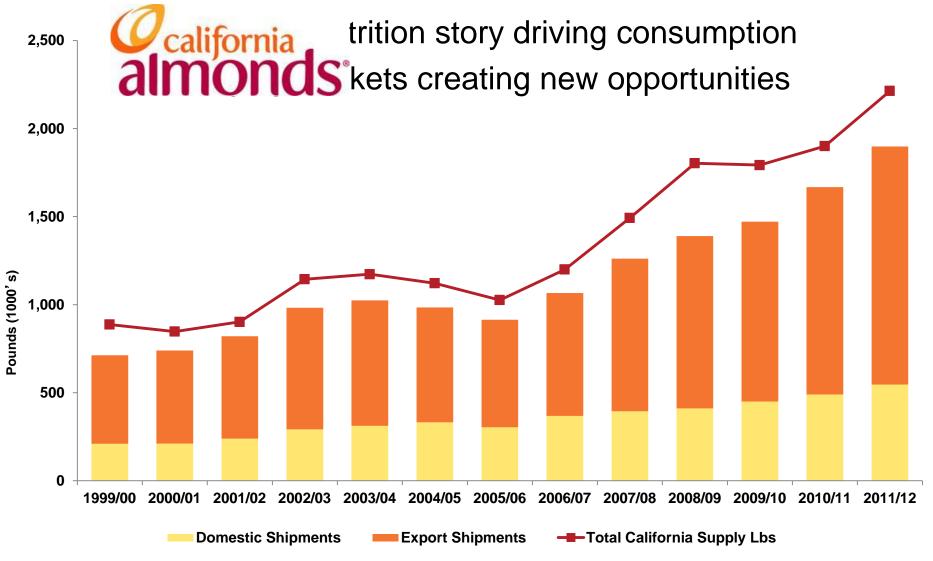






Domestic Shipments Export Shipments

California Almonds on Strong Growth Path



Nutrition Research Program Overview 1995 - 2012



Research Category	Projects	Published Papers
Heart Health and Beyond	19	22
Diabetes and Pre-diabetes	10	9
Weight Management, Satiety and Gut Health	14	14
Phytochemicals – Content and Action	12	27
Allergens	6	8
Other	10	3
Total	71	83

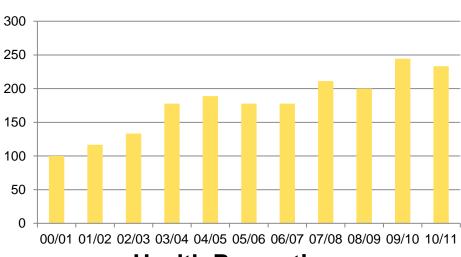
The Press Has Taken Notice



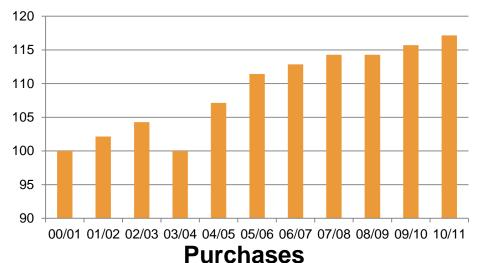


And Consumers are Responding

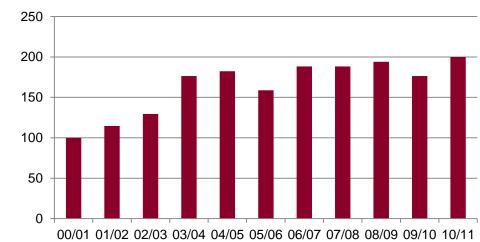




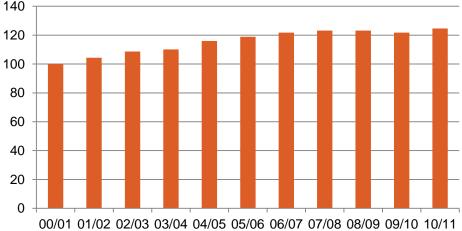
Awareness



Overall Liking



Health Perception

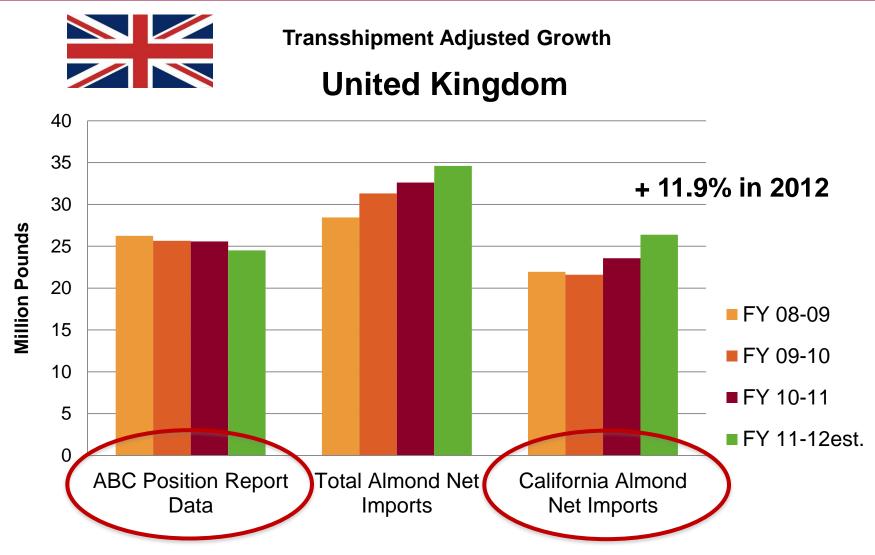


All measures indexed to 2001

Source: Attitudes, Awareness, and Usage (AAU) studies, Sterling Rice Group

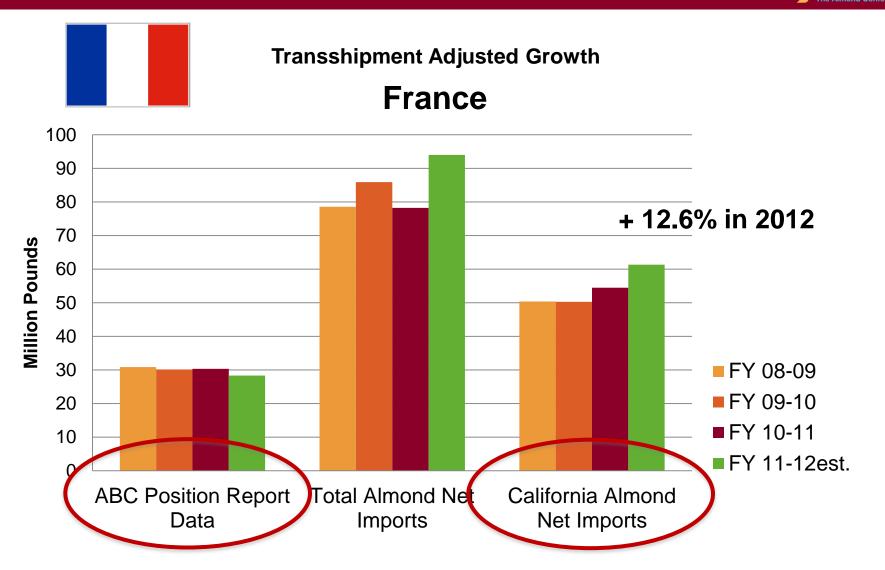
Europe Has Bright Spots as Well





Source: Global Trade Atlas

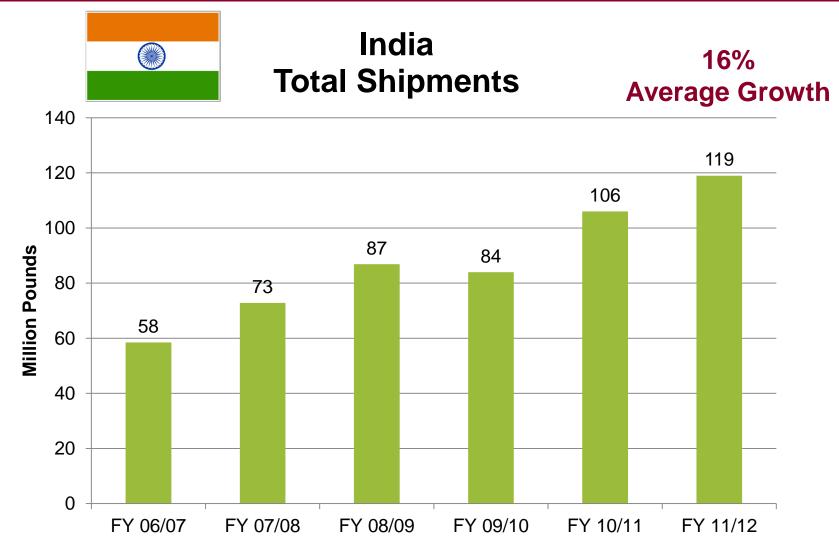
Shipment Growth in Western Europe, including Transshipments



Source: Global Trade Atlas

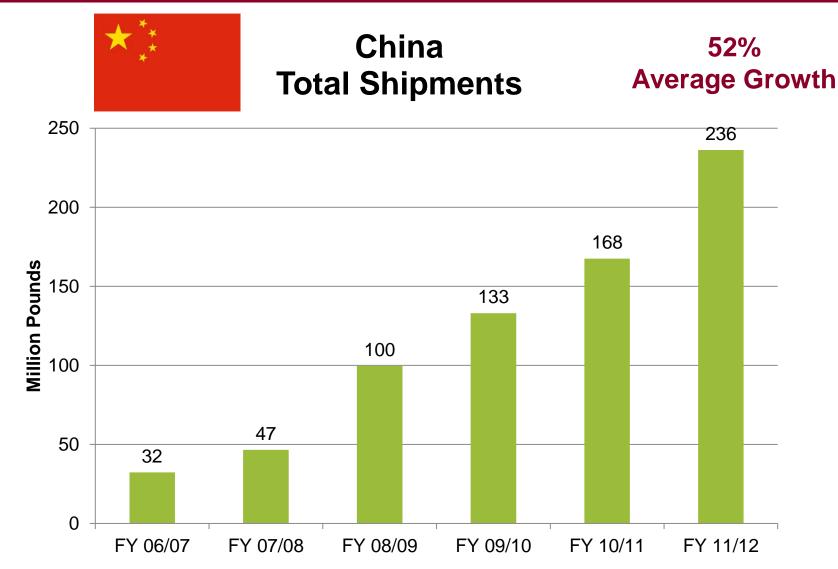
Emerging Markets Driving New Opportunities





Emerging Markets Driving New Opportunities





Source: ABC Position Reports

Recent Almond Growth Has Been Fueled by Global Trends



Emerging Markets



Key Trends:

- Urbanization helping to define areas of opportunity
- Rising middle class with greater disposable income
- Shift to more Western lifestyles with increased consumerism
- Higher incidence of diet related chronic disease heart disease, diabetes, cancer, obesity
- Greater health consciousness and focus on healthy eating

Recent Almond Growth Has Been Fueled by Global Trends

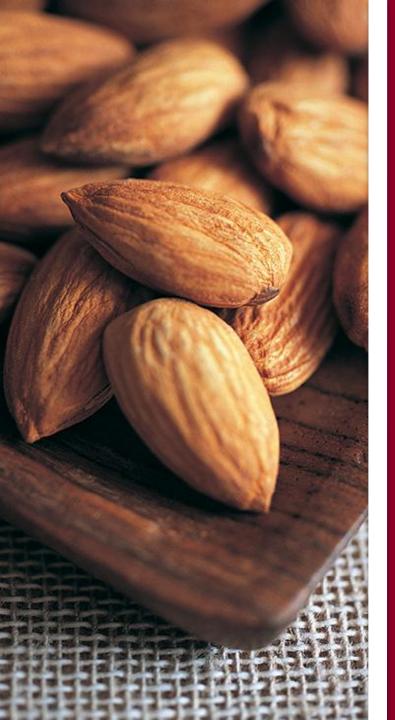


Established Markets



Key Trends:

- 1 in every 4 people will die of heart disease
- Nutrition research has driven shift in perceptions of healthy diet
- Snacking occasions have risen as traditional meals are downsized and more is eaten in between meals
- The versatility, portability, convenience, and nutritious good taste of almonds are a perfect fit with healthy lifestyles



Now a look at what to expect in the next 5 years



California Almond Demand: Looking to the Future

LuAnn Williams Innova Market Insights

California Almond Demand Looking to the future

The Almond Conference

December 13, 2012



INNOVA MARKET INSIGHTS

Lu Ann Williams Head of Research



www.innovadatabase.com

We track new products in 70+ countries



R&D: science, patents, technology, formulation, ingredients, regulation

Marketing: products, trends, consumer insights, category monitoring, news, trends

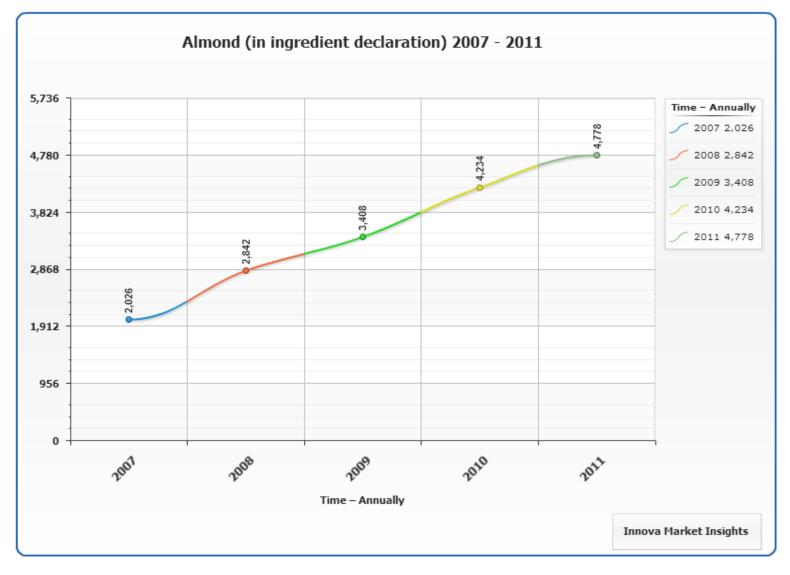


Today's presentation

- Global food trends
- Snacking
- Health & wellness
- Provenance
- Calories
- and almonds.....

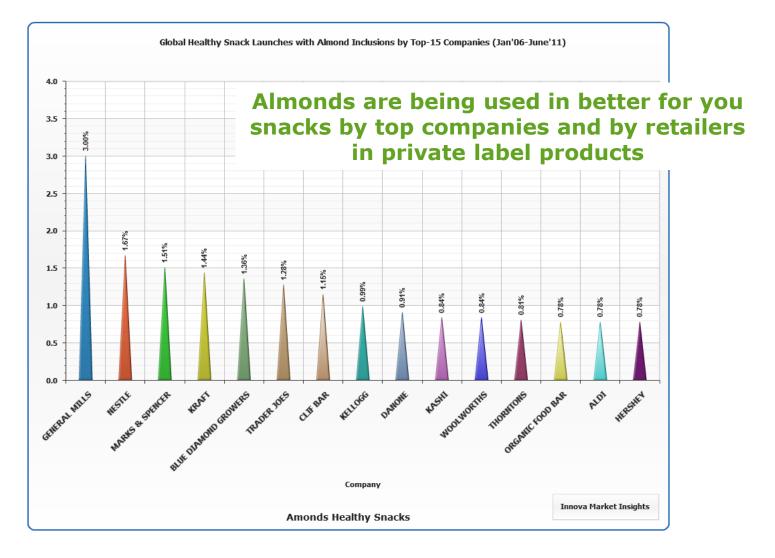


Use of almonds in new food launches





Top companies for healthy snacks with almonds





Multinationals: BFY + almonds

- General Mills: Cereal & Energy Bars, Snack Nuts & Seeds
- Nestle: Cereal & Energy Bars, Chocolate, Yogurt
- Kraft: Snack Nuts & Seeds, Cereal & Energy Bars, Chocolate
- Kellogg's: Cereal & Energy Bars
- Danone: Yogurt



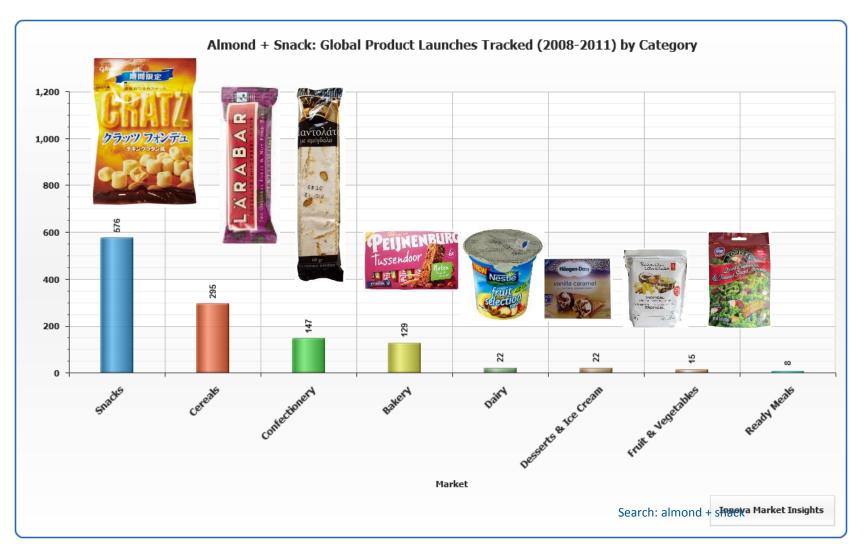








Almonds in a wide range of categories





A bright future for almonds

- They fit well into today's trends
 - Health & wellness
 - Simplicity, transparency
 - Increased snacking / on-the-go eating
- The are versatile
 - Go with almost every flavor
 - Work as a whole food or as an ingredient
- Everyone likes them, globally



Top 10 Trend 2013: The Aware Shopper

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Consumers are empowered

- Consumers are becoming increasingly attentive and sometimes critical
- Consumers are more knowledgable than ever about their food products (or at least think they are).
 - Where claims once flourished, transparency and credibility are now issues facing many food producers, both from consumers and governments.





 Manish Nadir @manish_nadir
 26 Oct

 Greenpeace - Kitkat - Ask Nestlé CEO to stop buying palm oil from

 destroyed rainforest youtu.be/1BCA8dQfGi0 via @youtube

 I View video



Eve Shepherd @tweets_eve 25 Oct Consumers fight back against Nestle's use of Palm Oil... #AdBusting #KitKat pic.twitter.com/Ng5w9JgX

View photo



 Tina Becker @starrysky4MJ
 24 Oct

 #stopanimalabuse #boycott #Nestle !! Help Stop the Use of Palm Oil!

 Palm Oil is destroying the environment and twitpic.com/b6zaxe

 Image: Wiew photo

Online protest drives Nestlé to environmentally friendly palm oil

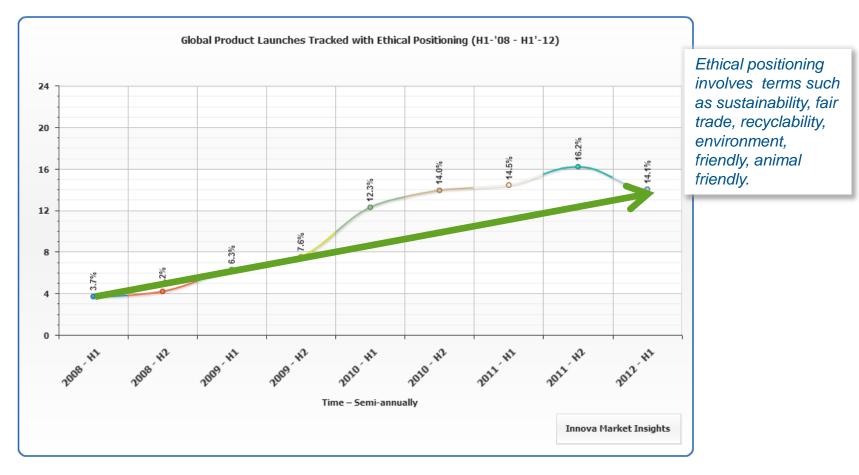
Food giant bows to Greenpeace campaign and vows to cut its 'deforestation footprint'





Global launch activity for ethical products

• Not only health is high on the consumer's agenda, they assume companies are being responsible corporate citizens.





Simple, clear and transparent labels



Australia: Lovingearth Raw Organic Cacao

Powder. Single origin, certified organic, fairly traded raw cacao powder from Satipo in the Peruvian Amazon. Jam packed with antioxidants, magnesium and bliss nutrients that can help keep you energised, healthy and happy. South Africa: Woolworths Food 3 Tasters Chewy Pecan Toffee. UTZ certified. Woolworths supports responsible cocoa farming and has committed to sourcing 100% UTZ certified cocoa for all its private label chocolates by 2016.





South Africa: O My Goodness Coco Citrus Rounds. Recyclable packaging. No additives, dairy, sugar, gluten, eggs, and preservatives. Certified organic. Produced in Plettenberg Bay, South Africa.

WOOLWORTHSFOOD WILD CAUGHT SMOKED BRISLING SARDINES WITH VEGETABLE OIL ADDED

South Africa: Woolworths Food Wild Caught Smoked Brisling Sardines with Vegetable Oil Added. Fishing for the future. This guarantee that this product is responsibly sourced. Recyclable packaging.

Clean label has become mainstream



United States: Fresh & Easy Chocolaty Peanut 90 Calorie Fiber Bars These oat and crisp rice granola bars contain five grams of fiber per serving, with a delicious, smooth chocolaty coating and the great taste of peanuts. **No artificial flavors, colors or preservatives**. High in fiber. Certified kosher. Recyclable packaging. Only 90 calories.





Mexico: Verde Valle Serena Mezcla Antioxidante Combinacion de Arandano, Cereza, Nuez, Almendra y Pistacho Pelado: Antioxidant Blend of Peeled Cranberry, Cherry, Walnut, Almond and Pistachio A combination of peeled cranberries, cherries, walnuts, almonds and pistachios, in a 60g aluminum pouch. 100% natural





Products for the critical consumer

• Clean label (natural and no additives/preservatives claims) and ethical claims (recyclable, charity and sustainability) can be used in conjunction.



Slovenia: Corny Nussvoll Erdnuss & Vollmilch: Cereal Bars with Peanuts and Chocolate More than 50% of nuts. No colors. No preservatives. Cardboard box is made of 80% recycled paper.



United Kingdom: Carmans Dark Choc Cranberry & Almond Bars Low GI rating of 53. Foods with a low glycemic index (GI) help control hunger and provide more sustained energy. Wheat free. 100% Australian made. **Made from natural ingredients**. Comes in a **recyclable packaging**.



Snacking

www.innovadatabase.com

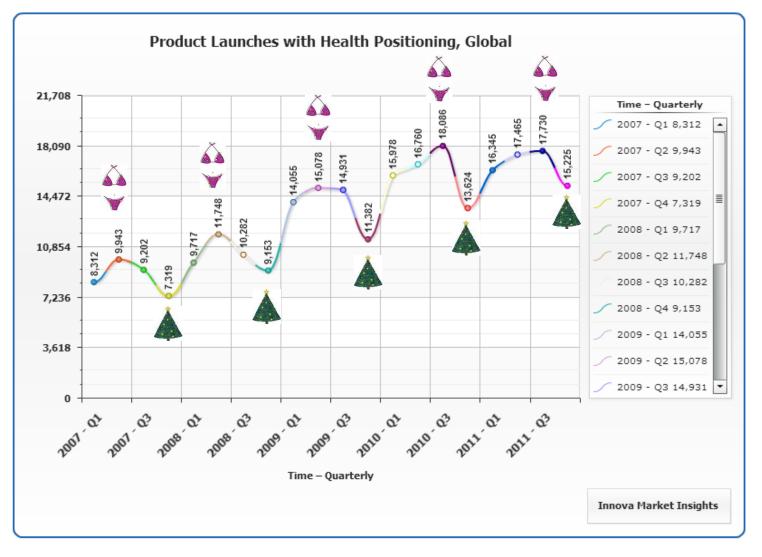
Snacking has changed





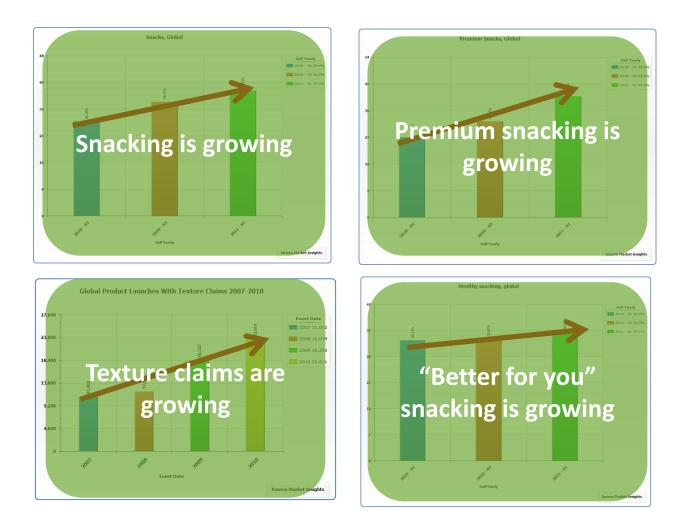


Health & wellness: a global opportunity





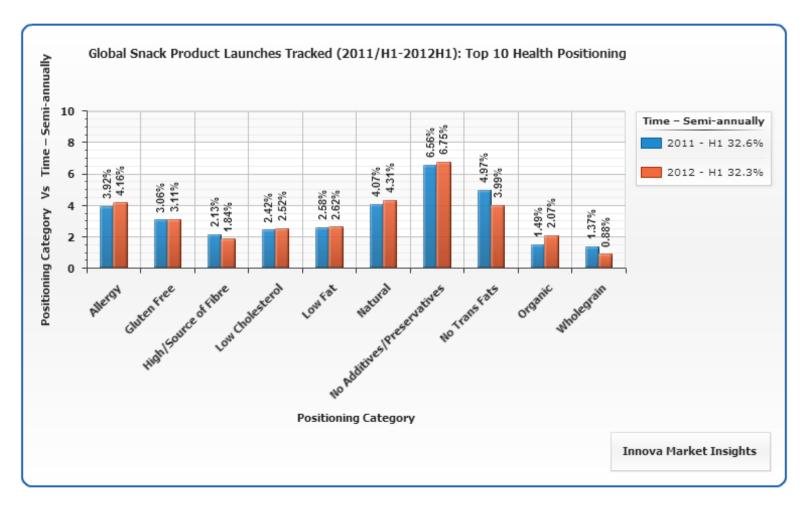
Snacking trends





Top 10 health positionings

• 34% of all snack product launched in 2012/H1 contain a health claim.







Only 79 calories (India)



- Less than 100 calorie pack.
- 100% vegetarian.



Calories + Satiety + Indulgence



- Mini corn cakes drizzled with dark chocolate, in a foil bag. For snacking between meals.
- Only 90 calories per serving. They help to calm your hunger. You can have them anytime or anywhere.
- Made with non-genetically modified corn. No preservatives or artificial colors. No hydrogenated fats. A source of fiber.



"Free from"



Denmark: Almondy Mousse Creamy Chocolate Truffle Cake. Deep frozen chocolate truffle cake in 500g cardboard box. **Gluten free.** No preservatives or artificial colorings.



Australia: Kez's Free Gluten Free Cereal with Fruit. Packed with 13 delicious ingredients. Certified halal. Kosher. Gluten and wheat free. Dairy and lactose free. Good source of fibre. No artificial colours, preservative or flavours. Made from natural ingredients. GMO free.





Smart snacking: lower saturated fat



United Kingdom: Blue Diamond Almonds with Smokehouse Flavor Smart snacking! 50% lower saturated fat than peanuts and cashews. This comparison is based on oil roasted, salted peanuts at 8.7g saturated fat per 100g and oil roasted, salted cashews at 8.5g saturated fat per 100g. No artificial colors or flavors. High in vitamin E. Made with canola, safflower and/or sunflower oil. Peanut free.



The lower sat fat nut balanced with super smoked tastiness

At Bue Diamond we balance mouth-watering flavours like deficious Smokehouse* with all the goodness of California's finest almonds, which have half the sat fat of permuts and casheve and absolutely no artificial colours or flavours. More word in the?



Fiber & digestion



Spain: EcoMil Instant Powdered Almond Drink Digest. Certified organic. Lactose free. No soy. Cholesterol free. Gluten free. Wheat free. Contains calcium. 100% non dairy. With Omega 3, fibers, and calcium



UK: Morrisons Almonds. Snack pack. A source of protein and fiber. Suitable for vegetarians



Antioxidant association



Mexico: Ann's House Creamy Strawberry Almond. Trans fat free. Cholesterol free. Low sodium. Good source of antioxidant vitamin E.. Natural goodness of fruit and nuts



Macedonia: Kibela Nutini Almonds. Roasted and salted almonds in a vacuum pack, held in a cardboard box. Source of vitamin E



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A new opportunity: *proven*, weight management

Greater use of scientifically proven claims



Ireland: Danone Actimel Probiotic Yogurt Drink: Strawberry & Banana Flavor. Helps strengthen your natural defenses. Scientifically proven



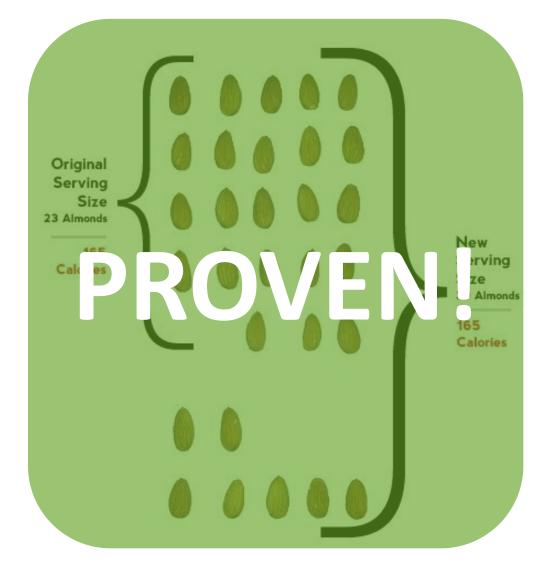
Ireland: Wrigley's Extra Ice White Chewing Gum. Sugar free chewing gums with mint flavor, microgranules and sweeteners. Sugar free. Helps keep teeth clean in a way you can feel. **Scientifically proven** to help remove stains and maintain teeth's natural whiteness



The Netherlands: Nutricia Nutrilon Goede Nacht 2: Night Time Milk Formula For Babies From 6 to 18

Months. With Immunofortis, a patented mix of scientifically proven fiber mix of GOS:Ic:FOS 9:1; DHA/AA, healthy polyunsaturated fatty acids; nucleotides, nutrients for growth and cell division

Almonds offer a <u>new</u> opportunity





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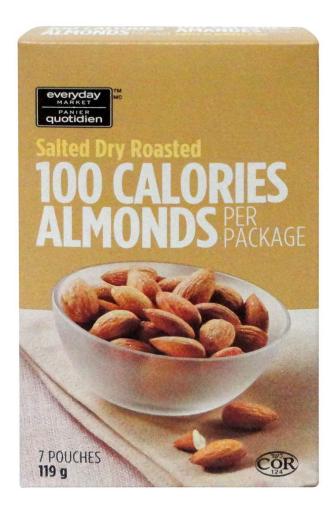
A new opportunity

- 100% natural.
- Good source of protein, fiber and vitamin E.
- No cholesterol.
- No trans fat.
- No sodium.
- A future claim?
 - Less calories than other nuts





Opportunity: larger pouch, more filling



- Seven sachets of salted dry roasted almonds.
- Only 100 calories per pouch.



Indulgence

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Chocolat

e lounge

Dublin

Airport/

Chocolate is hot



Theobroma Chocolate Lounge Malaysia, Australia, New Zeeland.



Vintage Chocolate Lounge Dubai Mall

Sushi-Bar Style

Denmark: Lu Cafe Au Petit Ecolier Extra Dark Chocolate Biscuits. Contains 70% cocoa.



UK: Marks & Spencer Belgian Triple Chocolate Cookies Indulgent Belgian triple chocolate cookies with dark, milk and white chocolates, half coated in Belgian dark chocolate.



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Permissible indulgence (now EFSA approved)

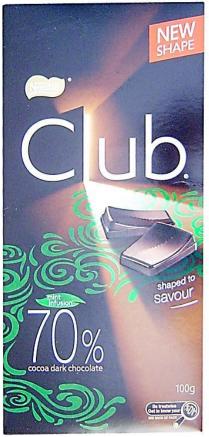
- Almonds + chocolate = permissible indulgence
- Now EFSA has issued a positive opinion on the blood flow support by cocoa powder or dark chocolate, manufacturers can look for possibilities to introduce dark chocolate products with related health claim.
- As a nut with many nutritional benefits, almond offers a wide variety of opportunities as key ingredient of dark chocolate products positioned around health.





Antioxidants: where indulgence meets health

• Chocolate products with antioxidants are good examples of combining indulgent chocolate products with a health aspect.





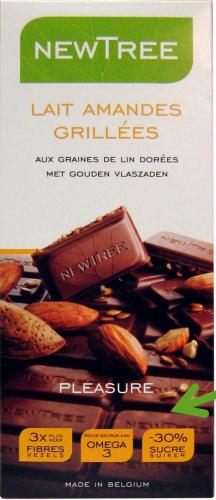
Australia: Nestle Club 70% Cocoa Dark Chocolate Mint Infusion. A serving of Cub Provides 178mg of antioxidant polyphenols. Chocolate contains minimum 70% cocoa solids. Recyclable packaging.

> UK: Beyond Dark 70% Cocoa Chocolate Chips. A 70% cocoa dark chocolate chips with intense, smooth, and sensuous flavors. Claims: Drops of pure pleasure. Naturally rich in antioxidants





Indulgence, pleasure and guilt free



Belgium: Newtree Lait Amandes Grilles Roasted Almonds Chocolate. Newtree Roasted Almonds Chocolate has the smoothness of milk chocolate enlivened by the crispness of the roasted almonds and golden flaxseeds. Less 30% fat. Contains omega 3



(C2

Almonds even more permissibly indulgent



- Hazelnuts (48%) covered with milk chocolate from Alpen milk.
- One portion of 25g contains 148kcal (7% GDA).

Price/Kilo: EUR 14.10





- Roasted whole almonds covered in silky smooth and richly delicious Dove dark chocolate.
- One portion of 39g contains 210
- Price/Kilo: EUR 25.27

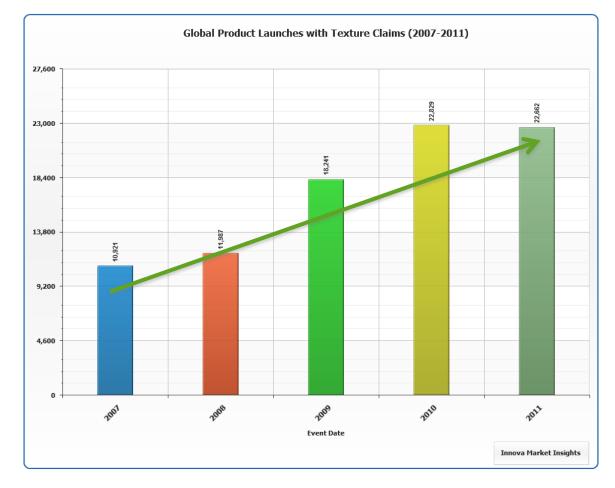


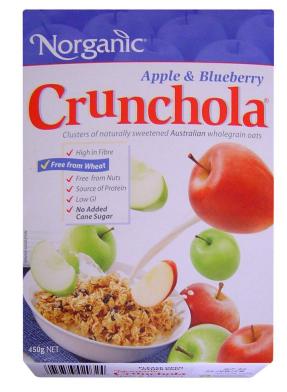
Top 10 Trend 2013: Sensory Experience

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Texture claim growth





Australia: Norganic Crunchola Apple & Blueberry Australian Wholegrain Oats

Search string: crispy crisp crunch crunchy velvet chewy chunk chunky cluster smooth bites silk silky nuggets creamy texture

Co-branding for new flavors and textures

 Brands are teaming up to create novel and fun products, enabling unusual mixes of textures and flavors.



Germany: MilkaAlpine Milk Chocolate and TUC Cracker

AU: Kraft Philadelphia Chocolate Frosting. Ready-to-spread chocolate frosting in a plastic tub. Made with Cadbury chocolate





Playing with texture



US: Muller Quaker Greek Corner Lowfat Yogurt with Caramelized Almonds.

> Mars Chocolate Caramel Dessert with **Chewy Mars Pieces.**

the US and Europe



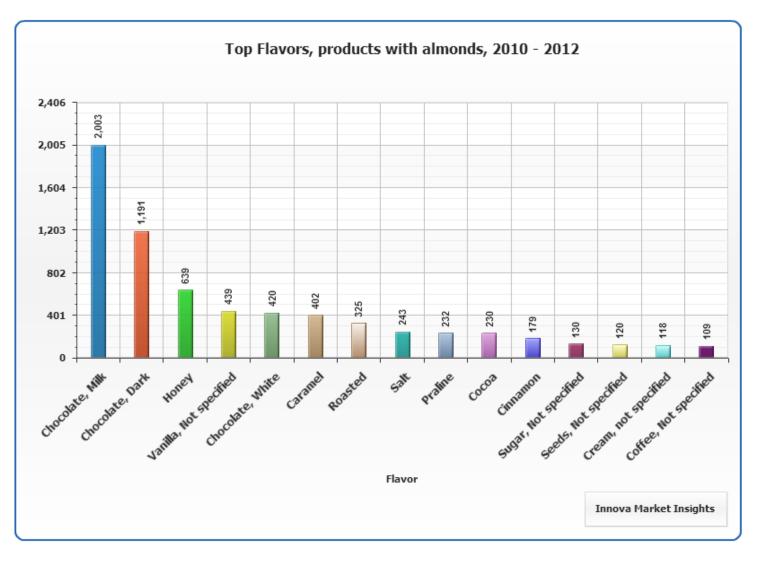




Sensory: flavors

www.innovadatabase.com

A huge range of flavors associated with almonds





Almonds go with anything



 Canada: Cinnabon Noix Melangees A La Canelle: Cinnamon Mixed Nuts

Malaysia: A premium
 selection of crunchy whole
 almonds encased in green
 tea smooth milk chocolate

Germany: Premium Quality
 Sugar Coated Almonds with
 Gingerbread Flavor







Flavor possibilities are endless.....



- Japan: Chicken Flavored Rich Hard Pretzel Snack with Roasted Almonds And Cream Cheese Coating
- Germany: Roasted California Almonds with Yogurt Flavored White Chocolate Coating
- Netherlands: Nutisal Spicy Festival Mix Dry Roasted Nuts



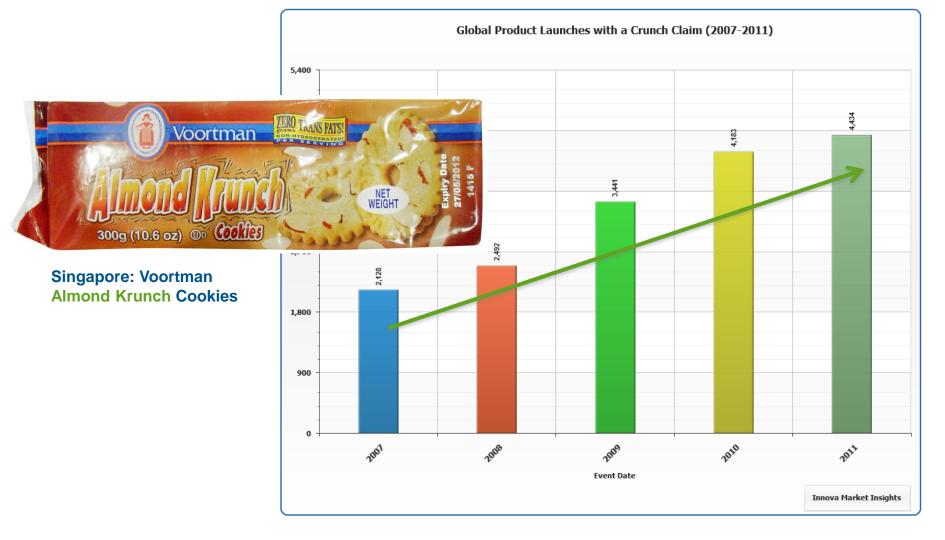




Sensory: almonds and texture



Crunch Claims Growth



Search string: crunch crunchy crunchiness

Inclusion of whole almonds

• The number of global almond introductions and global chocolate Introductions with the inclusion of whole almonds is increasing.



Malaysia: Ritter Sport Milk Chocolate Bar: Whole Almonds



France: Cote D Or Croquant Amande: Dark Chocolate Bar with Whole Almonds & Praline



Whole almonds for big taste

- Whole almonds also in other categories such as cereal & energy bars
 - demonstrates the increased desire for bigger inclusions in food products.





Thailand: Hershey's Nuggets Dark Chocolate with Almonds. Individually wrapped dark chocolates with whole almonds

Italy: Mulino Bianco Grancereale Barrette di Cereali: Cereal Bars with Whole Almonds, Red Bilberry & Crispy Grain Granules



Almond crunch





With an almond crunch ingredient



Japan: Bourbon Pakila Chocolate with Almond Crunch and Filled in Wheat Puff Stick Wafer

USA: Choxie Dark Chocolate Coconut Almond Cluster. A sweet escape of decadent coconut with an indulgent almond crunch. All covered in deliciously deep, dark chocolate.





Almond crunch flavor

• Almond is now synonymous with crunch as almond crunch is being used as a flavor name for products.



USA: Granola Flats Welcome to Wholesomeville Baked Whole Grain Chips: Almond Crunch. Slightly sweet, light, and crunchy chips made made with whole grains, almond nuts, seeds, and oats, then baked into bite sized pieces. Finally, granola is good to go.



Canada: Detour Lean Muscle Whey Protein Bar: Fudge Almond Crunch. Lean Muscle whey protein bar with fudge almond crunch covered with chocolate.



Tradition & premium

Provenance: where does my food come from?

- Interest in where their foods are coming from has never been higher among consumers.
- The cocoa industry was the pioneer with origin specific chocolate varieties



UK: The Co-Operative Truly Irresistible Fairtrade Ghanaian Dark Chocolate with Peppermint Oil. Velvety dark chocolate infused with peppermint oil for a deliciously cool flavor. Produced using the highest quality cocoa beans of Kuapa Kokoo, a co-operative of 45,000 farmers in Ghana.



Emphasizing the origin of ingredients can underline a premium positioning.



Provenance for premium positioning

ORGANIC MARICH Chocolate **Toffee Almonds** Premium California almonds in a buttery toffee glaze and creamy milk chocolate NET WT 4.5 OZ (1259)

Belgium: Belvas Belgian Chocolate Truffes Amandes: Gluten Free Organic Almond Truffles

Gluten free organic almond truffles. Milk chocolate and almonds from Murcia. This organic and Fairtrade milk chocolate is made with sweet and refined cocoa beans from the Peruvian highlands. The slightly roasted organic almond sublime the 'almond truffles" to a sweet indulgence that rivals the finest recipes without bitterness.

Philippines: Marich Organic Chocolate Toffee Almonds. Premium California almonds in a buttery toffee glaze and creamy milk chocolate.



California almonds = premium positioning

 Manufacturers can levarege the increasing interest of consumers in the origins of ingredients by communiciating the source of premium almonds from California.



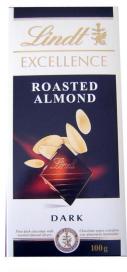
United States: Fresh & Easy Gourmet Milk Chocolate Almond and Raisin Bark. This bark is handmade with roasted, lightly salted California almonds and sun-dried Thompson raisins on top of pure milk chocolate.

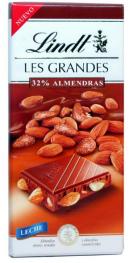
United States: Trader Joe's Dark Chocolate Almond Toffee. Crunchy toffee and roasted California almonds, covered with premium dark chocolate.

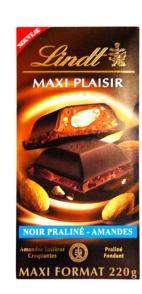




Typical almonds vs. Hazelnut chocolate products

















Some snack examples

• China \$61/lb

Thailand \$103/lb

China \$54







Some snack examples

• India \$48/lb

China \$37/lb

Netherlands \$41/lb





Wonderful® / ALMO Roasted Salted Almonds Amandes grillées salées Geröstete gesalzene Mandeln Geroosterde gezouten amandelen Almendras tostadas saladas 2009 Mandorle tostate salate



Takeaways

- Almonds are very on trend: the "perfect food"
- Better for you products: good for the bottom line
- Almonds used by most successful multinationals and by retailers in private label products
- Almonds can add premium appeal and a premium price
- Almonds bring wholesome appeal with inherent health benefits
- Almonds are versatile: work well in many applications and with all flavors – sweet, salty, ethnic
- And now, proven to have less calories















Questions