

Tay-Sachs Gene Flaw Identified

In an important step towards a precise test for Tay-Sachs disease, a genetic defect that causes the disease has been identified by Dr. Roy Gravel, professor of genetics at the Hospital for Sick Children in Toronto. The disease causes mental retardation and is usually fatal by the age of four.

During the past year, Dr. Gravel and his colleague, Dr. Enrico Arpaia, dissected the Tay-Sachs gene. In November 1987, they identified the defective genetic coding that characterizes the disease, distinguishing it from among more than 30 000 other components within the DNA heredity molecule. They subsequently developed a DNA probe, which acts as a "tracer" to identify the subtle abnormalities. The probe is a human-made bit of DNA that binds exclusively around the specific genetic defect, making accurate testing possible.

According to Dr. Gravel, his discovery is important for what it heralds for other diseases. "This is the future for the diagnosis of all genetic disease. It's an absolute test, in that it

distinguishes normal from mutant genes unambiguously in patients or carriers." The test uses as little as a single drop of blood.

Using a procedure developed in the United States, the researchers have been able to discover a hitherto unsuspected mutation of the disease, and there may be more. Because there are some patients with more than one mutation, additional tracers will be necessary. This means it will be at least two years until there is a complete diagnostic test for Tay-Sachs disease. However, the Cetus Corporation's "polymerase chain reaction" used by Gravel and Arpaia makes the tracer a million times more visible, speeding the analysis process. As soon as the team has constructed a tracer for each mutation, diagnostic accuracy will be much greater than the current mass screening process.

The Toronto team is in the forefront of the international search for the genetic cause of Tay-Sachs disease, which is approximately 10 times more prevalent in the Jewish population than among non-Jewish groups.

Canola Oil Cooking Up a Storm

Canadian canola oil export sales have increased dramatically in recent years as health-conscious people turn to the high-quality oil that has been produced and used in Canada for many years. The light taste and consistency of canola make it a favourite for salads and baking. For those concerned with cholesterol levels, canola has the added advantage of having the lowest saturated fat content of any vegetable oil.

Domestic sales of canola have risen almost 80 per cent in seven years, and the international market demands more every year. Canadian farmers are growing more canola, and Canadian plant breeders are developing new strains of the oilseed plants. Since granting of GRAS (generally regarded as safe) status to canola oil in the United States, sales to that market have increased considerably.

Products such as Proctor and Gamble's award-winning "Puritan" oil, which was chosen "health product of the year" in 1987 by the American Health Foundation, have speeded acceptance of canola in the United States. Many people find canola to be exactly what they are looking for, and Canada is answering their demands. California alone consumes 635 000 tonnes of vegetable oils a year — 270 000 tonnes of which end up on salads.

Canadian Grain and Oilseeds Minister Charles Mayer is enthusiastic about canola: "The recognition conferred by the American Health Foundation will create new marketing opportunities for Canadian canola, one of the most nutritious edible oils available today."

Canadian canola oil is the growing choice of health-conscious consumers.



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Formolo and Carbone 14 Put to the "Fest"

The Quebec theatrical company "Carbone 14" and Maria Formolo, a dancer from Alberta, were the Canadian contributors to joint festivals of theatre and dance that took place in seven cities in Venezuela and Colombia.

Carbone 14 was acclaimed for its production of *Hamlet Machine*, a multilingual work by German author Heiner Müller, and Maria Formolo "mesmerized her audiences" with her dance adaptation of Inuit art. Robert Desrosiers, director of *Hamlet Machine*, and Maria Formolo conducted workshops as part of the festivals' contribution to the artistic development of Latin America.

The festival of drama, Festival Ibero Americano de Teatro de Caracas, together with the dance festival, Segundo Encuentro de la Danza, were also a part of the celebration of the 450th anniversary of Bogota, Colombia.

The twin festivals, described as "more than a mere cultural exchange," included more than 50 productions, as well as conferences and workshops on drama and dance. Presentations included theatrical and dance groups from Latin and North America, Poland, the Soviet Union, Spain, Belgium, Greece and Canada.