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Cover

The moment of truth: *Columbia's* second lift-off last November carried the Canadarm, and it took place amid fears that a shockwave experienced on the craft's maiden flight would damage the sophisticated piece of hardware. A high pressure water spray on rocket nozzles damped the expected jolt, however, and Canada's contribution to the U.S. Space Transportation System performed flawlessly. (See story page 4). (NASA)



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Catering to special diets

Seven thousand Canadians (or one in 3 000) suffer from it; in the British Isles, the incidence is one in 300; in the United States and Australia, however, it is practically non-existent. At one time, it was considered a childhood disease; now adults are developing it with little hope of "growing out of it." Called celiac disease, persons afflicted cannot digest the protein gluten found in wheat, rye, barley, and oats, and therefore must abstain from such foods as bread, cereals, and even ice cream cones which contain gluten. Most foods have to be imported which escalates the cost so much that a celiac's grocery bill can run up to 33 per cent more than average.

When the special food dispensary at the Sick Children's Hospital in Toronto closed two years ago, Kingsmill Food Company Limited, also in Toronto, a small family-owned business for more than 30 years and the only Canadian manufacturer of a complete selection of dietary foods, began selling imported products over the counter and by mail order. However, company

Vice-President Dorion Kingsmill and her father Bill Kingsmill soon realized that the only way to cut the cost of importing "was to produce products ourselves which were not currently manufactured in Canada. We knew we had the market," says Ms. Kingsmill, "but we didn't have the products. The National Research Council's Mini-IRAP program was just what the proverbial 'doctor ordered' for what I call our 'prescription foods.' The doctor and/or dietician directs the allergic person or the person with a metabolic disorder or restricted diet to us. Without access to these foods, a patient's condition could become fatal."

With support under Mini-IRAP (objective of this program is to encourage small companies with limited or no technical staff to solve specific technical problems), the Company has been able to start new product lines, staff has increased, and sales in the last year have doubled. New products have been completed — a self-rising gluten-free flour, which can be used with or without milk or eggs, several types of cookies and cake mixes, frozen bread, a substitute baking egg replacer, low protein jellied desserts, brown rice bread mix, rice flour baking mixes, a rice cereal similar to Cream of Wheat, pancake and quick bread mixes, a gluten-free gravy mix, and beef and chicken soup bases; others are in various stages of development — melba toast, crackers, pastas, a lactose enzyme, and high fibre and high protein baking mixes.

"Our objective," explains Dorion Kingsmill, "is to formulate a cross section of foods for availability in retail outlets for people who are placed on low gluten, low protein, and food allergy diets. Some of our products will be convenience foods which can be used by non-allergic people, senior citizens, or anyone who is unable to bake for themselves." Outlets have been established with Boots drug stores, Woodwards and Dominion, and the company expects sales through this medium to run around \$150 000 the first year.

Concludes Ms. Kingsmill: "There is no question that Mini-IRAP has contributed to our growth which has resulted in the replacement of imported goods with cheaper Canadian ones. We are very much impressed that the whole program has addressed the problem with so little red tape." □



(Dave Webb)

Vice-President Dorion Kingsmill displays some of the products developed by her company for people on special diets.

Mlle Dorion Kingsmill nous montre quelques-uns des produits diététiques que la compagnie dont elle est la vice-présidente a mis au point pour les personnes suivant un régime.

Joan Powers Rickerd