

CONTROLLING  
FOOD ALLERGENS:

# HOW DOES CANADA STACK UP?

BY VALERIE WARD



After more than a decade of debate, food allergies and intolerances are still a troubling issue for Canadian consumers. While government and industry players have made real progress in managing food allergens, the Canadian Food Inspection Agency (CFIA) reports that nearly one-third of all recalls during the 2003-2004 fiscal year resulted from undeclared allergens.

While this figure is lower than in previous years, it's still worrying for the estimated one to two percent of adults and five to eight per cent of children in Canada who are food-allergic, and the 25 to 30 per cent who have a food intolerance. (A food allergy is an abnormal response of the body's immune system to a food or food component, usually a protein. An intolerance is an adverse reaction that results when the body doesn't produce enough digestive chemicals to break down a particular food. Examples include lactose intolerance, a reaction to the sugar in milk, and celiac disease, an intolerance to wheat gluten.)

Allergies to peanuts and nuts are the most common and fastest growing, triggering life-threatening or anaphylactic reactions in more than half-a-million Canadians. In addition to these products, Health Canada and the CFIA have identified eight other "priority" foods responsible for about 90 per cent of adverse reactions among Canadians: soy, milk, eggs, fish, crustacea and shellfish, sesame seeds, sulphites (a preservative), and wheat. The threshold dose for specific allergenic foods is not known, but some tests show it can take as little as one to two milligrams, or even less, to cause a reaction in sensitive individuals.

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There is no cure for a food allergy or intolerance; the only solution is to avoid eating the product that causes the reaction. To make safe choices, food-allergic consumers must rely on product labels for accurate information about what they're buying – often a challenge given the complexities of the labelling rules and the alternate names for various ingredients, such as casein for milk, lecithin for soy, and triticale for wheat.

As the industry grows more knowledgeable about allergens and consumers step up the pressure, regulators in North America and Europe have either revised their labelling regulations or are in the process of doing so. The U.S. passed the *Food Allergen Labeling and Consumer Protection Act* last year, to take effect Jan. 1, 2006, and the European Union (EU)

overhauled its regulations in 2003 (see sidebar on page 41). Here at home, changes to the labelling rules in the *Food and Drugs Act and Regulations* have been drafted and are tentatively scheduled for publication in Part I of the Canada Gazette sometime this spring.

When Canada's food and drug regulations were originally developed in 1954, there was less appreciation of the risks of undeclared trace amounts of food allergens. Although work has been done to enhance labelling safety for allergic individuals, regulatory analyst Gary Gnirss of Bulcan Foodbev Consultants Inc. says the rules still lag behind expectations.

## Canada's labelling rules

The current labelling regulations require manufacturers to list the ingredients and components – that is, the ingredients of the ingredients – of most pre-packaged foods. However, under subsection B.01.009, the components of 36 ingredients or groups of ingredients are exempt from this requirement when they are added to other food. Consequently, an undeclared margarine component that contains milk, a meat additive with wheat fillers, or a seasoning with fish flavouring could cause an adverse reaction in people who cannot eat milk, wheat or fish.

Another problem is the treatment of hydrolysed plant proteins, obtained from a vegetable source such as soybeans, corn, or wheat, and broken down for use as flavour enhancers or texturizing agents. Under the current rules, a hydrolysed protein's vegetable source only has to be declared on the label if it was produced through an enzymatic process. If it was obtained through an acid process, it does not have to be identified.

The draft regulatory changes attempt to address these weaknesses. For example, if one or more priority allergens is added to a product, either directly or as part of another ingredient, manufacturers must declare them on the label by their common name. This will also apply to priority ingredients that are now exempt under B.01.009, except for sulphite levels of less than 10 ppm. The draft rules will also require manufacturers to identify the common name of the plant source for all hydrolysed plant proteins, starches and modified starches.

Gnirss recognizes the improvements but says he's disappointed the proposal "didn't take it up a step. Canada was a leader during the allergen debate in the '90s but now we're falling short of consumers and industry expectations." He also criticises the proposal's use of clawbacks. "Sulphites are exempted, then were clawed back if they're at levels of more than 10 ppm," he says. "It's non-intuitive. If processors don't understand the rules, they'll be less likely to follow them."

Furthermore, Gnirss feels the Canadian proposal should focus more on education. "The U.S. legislation requires the Food and Drug Administration to conduct inspections and issue a report to ensure that manufacturers comply with practices that reduce or eliminate the risk of cross-contamination.

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So what impact will the new rules have on the industry? According to Gnriss, about 90 per cent of companies are ahead of the regulatory changes and have implemented strong internal policies. In addition, he says, most adhere to the CFIA's *Guide to Food Labelling and Advertising*, which recommends that industry adopt a proactive approach to allergen management.

In particular, the CFIA discourages the use of regulatory exemptions. It urges manufacturers, importers, distributors and retailers to provide complete labelling of all foods, and counsels that they establish internal controls, including voluntary recall of products that pose an allergen risk. The agency has also conducted assessments of labelling and allergen controls in the import, bakery and other sectors, and distributed recommendations to the industry, associations and government agencies.

However, despite this progress, challenges remain. CFIA figures show that undeclared nut products – peanuts, hazelnuts and tree nuts – were responsible for the largest percentage of allergen-related domestic recalls for the 2003-2004 fiscal year. Milk was next, followed by sulphites and eggs, sesame seeds and soy, and gluten and wheat. According to Ron Ramdeholl, acting director at the CFIA's Office of Food Safety and Recall, undeclared sulphites have often been the culprit in imported foods, with peanuts and tree nuts second, and milk third.

### Managing food allergens effectively

Yet investigations show that most recalls could have been avoided with proper awareness and allergen management, says Jennifer McCreary, training and customized programs manager at the Guelph Food Technology Centre (GFTC). To ensure an effective allergen management plan, she counsels, begin by understanding the regulations. "It's not a hazard that your product contains an allergen – it's a hazard that the allergen isn't on the label. Know what's in your product."

Next, start looking at potential sources of undeclared allergens in your facility and evaluate the risk that they could affect your product through cross-contamination or some other means. Assess all aspects of your operation, from ingredients and processing methods to packaging, co-packers and suppliers. Contamination can result from a variety of factors, from unknown ingredients in raw materials to carry-over of allergenic ingredients through improper cleaning of food contact surfaces.

McCreary, who leads GFTC workshops on allergen prevention, says the most common questions from clients involve scheduling products that contain several priority allergens. "They want to know things like which of these ingredients they should run last, when they should do an allergen cleaning to remove protein residue instead of just dry-wiping the equipment, and what amount of equipment



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that needs to be cleaned,” she explains.

Based on her experience, McCreary agrees that most of the industry is aware of the allergen issue and has been managing it proactively. “Some companies may have to change their ingredient lists when the new regulations come in, but many have already done so,” she says. “After all, they’re the ones getting calls from consumers.”

Dare Foods and Nestlé Canada are two companies who have taken the lead on prevention. Heather McTavish,

Dare’s director of marketing for cookies, says the firm implemented a plan last year to make Dare manufacturing facilities nut- and peanut-free. The action was driven by customer demand, in particular by letters from schools to parents highlighting the increase in nut/peanut allergies and including Dare products on a list of foods that kids shouldn’t bring to school.

“We’ve implemented a comprehensive strategy for making our facilities nut- and peanut-free,” McTavish says.

Dare has gone even further with its Bear Paws and Breton Crackers products, working with suppliers such as flavour houses and flour manufacturers to ensure that they follow similar practices, and labelling these two products as entirely peanut- and nut-free. McTavish says the company will soon announce the same approach with two other lines. For its allergen control efforts, Dare won the 2005 Partners in Anaphylaxis Safety Award from Anaphylaxis Canada.

Nestlé Canada has also adopted a comprehensive allergen management program. Besides declaring priority allergens, Nestlé Canada has labelled all of its confectionery products as peanut-free and manufactured in peanut-free facilities. The company’s 20-page policy document lays out detailed procedures for risk assessment, processing, sanitation, labelling, packaging, employee awareness, and internal and supplier audits. “It’s a top-to-bottom approach,” says Kathryn Rowan, the company’s vice-president, corporate affairs. “We know where products are at each stage of the process.”

Again, the basic driver has been customer demand. “We continue to respond to questions about allergens on our 1-800 consumer services line,” Rowan says. “We also have an ongoing relationship with Anaphylaxis Canada, Allergy and Asthma Canada and other organizations to ensure that we understand and include the viewpoint of anaphylactics. The proposed changes to the *Food and Drugs Act and Regulations* won’t have any impact on us,” she adds. “It will just formalize what we have already been doing for nearly a decade.”

*Valerie Ward is an Ottawa-based freelance writer.*

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## THE EU APPROACH

**P**ushed by greater awareness of the problem, consumer demand and pressure from anaphylaxis campaign groups, the European Union passed an amendment to its labelling regulations in November 2003, requiring that any product or derivative from a list of 12 ingredients must be identified on the label. That list includes cereals containing gluten, crustaceans, eggs, fish, peanuts, soybeans, milk, nuts, celery, mustard, sesame seeds and sulphur dioxides. The amended legislation also eliminates exemptions for additives that make up 25 per cent or less of the product; regardless of proportion, any item on the list of 12 must be on the label.

However, some products made from priority allergens don't cause problems in allergic individuals, says Jean Feord, business manager, legislation, with Leatherhead Food International in the U.K. One example is isinglass, a fish

derivative used as a clarifying agent in alcoholic beverages. To provide flexibility, the EU has asked industry to put forward scientific evidence for exemptions; a published list of exemptions is expected soon.

According to Feord, other gaps in the legislation include the fact that it doesn't cover food labelling in restaurants or address the voluntary "may contain" labels. A further complication, it lacks practical guidance on issues such as carryover additives and the treatment of processing aids. "On the surface, processors are ahead of the game where they can be," Feord says. "But without more specific guidelines, some processors worry whether they have the tools to go far enough back in the process to eliminate all potential sources of contamination."

The deadline for implementation of the EU allergen regulations is November 25, 2005.



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