

pendes wholly on the fact that he has the public on his side. So does that of the inspector. The combination of order and progress depends on the slow process

of co-operation by citizens at all stages, on this our legislation rests. The spiral is continuous. Its vital and sustaining spring is public consent.

## More Education in Nutrition

By ELIZABETH MACMILLAN

**T**HE establishment of a new and better social and economic order is a main peace aim of the United Nations. The first requisite of such a democratic social order is the provision of environmental conditions under which every citizen will be able to develop his or her full inherited capacity for physical and mental well-being.

Freedom develops feebly among ill-fed people. Nutrition has a profound effect on both physical and mental health. An adequate dietary is necessary for physical fitness, and the security which comes from physical health is fundamental for mental health. We cannot hope to attain the desired freedoms without a social order which provides the basic necessities for such health.

Nutrition is only one factor in health, but it is an important factor. Nutrition cannot perform miracles but adequate food does make a difference in health. We now know that some additional foods during pregnancy have a decisive influence on the health of the mother and the child. We know that food plays a part in building up resistance to disease and the prevention of tuberculosis. We know that proper foods make a difference in mental alertness and in the ability to learn. Adequate diets are necessary for proper bone and tooth development, for healthy skin, eyes and nerves and for optimal physical growth and length of life. Enough of the right kinds of food make a difference between positive health and merely passable health.

If our present knowledge of foods and nutrition was generally applied in Canada, it would have far-reaching implications for national health. Evidence that nutrition knowledge is not fully applied in this country, reckoned to have a high standard of living, is shown by the high incidence of rejections of men and women in the prime of life for service in the Armed Forces. True not all the incidents of these rejections can be laid at the door of malnutrition, but many undoubtedly belong there. Tuberculosis, weak hearts, poor nerves, poor vision, faulty skeletal development and much else are known to flourish in an environment of undernourishment.

Canada's shockingly high infant and maternal mortality rate bears further evidence of malnutrition.

Four Canadian Dietary Surveys conducted in 1939-40 with families in Halifax, Quebec, Toronto and Edmonton give us information, although somewhat limited, which bears evidence of faulty nutritional practices in Canada. Dr. L. B. Pett, Director of Nutrition Services, of the Department of Pensions and National Health, has made the following statement in summary of the findings of these surveys, "To sum up these findings is difficult, but the statement has been made that, roughly speaking, only forty per cent of the people studied were adequately fed, forty per cent were in a border-line state, and twenty per cent were seriously undernourished." "One conclusion is clearly evident from these surveys; many families in Canada were not securing supplies of food adequate for health, for the proper growth of children, and for working efficiency."

Canada, a land of plenty, has a challenging nutrition problem. Many say, why bother about this problem, the government will look after it. True our governments are doing something about nutrition. We have at Ottawa a federal nutrition office, Nutrition Services, who are conducting a worthwhile national nutrition education program. Canada has started a National Physical Fitness campaign, and is working on Health Insurance.

War has made our people more "nutrition conscious," but what of the post-war period? Is there not the danger that with peace and the food problems of European nations, together with the postwar plans for feeding the world, we may tend to lose sight of our own current and future nutrition problems?

We must not allow this to happen. We must get on with the job of combating malnutrition. We must help our people to become increasingly more "food conscious"—to know foods, how to grow them or buy them, and how to cook and serve them.

We know something about the nutritional situation in Canada. Before suggesting possible means of remedying the situation, it might be well to consider probable reasons why an understanding of nutrition, which is essential for health, is not more widely applied by more of our people.

The economists and nutritionists agree that there are probably three reasons for poor nutritional conditions. One is economic. Some people are undernourished because they cannot afford to purchase an adequate diet. Another cause is educational, lack of nutrition education, and a third cause is indifference to a program of positive health.

More education in nutrition can go a long way in improving the nutrition situation. True, nutrition education may not be able to overcome the economic factor, however, education can help families to make the best possible use of the available money. While the Canadian Dietary Surveys showed that chances for better diets increased with higher

incomes, nevertheless, many families with incomes adequate to purchase proper foods, were not doing so.

The other causes of malnutrition, lack of nutrition education and indifference, offer an important challenge to governments, individuals, organizations and societies concerned with human betterment. More nutrition education will be the most effective means of dealing with these causes.

The aim of a nutrition education program must be to make all Canadians healthier through application of well established nutrition principles, to help all to be adequately fed. This is truly an extensive undertaking. Two questions need to be answered. Who will do the work and where are logical points of emphasis for a program of nutrition education?

#### **Who Will Do the Work**

A nutrition education program requires a local planning committee. This committee may advantageously consist of both professional and lay representatives. The professional representatives should include members of the medical profession, home economists, nurses, particularly those in public health work, hospital administrators, social workers and school teachers. Because of the limited number of professional workers available and because participation begets interest, lay people can play an effective role in a program of nutrition education.

For success an education program requires the cooperation of many organizations, societies and associations. Nutrition education cannot be left to governments alone to do.

#### **Where Are Logical Points of Emphasis**

It is encouraging to realize that men and women in the Armed Services are daily being taught, in a most convincing and practical manner, the importance of adequate diets. Nutrition Services have been disseminating nutrition information in Canada's war industries. In the post-war period the knowledge gained in these

mass feeding projects will be transferred to homes and should be an outstanding asset in improving family nutrition.

Undoubtedly the most fruitful point of emphasis for a nutrition education program will be the school, not only in the classroom, but through a school lunch program, not merely giving nutrition facts only, but in dealing with the health problems of the individual student. The provision of adequate school lunches with pupil and teacher participation in preparing and serving, in some cases, also growing the food, is undoubtedly one of the most effective means by which nutrition may be taught.

The knowledge acquired in schools will have a profound influence on improved nutrition in the home. Parents are interested and proud of the doings of their children, and in many cases mothers will be more willing and anxious to learn nutrition from their children than to go to public meetings with talks and demonstrations on foods and nutrition.

Psychologists say that the most effective way to solve the nutrition problem is to build food habits early in the life of the individual. Although adults may show a certain indifference, children are malleable. The children's health is of primary importance to the mother. Mothers are more susceptible to nutrition knowledge and more determined to apply it when they have young children to feed than probably at any other time in their lives.

Newspapers, radio and magazines offer excellent opportunities for nutrition education. Many women's organizations and societies now have study groups and nutrition committees. If the material is well planned and well presented, these offer opportunities for spreading nutrition education.

Home Economics and Public Health departments in our universities who train nutritionists probably will never justify the money spent on them so long as they stay inside class rooms, and have meagre effects on the nutrition of the

community at large. No longer must nutrition teachers be content to give nutrition facts only, but through nutrition course, the students must be helped to develop a social consciousness regarding nutrition. They must be helped to realize their responsibilities as nutrition leaders. They must become alert to the nutritional needs of their fellowmen, and capable of translating their knowledge into practical everyday application—adequate meals served from foods procurable and at hand which will improve the national health and morale.

Helen S. Mitchell of Defense Health and Welfare Services, Washington, has given three key words, namely STIMULATION, INFORMATION, and APPLICATION, for a nutrition education program. These words might well be our objective for a Canadian program of nutrition education, where the first task is to stimulate all persons to a realization of the importance of optimum health rather than merely passable, sub-marginal health, far too prevalent at the present time.

The second task is to inform every citizen with regard to the simplest facts concerning food values and human nutritional requirements. This information should be in a form that can be understood by all, simple and to the point.

The third task to apply nutrition facts in the life of every citizen calls for cooperation from producer, distributor and consumer. The farmer must produce the right kind and amount of food, and transportation and storage must provide the consumer with food in good condition. The homemaker may apply nutrition principles in her meal planning and preparation, but there is still a duty for all family members to eat these right foods when served. All can have a chance to apply nutrition if they will.

It is impossible to see the end of nutrition education. It must necessarily be a long-term, continuous program if the aim of the program of nutrition services, namely, to help everyone in Canada to enjoy the health that comes from eating the right foods, is to be fulfilled.