



Trends in Collagen

Jorge Sarasqueta - Director of Latam

About Innova Market Insights

- Leading global market research company focused on trends and innovation in F&B and ingredients.
- We serve our clients with our Innova Database, which is the largest F&B new product launch database:
 - Based on a network of F&B professionals
 - Tracking new products in more than 75 countries
 - Adding more than 200,000 new products per year



Trends in Collagen

TOPICS FOR TODAY

1. Overview of collagen NPD
2. Application of collagen
3. What's next?
4. Overview of gelatin NPD
5. Application of gelatin

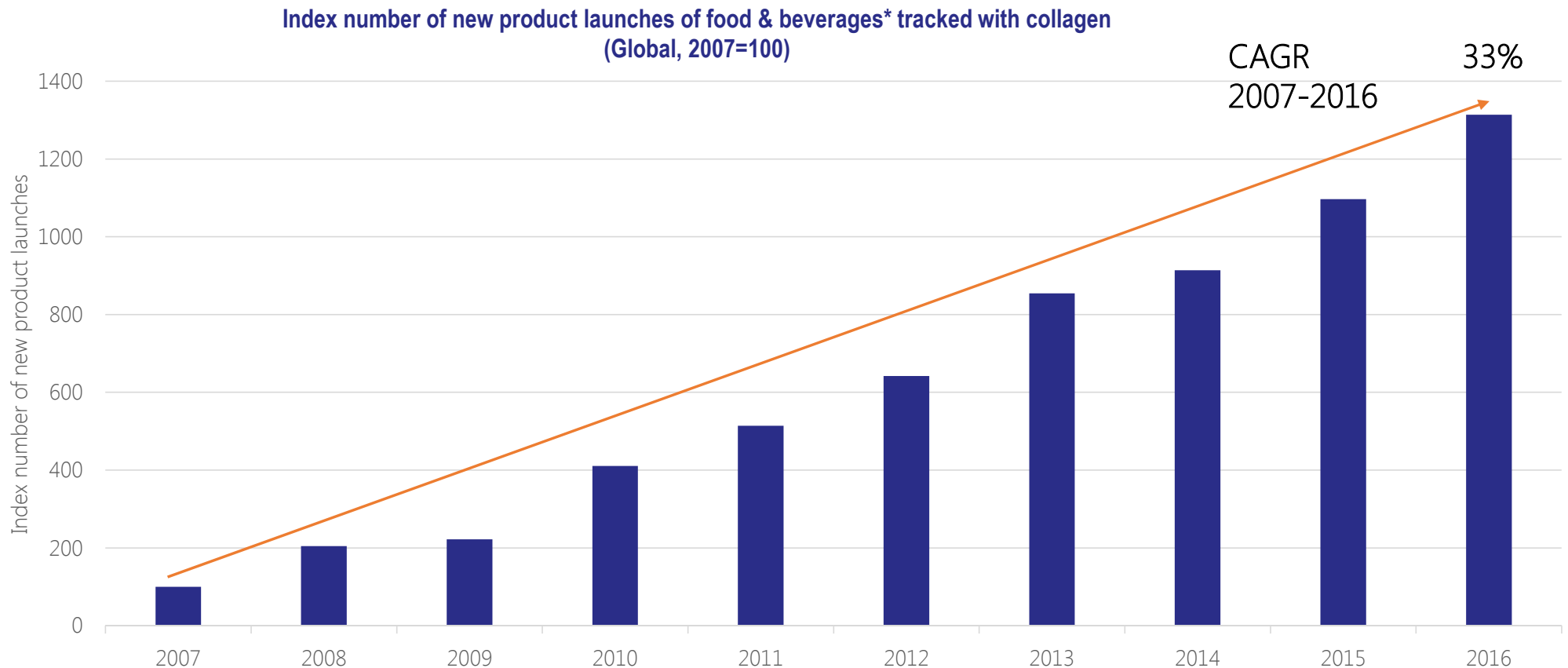




Overview of collagen NPD

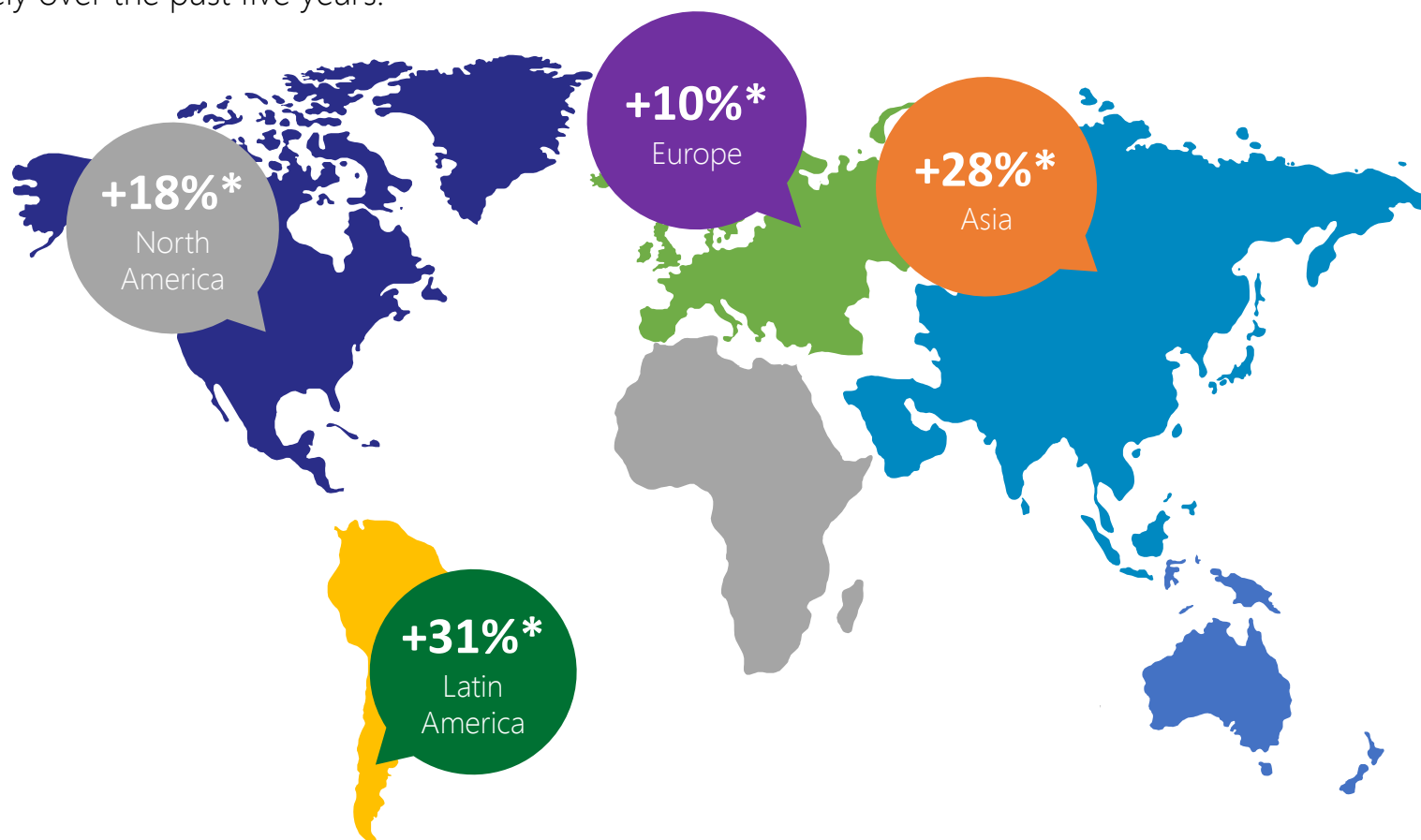
Collagen is on trend; steady growth over past 10 years

- Launches containing collagen have been rising for past ten years:
- Most of growth is attributed to supplements and sport nutrition.



Latin America and Asia are catching up the developed market for collagen use

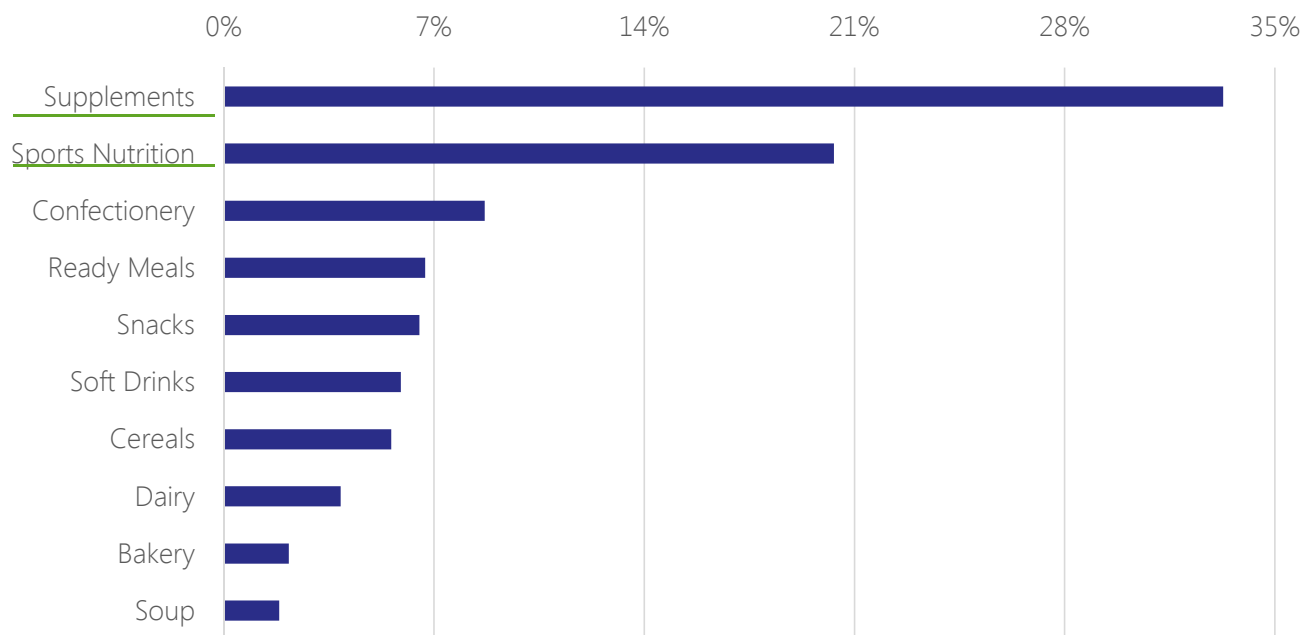
- Latin American and Asian markets show the fastest growth in terms of collagen applications, featuring CAGR of 31% and 28% respectively over the past five years.



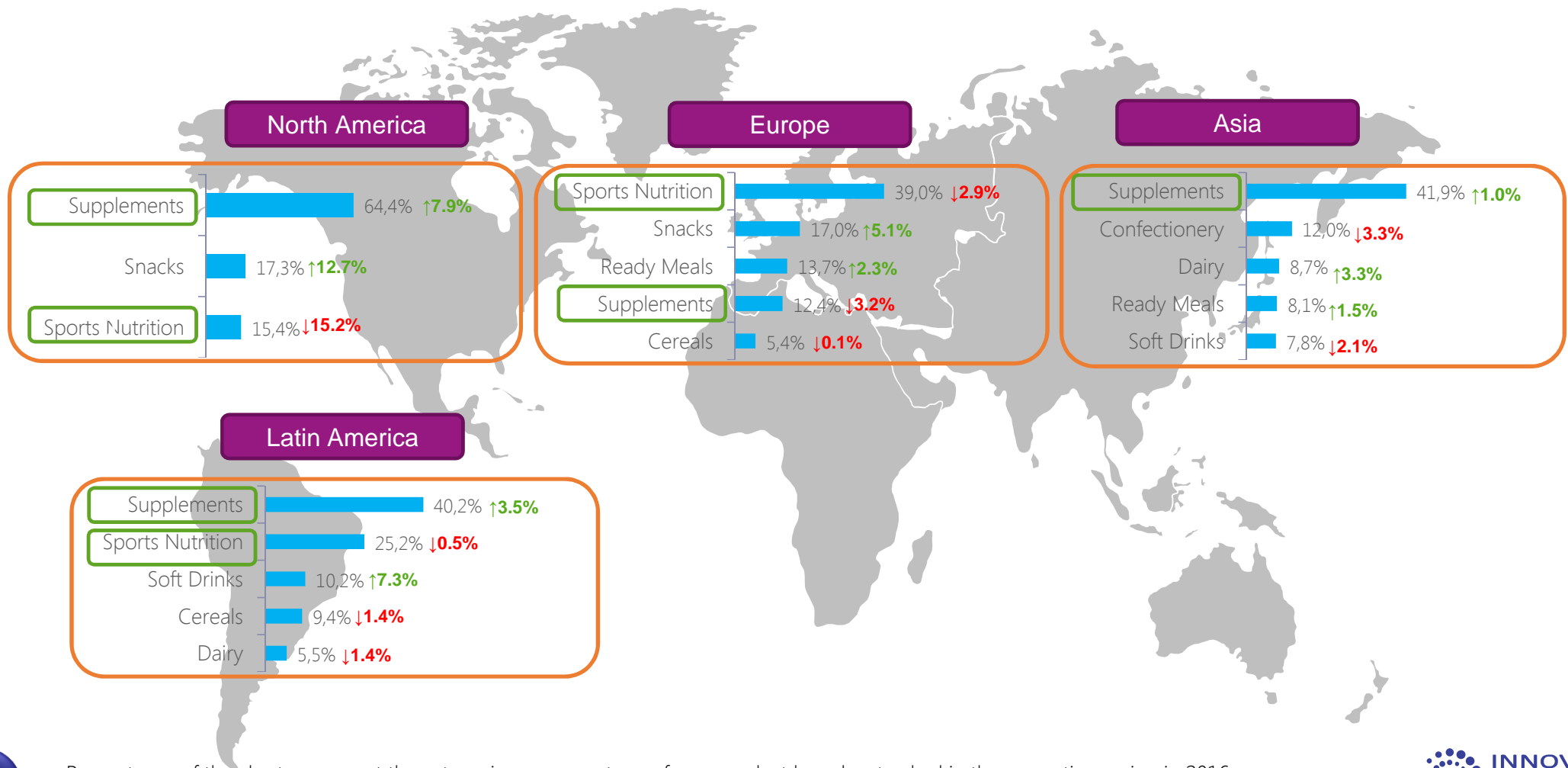
Functional benefits drive application in supplements

- Supplements and sports nutrition lead collagen applications over past 5 years.
- Health benefits of collagen drive innovation of the ingredient.

Percentage of food & beverages* new product launches tracked with collagen in top 10 market categories (Global, 2012-2016)



Key categories with collagen regionally

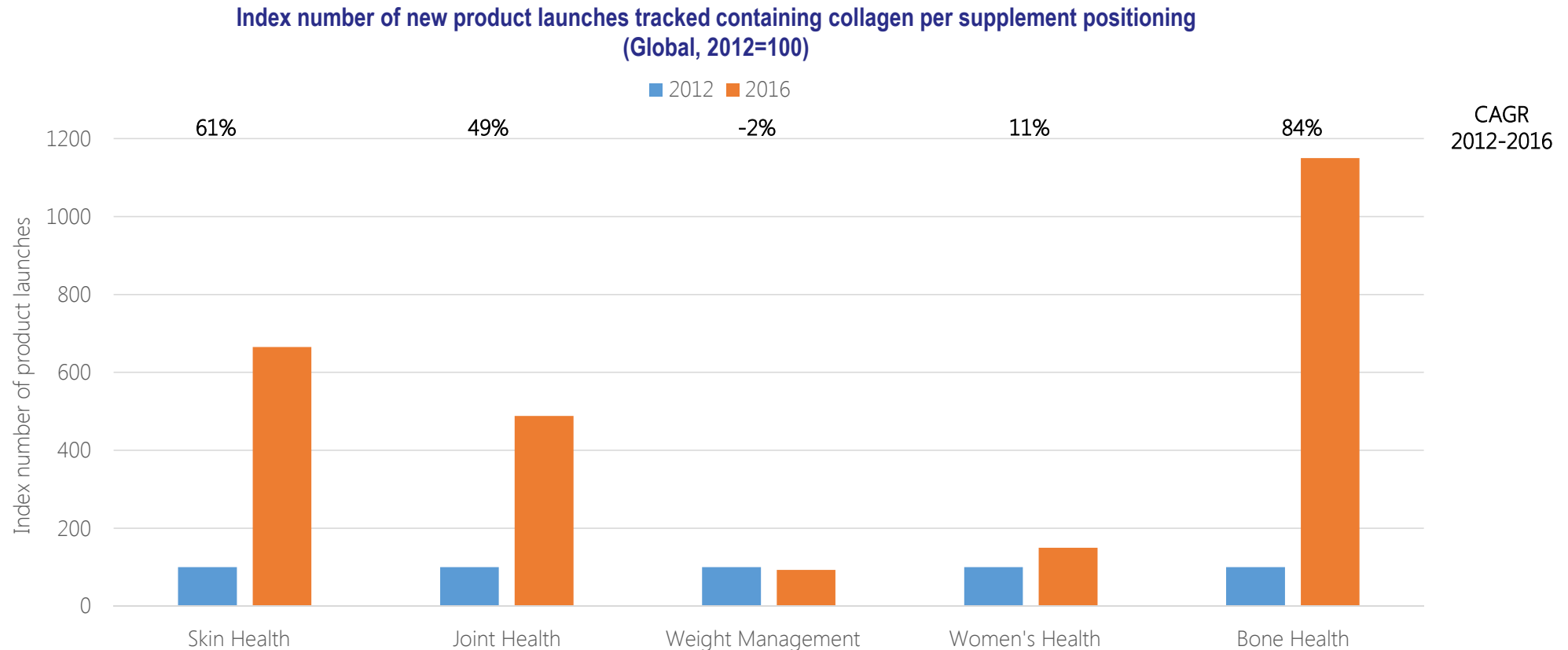


- Percentages of the charts represent the categories as percentage of new product launches tracked in the respective region in 2016
- Increase (↑) and decrease (↓) in percentage points (%) compared to 2015

Application of collagen

Mobility platform growing fast | healthy aging is a growing market

- Demand for healthy aging driving interest in supplements for skin, joint and bone health.



Joint and bone health are growing opportunities

INCREASING MOBILITY



Solgar No.7 Joint Support And Comfort Dietary Supplement
(United States, Aug 2016)

Description: Solgar No.7 joint support is the next generation alternative after glucosamine that **increases mobility, flexibility and range of motion in sensitive joints...**

STRUCTURAL PROTEIN OF TISSUES



Vitabiotics Jointace Collagen Macronutrient Supplement With Glucosamine, Collagen, Chondroitin And Vitamin D
(United Kingdom, Dec 2016)

Description: Jointace collagen **provides a high-grade collagen** which is hydrolysed to improve absorption **Collagen is a structural protein found in several connective tissues** in the body including **bones, cartilage, gums, skin, tendons and blood vessels.**

JOINT HEALTH



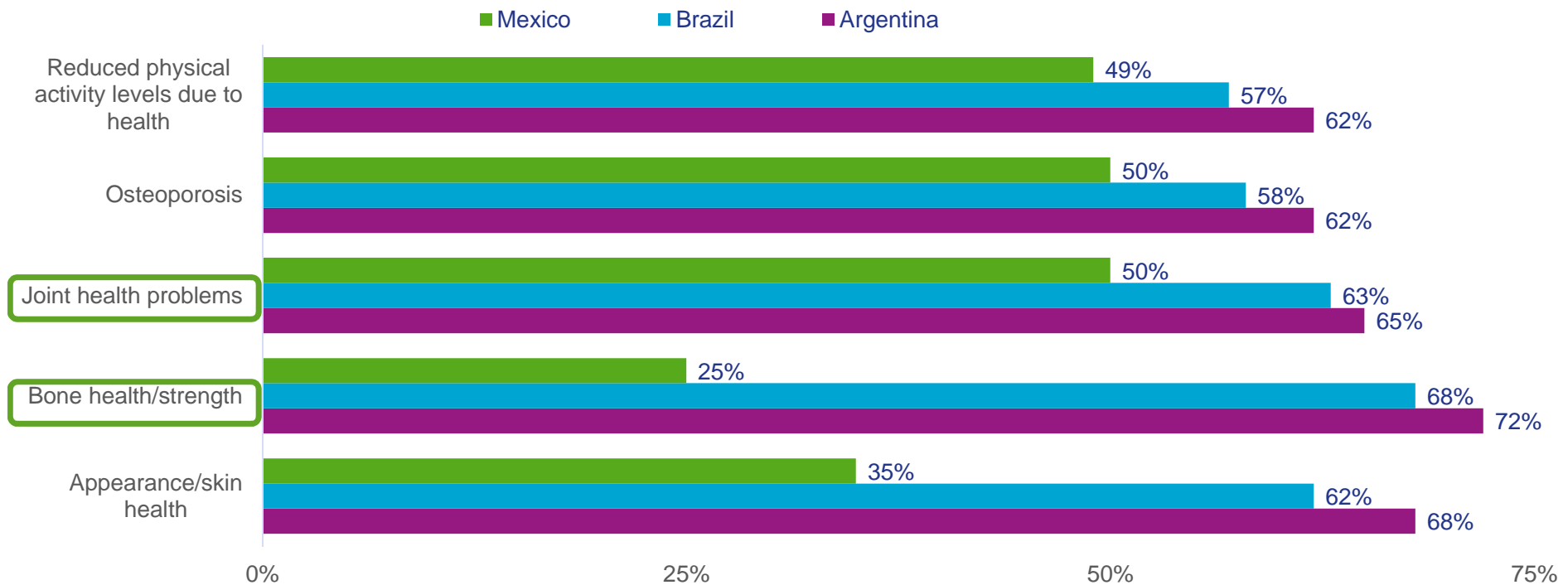
Gelicart collagen supplement
(LATAM, Mex 2014)

Description: Dietary supplement based on bioactive **collagen peptide (FORTIGEL)**, to **support long-term joint health**

Latin American consumers are very concerned about their health

- Mobility related health issues like osteoporosis, bone health and joint health problems are among the most important concerns, especially for Argentinean consumers.

% of consumers reporting to be very/extremely concerned about:



Skin health has been traditional use for collagen in Latin America

SKIN ELASTICITY



Brn Foods Foods Collagen Powder Dietary Supplement with Strawberry Flavor (Brazil, Nov 2016)

Description: ...In addition, it is also important because it is **a protein that participates in the composition of bones, tendons, cartilage and skin, helping to maintain these structures, such as the elasticity and firmness of the skin.**

SKIN DIETARY



Essential Nutrition Mistura Para Preparado De Babida A Base De Colageno Sabor Cranberry: Collagen Skin Dietary Supplement With Cranberry Flavor (Brazil, Mar 2016)

Description: **Collagen Skin dietary supplement acts directly on skin cells, minimizing the formation of wrinkles, sagging and fine lines, favoring the elasticity and skin hydration...**

SKIN MAINTAINING



Geneo Skin Collagen, Lycopene And Carotene Dietary Supplement Powder (Argentina, Aug 2016)

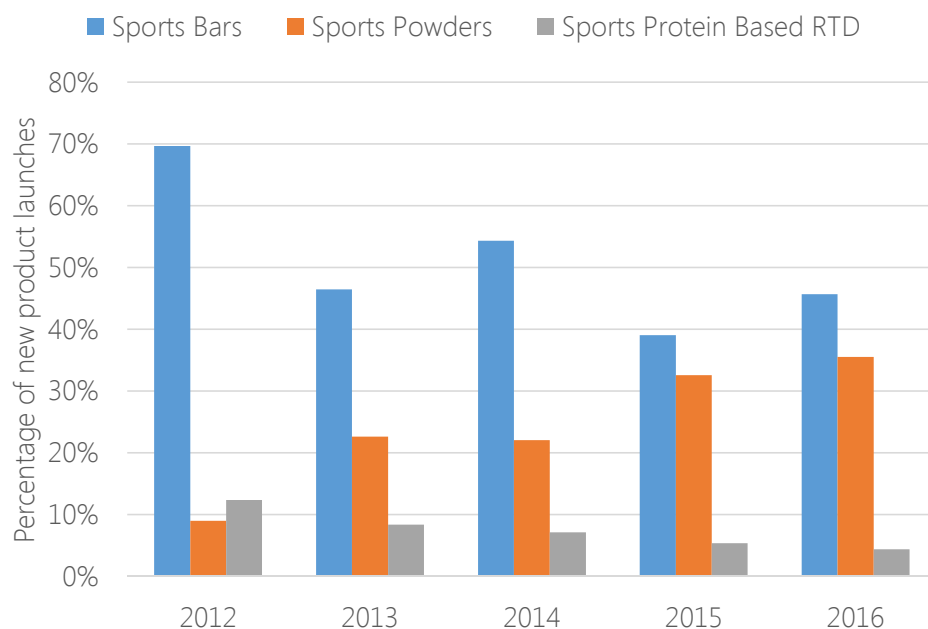
Claims: Studies has proven that **hydrolysed collagen contributes to maintain skin firmness and elasticity, carotene associated with lycopene helps to a better tanning protecting skin from damages produced by solar radiation.**

Collagen in sports nutrition growing in popularity

BARS AND POWDERS

- Bars and powders are most commonly seen format for collagen application in sports nutrition products.

Percentage of sports nutrition new product launches tracked with collagen (Global, 2012-2016)



COLLAGEN COMBINED WITH OTHER PROTEIN



Max Titanium Mass Titanium 17500 Sabor Chocolate: Mass Titanium 17500 Dietary Supplement With Chocolate Flavor (Brazil, Jun 2016)

Description: ...It contains exclusive formula of three types of proteins with high biological value: whey protein concentrate, hydrolyzed collagen and egg albumen. .

Application in the Latin American market

PROTEIN BARS



Integralmedica Vo2 Protein Bar: Cookie Flavor (Brazil, Jun 2016)

Ingredients: Fructose syrup, protein concentrated whey, soy protein isolate, chocolate sauce with milk, fructooligosaccharide, safflower oil, **protein hydrolysates (collagen)**, vitamins mix...

SPORTS GEL



Musclepharm Sport Series Combat Pro-Gel With Chocolate Flavor (United States, Aug 2016)

Ingredients: Purified water, **hydrolyzed collagen protein**, whey protein isolate, maltodextrin, glucose polymers, alkalized cocoa powder, ascorbic acid, niacinamide, calcium pantothenate, pyridoxine hydrochloride, riboflavin, sucralose, potassium acesulfame, lactic acid, sodium chloride, potassium sorbate, and sodium benzoate.

PROTEIN BASED RTD



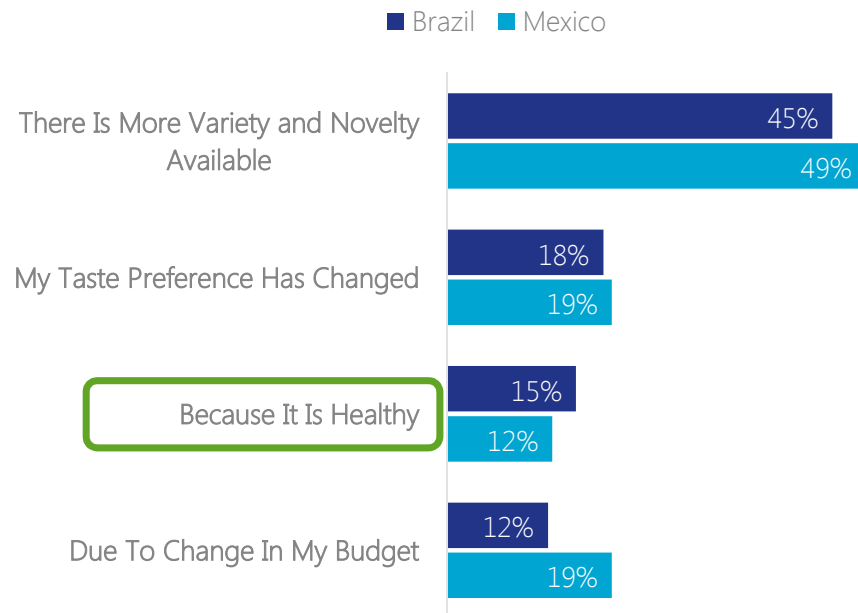
New Whey Liquid Protein Dietary Supplement With Blue Raspberry Flavour (Panama, Jan 2017)

Ingredients: Water, **complete protein matrix (NWN proprietary blend of collagen protein isolate, whey protein isolate, casein protein isolate)**...

Functional confectionery: good opportunity for collagen

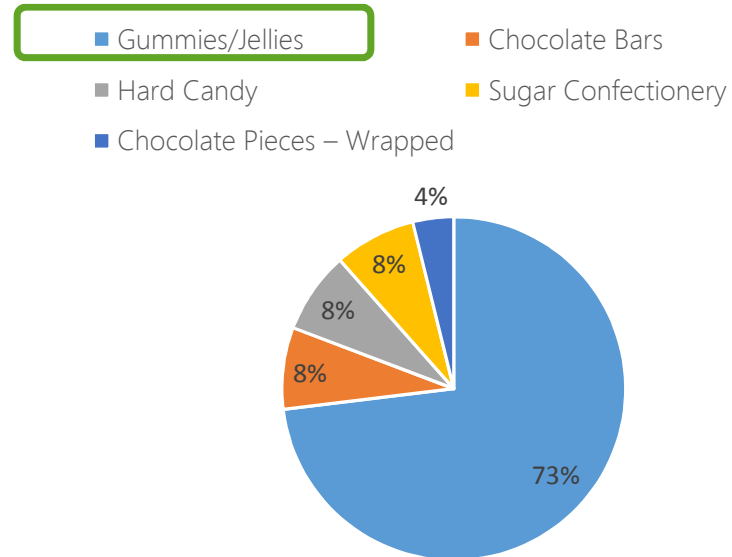
WHY DO CONSUMERS PURCHASE?

Why have you increased your consumption of sugar confectionery?
(Brazil vs Mexico, 2016)



GUMMIES/JELLIES IS THE KEY CATEGORY

Percentage of sub-category in confectionery new product launches tracked with collagen
(Global, 2016)



Functional confectionery with collagen: established in Japan

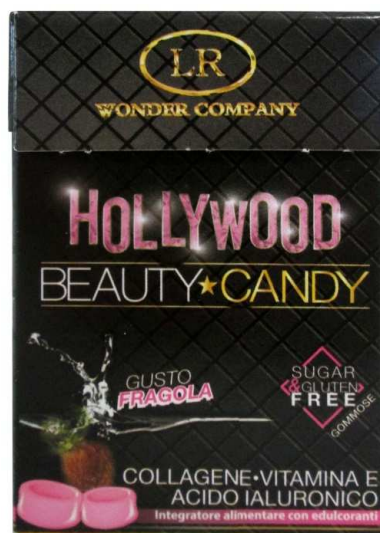
JELLY



Yukiguni Aguri Mango Konnyaku Jelly
(Japan, Dec 2016)

Claims: These sweets also contain plenty of **water-soluble fiber**, making them as good for your digestion as they are delicious. **Contains 600mg collagen.**

CANDY



Lr Wonder Company Hollywood Beauty Candy: Strawberry
(Italy, Aug 2016)

Description: Its secret is the **unique combination of collagen, hyaluronic acid and vitamin e**. Collagen is an important protein that protects the skin from inside.

GUMMIES



Fini Balas De Gelatina Com Colageno: Jelly Candies With Collagen
(Brazil, May 2016)

Description: Strawberry, green apple and orange flavored jelly candies with **collagen**, in an 18g plastic packet.

Novel product launches with collagen

ALCOHOLIC BEVERAGES



Gekkeikan Kirei Plum Sake (Philippines, Sep 2016)

Description: This umeshu is made from a combination of 100% japan-grown ume plums, pure fushimizu water, and **added collagen to aid in skin health**. Enjoy straight, on the rocks, or with a complimenting mixer.

COLLAGEN WATER



VitaminAcqua: Agua Con Colageno, Collagen Water (Brasil, Jan 2017)

Description: Vitamin water beverage with pomegranate and cranberry flavor, in a 400ml PET bottle
Claims: Gluten free. Artificially colored. Recyclable packaging. With added vitamins B2, B3, B5, B6, B9, B12, C and collagen

READY MEALS



Yunotani Soft Sashimi Konjac With Citrus And Collagen (Japan, May 2016)

Description: Soft sashimi konjac with seaweed and **collagen**. Comes with mustard miso dressing.



What's next?

What's next?

- Bone and joint health are fast growing, emerging opportunities. Collagen has provable benefits.
- Skin health applications have more opportunities outside the supplement category compared to bone + joint.
- Collagen will continue to grow in popularity | demographics is destiny: healthy aging (lifestyle) is a big opportunity.
- The sports protein category is a fast growing around the world and collagen offers new benefits in combination with other proteins.
- Gummies/Jellies dominant the application of collagen in functional confectionery. As consumers around the world look for more permissible indulgence, this remains a category for novel applications.
- Novel products remain a more niche opportunity but does provide opportunities for product differentiation.



THANK YOU!

EMAIL

contact@innovami.com

www.innovadatabase.com

