

## EXECUTIVE SUMMARY

Around 3 million Americans have celiac disease and a further estimated 40 million have gluten-intolerance or sensitivity. There are also millions of other Americans who may be undiagnosed for either of these conditions. The core market for gluten-free food is comprised of both diagnosed and undiagnosed individuals. Other consumers of gluten-free products purchase them due to perceived health or beauty beliefs.

The number of new introductions of gluten-free packaged food and beverage products in the United States has grown by $80 \%$ from 2005 to 2010. The growth in retail volume and value sales of gluten-free packaged foods is expected to continue to increase from 2011 to 2014.

Traditional gluten-free categories such as bread, cookies, crackers, cakes, baking mixes, cereals and pasta are growing markets and have seen many product introductions in the past few years. However, non-traditional categories such as snack foods, dairy, sauces and seasonings, desserts, and confectionery have also seen many new product introductions. This is because some of these products may actually contain 'hidden" gluten that was removed for individuals with celiac or gluten-intolerance. Alternatively, they may have been naturally gluten-free, but are now labelled as gluten-free by this producer to capture the popular health trend.

According to Euromonitor, only seven companies control 30\% of the gluten-free packaged foods market (not including bakery mixes and products that are naturally gluten-free). The rest of the market is scattered between companies with less than $0.1 \%$ market share each.

There is a growing number of individuals with celiac disease or gluten-intolerance who want more choices of better tasting gluten-free foods in supermarkets and restaurants. These consumers are willing to pay a price premium for many indulgence products such as bakery foods and snacks.

Disclaimer: The statements in this report should not be construed as offering regulatory advice. As rules and/or guidelines change, manufacturers are advised to check with regulatory authorities before finalizing label claims.

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Source: Shutterstock 2011

## WHAT IS GLUTEN-FREE?

Gluten is a protein found in wheat, rye, barley, or any of their crossbred varieties and derivatives.

In baking, gluten is the binding agent within the flour that prevents the baked good from crumbling. As such, gluten is found in many processed and packaged foods and in hidden sources such as hydrolyzed vegetable/plant protein (HVP/HPP), malt, spelt, kamut; certain drug products, as well as vitamins, and lip balms.

There are two ways that a food can be considered gluten-free:

1. It can be a dietary food that is made from one or more ingredients that does not contain wheat (or any Triticum species such as durum wheat, spelt, and kamut), rye, barley, or one of their crossbred varieties.
2. According to the Food and Agriculture Organization of the United Nations' (FAO) Codex Standards list, a food can also be considered gluten-free if it has been made from wheat, rye, barley, oats, or one of their crossbred varieties, and has been specially processed to remove gluten. It must also maintain a gluten level that does
 not exceed $20 \mathrm{mg} / \mathrm{kg}$ in total, for any food sold or distributed to the consumer.

## DIFFERENCE BETWEEN ALLERGY AND INTOLERANCE

## - ALLERGY

When referring to food, an allergy can be defined as affecting the immune system and having an immediate reaction upon ingestion. The main step required to avoid this reaction is to eliminate the offending food(s) completely. Common food allergens include: eggs, milk, fish, peanuts, shellfish, soy, tree nuts, and wheat.

## -INTOLERANCE

A food intolerance can be defined as affecting the digestive system and as such, it typically takes longer for a reaction to occur. The main step required to avoid a reaction is to eliminate the offending food(s), or to moderate one's consumption of it. Common offenders include: gluten (from wheat-based
 products), and lactose (from milk-based products).


Source: Euromonitor 2011, Health and Wellness

## -HEALTH REASONS : CELIAC DISEASE AND GLUTEN INTOLERANCE/SENSITIVITY

Celiac disease (or coeliac disease) is a lifelong autoimmune disorder that is passed on genetically. It is a disease of the digestive system where the parts of the small intestine are damaged or destroyed by the immune system due to a reaction from ingesting gluten. This affects the absorption of nutrients into the body and can lead to various associated illnesses including, but not limited to, malnutrition, osteoporosis and anaemia. Those suffering from the disease can also be prone to other autoimmune diseases such as Type 1 diabetes, thyroid disease, liver disease, rheumatoid arthritis, Addison's disease, and/or Sjögren's syndrome.

There is no cure for the disease but those living with it can control it by observing a strict gluten-free diet.
Gluten intolerance/sensitivity differs from celiac disease as the small intestine is not damaged with gluten consumption. Those affected can eliminate or reduce their consumption of gluten and their health should improve.

Following a gluten-free diet can sometimes be difficult as many processed and packaged foods contain gluten, which can be hidden within the product. Therefore, the proper labelling of products is very important.

It is estimated that up to 1 in every 133 Americans (3 million people) are affected by celiac disease and a further estimated 40 million are non-celiac gluten intolerant. Diagnosis for both celiac disease and gluten sensitivity involves a screening done through blood tests, small intestine biopsies, and endoscopies which can sometimes lead individuals to not have testing done, as it has been seen as complicated and sometimes inconclusive. However, recent progress with testing has resulted in people being checked for gluten intolerance. Through improvements to diagnosis, and with proper education, the number of affected Americans could grow in the next few years.

## -HEALTH BELIEFS

Gluten was incorporated into the human diet 10,000 years ago, which is a recent occurrence in evolutionary time. This short period has left little time for our bodies to evolve in terms of processing this new protein, and many non-intolerant consumers are choosing to revert to a gluten-free diet for a variety of reasons. In fact, a survey of U.S. adults by the Hartman Group showed that $39 \%$ of all gluten-free consumers purchase these products for digestive health reasons, $33 \%$ purchase for its nutritional value, $25 \%$ to help lose weight, $20 \%$ for healthier skin, $18 \%$ to alleviate joint pain, and a variety of other reasons. Only $5 \%$ of gluten-free consumers polled said they purchase these products to "treat" celiac disease. Many consumers from the same survey said that they unintentionally purchase gluten-free products because the products they like to purchase "just happen to be gluten-free."

There is a notion that gluten may increase the risk of Attention Deficit Hyperactivity Disorder (ADHD), Irritable Bowel Syndrome (IBS), or autism. Although there has yet to be scientific evidence supporting this theory, many non-celiac Americans are choosing to cut gluten from their diet. Furthermore, there is also the belief that cutting out gluten results in having more energy. The link between these two factors is not clear and different groups have their beliefs; however, it is possible that those choosing to follow a gluten-free diet have increased fruit and vegetable consumption leading to overall healthier eating habits.


Finally, the gluten-free movement is portrayed as a hip and gourmet food trend. With non-celiac celebrities such as Victoria Beckham and Gwyneth Paltrow following the gluten-free diet and promoting how it keeps them in shape, there is a high probability that those who are influenced by celebrity trends may seek out gluten-free foods. Celebrity chef Jamie Oliver recently launched a new cookbook called "Jamie's Ministry of Food: Anyone Can Learn to Cook in 24 Hours", where 60 of his 108 recipes are gluten-free.

## LIVING GLUTEN-FREE

For those following a gluten-free diet, it is very important to screen products for gluten. There exists many food alternatives to wheat, rye and barley; as such, people with gluten restrictions can maintain a well-balanced diet.

The table below indicates some naturally gluten-free foods:

| Amaranth | Corn | Malitol | Oats | Soy |
| :--- | :--- | :--- | :--- | :--- |
| Arrowroot flour | Flax | Maltose | Potato | Sweet potatoes |
| Baking soda | Gelatin | Mannitol | Quinoa | Tapioca |
| Buckwheat | Guar gum | Millet | Rice | Xanthum |
| Carob bean gum | Lecithin | Molasses | Sorghum | Yeast |
| Cassava (manioc) | Legumes | Mustard flour | Spices |  |



Living gluten-free is not an easy task for anyone to undertake as many aspects of life end up changing; from eating out to grabbing a quick snack, each item must be guaranteed to be gluten-free. The food industry is recognizing this growing consumer group and many food services have begun to incorporate gluten-free menus into their offerings. The price point for these "free-from" products is higher than conventional foods as increased technology and infrastructure is required. With an increase in awareness and diagnosis, demand is poised to grow and increased investment in new products should increase options for those following a gluten-free diet.

## THE GLUTEN-FREE CONSUMER

A few years ago, gluten-free products were virtually unheard of except in specialty health food stores. Now, it has become more difficult to not see a gluten-free product in regular supermarkets and hypermarkets. In some cases, whole aisles are dedicated to gluten-free packaged foods, along with other specialty foods such as diabetic and lactose intolerance foods. Globally, around $20 \%$ of consumers in a Datamonitor survey said that they avoid certain foods due to an allergy or intolerance most of the time or all the time. A further $22 \%$ claimed to do this occasionally. This is a large worldwide market for many companies wishing to launch intolerance and allergy-free products.

Dominant packaged food companies, instead of small niche companies, are including gluten-free options in their line of products. An example is General Mills, which introduced Rice-Chex cereal into the U.S. market and is also introducing a line of gluten-free cookie and cake mixes.

According to Datamonitor, those who are influenced by gluten-free claims are healthier eaters, more ethical, experimental, and more influenced by natural and organic ingredients than the average global consumer. Consumers in the 50-64 and the 25-34 age range in North America are also more likely to be influenced by gluten-free marketing. Males are also more influenced by gluten-free marketing and claims than females, in North and South America.

However, through a careful analysis of gluten-free market trends and its consumers, the number of individuals who purchase gluten-free products for reasons other than celiac disease or a gluten-intolerance, will most likely decline as it becomes just another passing fad. But, as the number of Americans with celiac disease and gluten-intolerance rises due to improvements in diagnosis and public education, the gluten-free market will most likely continue to grow in the future, just at a slower pace.

## POSSIBLE CHALLENGES



A total of $14 \%$ of the American population may have celiac disease or gluten-intolerance, but gluten-free bakery products (the largest gluten-free packaged food category), only represents less than $1 \%$ of the total bakery retail sales in the U.S. Part of the explanation is that many consumers do not know they have celiac disease or a gluten-intolerance. As well, some consumers may be choosing not to purchase gluten-free foods due to their high price point, their taste, or a variety of other reasons.

## -ECONOMIC RESTRICTIONS

Gluten-free products are generally more expensive than regular wheatcontaining foods. This is partly due to the small demand for gluten-free products as well as the extra costs associated with developing gluten-free foods that actually taste good. Based on a survey administered by the Gluten-Intolerance Group of North America, celiac shoppers estimated that up to $30 \%$ of their entire monthly grocery bill was spent on gluten-free products. This is a large barrier for the gluten-free market to overcome, because at such a high price point, consumers with a gluten intolerance may simply choose not to purchase such items. However, with so many products on the market that contain gluten such as bakery products, snacks, dairy products, confectionery, seasonings and spreads, and even cold cuts, it is a challenge for a consumer with a gluten-intolerance to not purchase some sort of
 gluten-free food. The convenience factor of gluten-free foods for consumers can often outweigh the higher cost issue of these products.


Some products that are already on the market such as tortillas and plain yogurt are naturally gluten-free. Labelling these products as gluten-free can have some benefits as well as some disadvantages. Some consumers do not like the taste of gluten-free products or do not see them as tasting the same as their gluten-containing counterparts. Using labelling for products that are naturally gluten-free may help certain consumers notice products that are safe to consume, but may also deter non-celiac or gluten-intolerant consumers because of the taste factor. One possible solution would be to place gluten-free labelling only on the back, instead of the front, of naturally gluten-free products. However, gluten-free labelling might fare better on the front of products that naturally contain gluten and have undergone modification to eliminate the gluten, or are specially re-formulated to not contain wheat.

Source: Shutterstock 2011

## - TASTE OF FOOD

The taste of gluten-free food has a very big impact on its sales potential. In 2009, a survey was done by the Gluten-Intolerance Group of North America which mentioned that $71 \%$ of consumers with celiac disease agreed with the statement, "It is hard to find good tasting gluten-free foods."

## OPPORTUNITIES

As mentioned previously, one challenge with gluten-free products is their high price point, but
 this can be alleviated by providing consumers with private label gluten-free products. Many retailers in the U.S. have taken advantage of the gluten-free market by providing gluten-free private label products as well as special in-store signage and locations for gluten-free packaged foods. An example is the Kroger grocery retailer in the U.S. which ensures that some of its private label products do not contain gluten or wheat, but does not ensure against cross-contamination. Some examples include yogurts, condiments, peanut butter, puddings, deli meats, hard candy, and plain potato chips. Some grocery stores also have lists of most of their gluten-free product offerings online such as Trader Joe's, Wegman's, Shop Rite, Publix, and Stop and Shop. Much like kosher or diabetic products, some grocery retailers may even have whole aisles dedicated to intolerance products such as gluten-free.

There are opportunities for both small and large companies in the glutenfree market. Large multinationals can extent their product lines to include gluten-free offerings or simply put a gluten-free label on the back of their products that are currently gluten-free. Small companies can take advantage of the price premiums of the gluten-free packaged food segment as it is still a niche market. Even companies that sell mostly gluten-free products can be successful. Glutino, a Canadian company, only sells gluten-free foods and its American subsidiary currently holds the largest market share for traditional gluten-free products.


Source: Shutterstock 2011

There are always opportunities to better educate the public about celiac disease, gluten-intolerance and gluten-free packaged foods. This can be done through consistent product labelling by producers and retailers, marketing and advertisements, and more gluten-free product choices in stores and in the foodservice industry.

## - LABELLING AND CERTIFICATION IN THE UNITED STATES

The Food and Drug Administration (FDA) introduced the Food Allergen Labelling \& Consumer Protection Act (FALCPA) in 2006 for the following food allergens: milk, eggs, wheat, soy, peanut, tree nuts, fish, crustaceans and shellfish. As of early 2011, the FDA has still not ratified their proposed guidelines on gluten-free labelling. Currently, products are labelled gluten-free, free of gluten, or no gluten, on a voluntary basis by companies. The main law that FDA has proposed* is that a product can be qualified as gluten-free if the gluten content does not surpass 20 parts per million (ppm). The FDA also goes on to propose what types of foods cannot contain the gluten-free label, such as a product with a "prohibited" grain as an ingredient or that is derived from a "prohibited" grain, unless they have been specially processed to remove the gluten to less than or equal to $20 \mathrm{mg} / \mathrm{kg}$. Examples of prohibited grains include: barley, wheat, rye, spelt, kamut, triticale, farina, vital gluten, semolina and malt vinegar. It does not include oats, as the FDA concluded that research data suggests that the majority of individuals with celiac disease can tolerate a limited daily intake (e.g., 50 grams) of oats that are free of gluten from wheat, rye, barley or their crossbred hybrids.

There are, however, gluten-free standards for international trade purposes. The Codex Alimentarius Commission (created by the United Nations Food and Agriculture Organization, and the World Health Organization) sets the standard of gluten content allowed in a food product to be considered gluten-free. The standard concludes that gluten-free foods can not contain wheat, rye, barley, oats or their crossbred varieties, unless they have been specially processed to remove the gluten and their gluten level does not exceed $20 \mathrm{mg} / \mathrm{kg}$ [ 20 parts per million] in total, based on the food as sold or distributed to the consumer. Naturally gluten-free foods shall not be designated "special dietary", "special dietetic" or any other equivalent term, but may bear a statement on the label that "this food is by its nature gluten-free.

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## MARKET SIZE AND GROWTH

Sales of gluten-free packaged foods have been increasing in both volume and value at a faster
 rate than lactose-free and diabetic packaged food, however, to make a fair comparison between the growth in gluten-free versus diabetic foods, the low/no/reduced sugar and low/no/reduced carb markets must also included. Most diabetics do not purchase foods labelled as simply "suitable for diabetics" and this market has subsequently not grown in significance in the U.S. This is because the more popular packaged food markets for diabetics are sugar-free products. It is not very likely that the market sales for gluten-free packaged food will ever catch up to sugar-free beverages, but it may in fact catch up to the lactose-free dairy market and has actually surpassed the declining low/no/reduced-carb market. The sugar-free beverage market in the U.S. will reach US $\$ 13.3$ billion in 2011, and the sugar-free food market will reach US $\$ 6.4$ billion. The gluten-free market, by comparison, is expected to only reach US\$1.3 billion in sales by 2011. However, the gluten-free market, which is still in its early growth, is expected to achieve higher growth rates (31\%) from 2011 to 2014.

Foods that are naturally free from gluten are not included in the Euromonitor gluten-free sales data. Bakery products, which include cookies, crackers, cakes, cereal and other baked goods, are the single highest grossing packaged food category in the gluten-free market. However, the other gluten-free category, which included a multitude of categories (including snacks) had the largest retail value and volume sales in 2010. According to Mintel, there were around 300 new gluten-free snack product introductions in the U.S from 2008 to 2010.

## New Product Example:

Wheat and Gluten-free Waffles
Company: Van's Natural Foods
Price: US\$2.99
Store Name: Schnucks
Date: Nov. 2010
Storage: Frozen
Made with wholegrain flax, sweetened with fruit juice and free from dairy and egg.


Source: Mintel, 2011

Gluten-free Retail Market Sizes in the U.S. - Historic/Forecast US\$ Millions —Fixed 2009 Exchange Rates

|  | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| GF Food | 950 | $1,108.9$ | $1,217.4$ | $1,344.2$ | $1,482.8$ |
| GF Bakery Products | 424.7 | 506.3 | 562.5 | 616.8 | 687.7 |
| GF Pasta | 21.1 | 23.3 | 24.5 | 25.9 | 28 |
| Other GF Food | 504.2 | 579.3 | 630.4 | 701.4 | 767.1 |

Source: Euromonitor, 2011
Gluten-free Retail Market Sizes in the U.S. Historic/Forecast - '000 Tonnes

|  | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| GF Food | 108.1 | 123.8 | 134.5 | 146 | 156.8 |
| GF Bakery Products | 48.6 | 56.3 | 61.4 | 66.1 | 71.9 |
| GF Pasta | 2.4 | 2.6 | 2.8 | 2.9 | 3.1 |
| Other GF Food | 57.1 | 65 | 70.2 | 77.1 | 81.9 |

Source: Euromonitor, 2011

Top 10 Categories of New Products Introduced to the Gluten-free Packaged Food Market in U.S. - January 2008 to December 2010


## GLUTEN-FREE BAKERY

Growth in the gluten-free bakery market is expected to reach $35.2 \%$ for the period of 2011 to 2014. This translates into retail sales of US\$834.2 million in 2014. Euromonitor does not include sales of gluten-free bakery mixes and supplies. However, Mintel has captured 202 new product introductions in this category within the past three years. Bob's Red Mill is a significant player in the gluten-free baking mixes category with around 40\% of the market, according to Mintel.

## New Product Example:

Brown Rice Bread
Company: Glutino
Price: US\$5.69
Store Name: Whole Foods Market
Date: Dec. 2010
Storage: Frozen
Glutino Homestyle Brown Rice Bread is a wholegrain bread with prebiotics that help maintain a healthy digestive system. This kosher certified product is free from gluten, cholesterol and saturated fat, and has a low sodium and fat content.


Source: Mintel, 2011

Gluten-Free Bakery Products Retail Market Sizes - Historic/Forecast in US\$Millions (Fixed 2009 Exchange Rates)


Source: Euromonitor, 2011


Source: Mintel, 2011.

## GLUTEN-FREE SIDE DISHES

The gluten-free pasta market is relatively small compared to the gluten-free bakery segment. Its growth in volume terms is also relatively small. A possible explanation is that consumers are willing to avoid consuming pasta products, but find it hard to give up their favourite foods such as bakery and snacks.

## New Product Example:

Gluten-free Angel Hair Pasta
Company: De Boles
Price: US\$2.39
Date: Mar. 2010
De Boles Gluten-Free Angel Hair is made with wholegrain rice and golden flax and is an excellent source of omega-3. This premium pasta is fortified with three B vitamins and contains no artificial flavours, colours or preservatives.


Source: Mintel, 2011

Gluten-Free Pasta
Retail Market Sizes - Historic/Forecast in US\$Millions (Fixed 2009 Exchange Rates)


Source: Euromonitor, 2011

| Number of New Gluten-free Side Dish Products <br> in the U.S. - Jan.2008 to Dec. 2010 |  |
| :--- | :---: |
| Pasta | 63 |
| Potato Products | 19 |
| Rice | 46 |
| Stuffing, Polenta \& Other Side Dishes | 26 |

Source: Mintel, 2011.

## GLUTEN-FREE SNACKS

Mintel considers the gluten-free snack category to have the most amount of new product
 introductions, even over baked goods, baking mixes, cereal and pasta. This is because the gluten-free label or claim is used most on these types of new products, but it is not always counted by Euromonitor retail sales data. Often the gluten-free label is used on snacks that are naturally gluten-free, or would have been introduced into the marketplace with the same lack of wheat ingredients whether or not it had the gluten-free label, such as nuts and popcorn products. The true gluten-free products that were specifically made for individuals with celiac disease or gluten-intolerance, are usually products such as specially formulated breads, pasta, cereals, baking mixes, and some snacks. Some other products that may have been reformulated to be free of gluten include salad dressing, confectionery, syrups, ice cream, chips, soups and broth, pudding, beverages mixes, and cold cuts, among some other items. It seems that many companies use the gluten-free label to capture the growing gluten-intolerant, celiac or health fad market.

Whether or not the gluten-free fad within the snack category will slowly die off like all low-carb packaged food sales, or flourish like sugar-free packaged food sales, it is too soon to tell. However, the individuals with gluten-intolerance or celiac disease purchasing products truly made specifically for them will always be there.

## New Product Example:

Nature Valley Bars
Company: General Mills
Price: US\$2.99
Store Name: Rainbow Foods
Date: Dec. 2010
Made with roasted almonds,
peanuts and sunflower seeds


| Number of New Gluten-free Snack Product <br> Introductions in the U.S. <br> January 2008 to December 2010 |  |
| :--- | :---: |
| Savoury Snacks | 814 |
| Snack/Cereal/Energy Bars | 241 |
| Fruit Snacks | 131 |
| Corn Based Snacks | 90 |
| Potato Snacks | 85 |
| Nuts | 44 |
| Rice Snacks | 37 |
| Popcorn | 30 |
| Other | 398 |
| Sweet Snacks | 232 |
| Pastilles, Gums, Jellies \& Chews | 91 |
| Boiled Sweets | 34 |
| Gum | 21 |
| Marshmallows | 20 |

## KEY PLAYERS IN GLUTEN-FREE FOODS IN THE UNITED STATES

Company Shares (by Global Brand Owner) - Retail Value - \% Breakdown


Source: Euromonitor, 2011

## FOREIGN MARKETS ON THE RISE

The U.S. has the largest market for traditional gluten-free products such as bakery, pasta and
 other products that usually contain gluten. Western European countries such as Germany, Italy, the U.K, Spain and France are among the top retail markets for gluten-free packaged food products. However, Mintel data in the graph below shows that Brazil has significantly more new product introductions in all food categories within the past three years. As mentioned before, there are many products that are not specifically made for individuals with celiac or gluten-intolerance that claim gluten-free status on their label. Brazilians are known to be more aware and open to health trends and therefore, to go along with this trend, many naturally gluten-free products are labelled as such. As well, their diets are close to a gluten-free diet, making it easier for the average consumer to purchase gluten-free products and for companies to label their products as gluten-free. In Brazil, a total of $45.6 \%$ of new packaged food and beverage products introduced from 2008 to the end of 2010 were labelled as gluten-free. In comparison, only $7.5 \%$ of all packaged food and beverage products introduced in the U.S during the same period were labelled as gluten-free.

Top 15 Gluten-Free Retail Packaged Food Markets - Historic/Forecast
US\$ Millions - Fixed 2009 Exchange Rates

| Geographies | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| World | $\mathbf{2 , 2 7 1 . 2}$ | $\mathbf{2 , 4 6 7 . 8}$ | $\mathbf{2 , 6 9 0 . 7}$ | $\mathbf{2 , 9 2 8 . 2}$ | $\mathbf{3 , 1 6 0 . 3}$ | $\mathbf{3 , 4 2 1 . 0}$ |
| United States | $1,108.9$ | $1,217.4$ | $1,344.2$ | $1,482.8$ | $1,612.9$ | $1,766.8$ |
| Germany | 282.0 | 312.5 | 343.1 | 373.3 | 401.1 | 427.9 |
| Italy | 251.0 | 262.7 | 277.8 | 293.7 | 312.5 | 335.9 |
| United Kingdom | 118.0 | 127.4 | 136.3 | 143.4 | 149.9 | 155.3 |
| Spain | 59.5 | 61.9 | 65.2 | 68.9 | 72.7 | 76.4 |
| France | 54.5 | 59.8 | 66.2 | 73.9 | 82.7 | 93.0 |
| Sweden | 49.3 | 50.8 | 52.4 | 54.2 | 56.0 | 57.7 |
| Australia | 41.8 | 46.3 | 51.3 | 55.6 | 59.6 | 62.9 |
| Russia | 41.4 | 45.5 | 49.3 | 53.5 | 58.2 | 63.4 |
| Austria | 36.3 | 37.3 | 38.2 | 39.1 | 40.1 | 41.2 |
| Poland | 31.4 | 34.2 | 37.0 | 39.8 | 42.6 | 45.5 |
| Finland | 30.0 | 32.6 | 35.2 | 37.6 | 40.1 | 42.7 |
| Norway | 27.6 | 29.9 | 32.5 | 35.3 | 38.3 | 41.5 |
| Canada | 21.4 | 23.5 | 26.3 | 29.9 | 34.4 | 39.6 |

Source: Euromonitor, 2011.

Top 10 Categories of New Product Introductions Within the Gluten-free Market January 2008 to December 2010


Source: Mintel, 2011

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## Gluten-Free Packaged Foods in the United States

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[^0]:    *The full proposal is available online at:
    http://www.fda.govFoodLabelingNutritionFoodAllergensLabelingGuidanceComplianceRegulatoryInformation/ucm077926.htm

