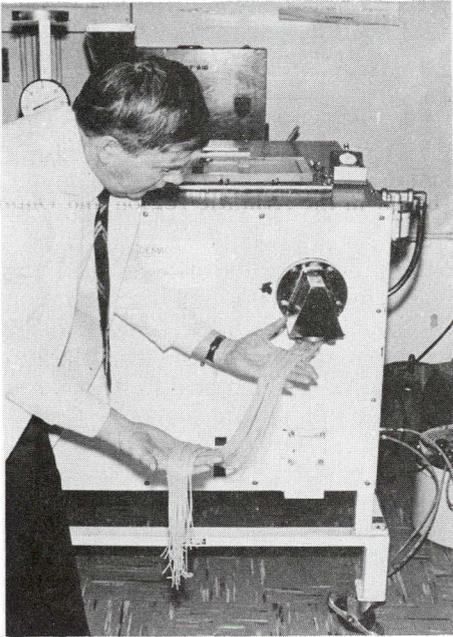


"The best measure of cooking quality is the bite test. In spite of the enjoyment had by human volunteers, we needed to replace them with a machine that could put its findings in numerical terms which don't vary according to individual bias."



This apparatus which measures the tenderness of cooked spaghetti is in use at the Canadian Grain Commission's Research Laboratory in Winnipeg, Manitoba.

So the machine bites into the spaghetti, chews it, and tells the scientists things they want to know about the cooking quality — firmness, texture and "chewiness".

"This is only one of the instruments we use to measure gluten strength in existing Canadian-grown durum varieties and those coming along in breeding programs," says Dr. Matsuo.

Gluten is a protein substance intermixed with the starchy endosperm of the grain in wheat.

It is thought to be the main factor in the cooking quality of pasta products, including spaghetti, which are made from semolina, the coarse granular milling product of durum wheat.

Our export of 63.7 million bushels of durum in 1971 is considered relatively high for recent years. It may reflect the acceptance of new varieties such as Hercules, which made up about 57 per cent of the estimated 72.5 million bushels of durum grown in Canada in 1972.

"Hercules is an improvement, a be-

ginning, out of Canadian breeding programs that are aiming for more gluten strength," Dr. Matsuo says.

"We have been screening cooking quality of varieties in the co-operative tests as well as early breeders' material. New varieties are on the way that will be even better.

"We're adjusting our durum to meet European demands. The more we know about their processing methods and requirements, the better equipped we'll be to do the job."

Mobility made easier

Canadian workers who must leave their home area to find employment will receive additional help as a result of amendments to the Manpower Mobility Regulations announced on May 15 by Minister of Manpower and Immigration Robert Andras.

The amendments, which became effective the same day, will provide a daily allowance of \$13 for a period up to a maximum of five days to workers receiving exploratory grants.

To help the many families relocating under the program who do not own a home, the present allowance of \$500 for the purchase of a home will be increased to \$1,500. This removes one of the major barriers to the mobility of these families. The \$1,000-allowance previously paid for the sale of the worker's home has been discontinued.

Concern for disadvantaged persons has led to the introduction of special travel grants, which enable workers to travel from areas where there are no manpower services to other locations for special testing and counselling services. The benefits will be identical to those for workers on job-seeking trips, and will include travel and living allowances.

Stamp honours distinguished Canadian painter

Postmaster General André Ouellet recently announced that a 15-cent stamp would be issued on June 8 to commemorate the hundredth anniversary of the birth of J.E.H. MacDonald, one of Canada's leading painters who was a member of the Group of Seven during the first quarter of the present century.

"As with other issues commemorating great Canadian artists, the MacDonald stamp demonstrates one of the painter's finest works," said Mr. Ouellet. "MacDonald's painting entitled *Mist Fantasy* has been reproduced in the design of this stamp through the courtesy of the Art Gallery of Ontario."

James Edward Hervey MacDonald was born of Canadian parents in Durham, England, in 1873. The family moved to Canada in 1887 and settled in Hamilton, Ontario, where the young MacDonald attended the Hamilton Art School for two years. When the family moved to Toronto in 1889, MacDonald continued his studies in evening classes at the Central Ontario College of Art there and served his apprenticeship as a lithographer with a Toronto firm. In 1895, MacDonald began work as a designer for a commercial art firm, Grip Limited, where he met some of his future colleagues in the Group of Seven, of which he became a founding member in 1919.

In 1910 MacDonald made the first of many trips to Georgian Bay, Ontario, where he began sketching in his spare time. The following year he left Grip Limited to devote himself entirely to painting. He travelled and painted in the Georgian Bay and Mattawa areas, the Laurentians, the Maritimes, the Rocky Mountains and the Algonquin and Algoma districts of Ontario, where he is considered to have done his finest work.

In 1921 MacDonald became an instructor in the department of Design and Applied Art at the Ontario College of Art. While there, he produced some of his finest canvasses, among them *Mist Fantasy*, painted in 1922. MacDonald became principal of the Ontario College of Art in 1929, until his death on November 26, 1932.

