Point of View

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Prices for a leaner dairy industry

For several decades, the basic policies of the dairy industries in developed countries, especially Canada and the Member States of the European Community, have encouraged the production of fat and have tended to neglect that of protein and minerals. This not only opposes the general well-being and the best interests of consumers but also distorts world trade. Much could be done by health professionals to persuade the milk producers, consumers and governments that support for dairy farming should be modified so that less fat and more protein are produced and consumed.

For the first time in the history of the General Agreement on Tariffs and Trade (GATT), agriculture is the main item and the biggest stumbling block in negotiations. The problems are caused by rich countries, where the dairy sector often occupies a prominent position. Vast resources have been devoted to increasing the production and consumption of milk fat, while that of protein and minerals has been neglected.

The dairy industry in Canada

Successive Canadian governments have regarded dairy produce as essential and have given a high degree of protection and support to the dairy sector and its basic policies, thereby prejudicing the well-being and health of the population. Despite warnings issued 25 years ago (1) the sector is still mainly concerned with the production of fat because the sale of fat has artificially been made the most profitable option. Decades have been lost during which milk could have been produced with a higher protein and lower fat content.

The social purpose of the dairy sector is to supply the population with protein and minerals, mainly calcium which is linked to the protein. Apart from water and lactose (one of the main non-fat solids) the only other important constituent is fat, which contains no calcium. Milk and dairy produce other than butter and cream constitute a specific category in Canada’s official food

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guide. Were it not for their calcium content they would probably be grouped with meats and their substitutes. Fat would not justify the existence of a sector for produce of animal origin, far less the massive support from governments. It remains to be seen if such support can be justified in the case of milk proteins and calcium.

If the state wishes to reduce the retail price of fat for the population, it should do so efficiently. This would mean supporting the production of vegetable fat, which has the same nutritional value as and is generally cheaper than animal fat.

The ratio of the price subsidies for butter and powdered skimmed milk, which represent fats and proteins respectively, encourages the production and consumption of dairy fat. Yet health experts recommend that dietary fat, especially that of animal origin, be reduced to a minimum. One section of the milk industry admits to producing too much fat, which is increasingly being rejected by consumers. Paradoxically, farmers are currently being encouraged to increase rather than reduce the fat content of milk. The dairy sector does not seem to want to promote the consumption of more non-fat solids in the belief that they replace milk fat in people’s diets. The imbalance in the ratio of price subsidies causes a part of the protein produced by the milk herds to be declared surplus to requirements; in order to obtain this fraction, Canadians have to pay more than double the “dumping price” paid on the international market or the animal feed market. Since a part of the non-fat solids is regarded as surplus to requirements, the sector is unwilling to produce greater quantities of proteins, which are the best nutritional components of milk.

The policy in support of fats depresses productivity, profitability and competitiveness in the sector; higher prices and/or state subsidies follow, because of:

— loss of income among producers, who dispose of their surpluses at a loss;
— elevated unit production costs for fat, since it has more than twice the energy concentration of protein and lactose;
— blocking of the expanding market for low-fat produce.

This policy also means that a greater proportion of consumers’ and taxpayers’ incomes is spent on each unit of dairy produce consumed than would otherwise be the case, and that the sale of milk proteins and calcium is much less than it should be. Consequently, the consumption of fats, especially saturated fats, is higher, and that of proteins and calcium is lower, and there is a wastage of resources that could otherwise be used for improving health.

In the past, dairy fat, especially butter, accounted for a much larger part of the sector, probably because people needed more energy and less vegetable fat was available. At the outset, therefore, the sector concentrated on producing fat. This bias has

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been maintained despite the change in consumption patterns which began about 20 years ago, but remained masked because of the priority given to fats. National, provincial and producer quotas are based on fat, as is direct government subsidy. Under
the current system of payment for milk, producers’ incomes depend primarily on the volume supplied; the other main factor affecting the price of milk is its fat content.

Periodically, the national production quota is brought roughly into line with the population’s consumption of dairy fat, more or less irrespective of the unconsumed quantities of non-fat solids, basically in the form of powdered skimmed milk.

Producers’ incomes are therefore almost directly proportional to the total quantity of dairy fat consumed. The individual production quotas are consequently an economic determining factor of great importance, perhaps even more so than the price of milk. For a given quota, expressed in kilogrammes of fat, the maximum volume of milk that may be delivered increases as the fat content decreases. It is hardly surprising that the subsidized price for butter is maintained lower than that for powdered skimmed milk in order to keep fat consumption higher than it would otherwise have been.

- The support price for powdered skimmed milk has been maintained relatively higher than the price of butter, resulting in lower consumption of non-fat solids and constant surpluses of powdered skimmed milk (because of this bias the financial repercussions are much smaller than they would be if the consumption of dairy fat were to fall in a similar way).

- Widespread damage is caused in society, but because this is not immediately obvious the policy of the sector is unaffected.

- Great quantities of the best nutritional constituents of milk are used for animal feed or exported and thus not consumed by the people, who nevertheless pay dearly for their production.

Over a period of almost 25 years the sector has failed to apply recommendations for the reorganization of dairy farming in order to increase the protein content of milk (1).

The global dairying scene

The situation in the European Community, which has a decisive influence on the global dairy industry, seems to be similar to that in Canada. Every year, only about 20% of the 1.5 million tonnes of powdered skimmed milk produced in these countries is used for human consumption; double this amount is used for animal feed. The latter thus benefits from a lower price compared with what consumers pay for the milk proteins and calcium contained in the different milk products on the market. As in Canada, the people of the European Community are thus deprived of vast quantities of the most nutritious constituents of dairy produce, especially protein and calcium, even though they pay a high price for their production.

The Canadian distortion of the real demand for these non-fat solids as opposed to fat seems to be matched in the European market. This is bound to have severe repercussions on the Community’s international dairy trade, which accounts for some 50% of the world total and probably has a major influence on policies and prices in the dairy sectors of many countries.
In the vast majority of Western countries, governments have long guaranteed their milk producers returns far above international prices. This has necessitated payment to the milk-processing industries of support prices that are also substantially higher than those obtainable on the international market. In any given country it could be said that the sum of the national support prices for the two basic milk products (butter and skimmed milk powder) equals the national protected price for milk paid to producers. When a sum is allocated to pay producers for the milk they sell it has to be divided between the two support prices in a certain ratio. In such a system these prices equal the minimum sale price and the cost of supplying the raw material to factories processing all types of milk product. In both Canada and the European Community, where the protected prices of national dairy products are far in excess of international prices, the logical criterion for setting the ratio would seem to be that of relative internal demand.

Unless exceptionally wealthy a country cannot afford to commit itself to major expenditure on an economic sector if the national population obtains the least valuable part of the product and if the country’s livestock or the citizens of other countries consume the most valuable parts at great discount. Yet this is what seems to be happening in the dairy sectors we have considered. It is equally clear that the structural surpluses of non-fat solids and their disastrous consequences are due to deliberate imbalance in the support prices. One can understand why the states concerned choose to be self-sufficient in milk production. Yet this choice is expensive in terms of direct state subsidy for production, research, development, distribution and so on, and, more importantly, in depriving citizens of access to dairy produce at the much lower international prices. It is the national population that should consume most, if not all, of a country’s dairy produce, especially the best nutritional constituents. The best way to achieve this without further distorting the sector’s economy is to adjust frequently the ratio in support prices in the light of the relative demand for at least fat, protein and lactose.

Dairy farming wrongly emphasizes fat production. Cattle are kept in such a way as to obtain as high a fat content as possible in milk, whereas fat levels should be reduced. The demand for fat has fallen to such an extent that its real market value probably no longer covers even the cost of extra feed for the cows that produce it.

National dairy sectors need enough popular backing for reform to become politically feasible in a short time. Logically, people working in health and welfare should help to bring about such a state of affairs. Of course, it is difficult to build up support when reform is likely to upset a sector of the economy.

The dairy sector should be encouraged to produce milk with the highest possible proportion of protein to fat. Genetic selection and other methods should be drastically reformed to this end. It has to be borne in mind that there is a positive genetic correlation between protein and fat; in other words, intensive selection for protein inevitably produces a simultaneous,
though lesser, increase in fat. Nevertheless, a greater concentration of the nutritional elements in milk (dry constituents) would help to improve real productivity.

When bulls of more appropriate genetic potential are used for artificial insemination, increases in fat production should become smaller. The positive genetic correlation between protein and fat yields should reassure people concerned that milk fat could disappear. It is worth noting that this correlation served to prevent a dramatic fall in milk protein as selection for fat proceeded.

People who wish to consume dairy fat should not be deprived of it. However, since it is not the best source of energy or even of fat, its cost should be met more by those who consume it rather than by society as a whole. An immediate and strong reversal of policy is needed. A large-scale information campaign should be directed at dairy farmers, since they will probably be inclined to resist such a change.

The factors responsible for the present situation need to be eliminated. The income of the sector will have to come as much from proteins as from fat. In order to achieve balance it is necessary to promote proportionally higher consumption of proteins than of fat. In order to bring down the relative price of non-fat solids, they should receive a lower proportion of the milk price guaranteed to the producer. An effort should be made to increase the variety, quality and promotion of low-fat products and/or products with added non-fat solids.

When these actions bear fruit the new goal of national dairy sectors will be to sell maximum quantities of all milk solids. It should become advantageous to sell as much as possible of the type of milk constituent whose production is likely to cost least, and this should conform to what people actually want. Once the system has been reformed the prospects for the consumption of all milk solids should be very good. The best way forward should be through the production of low-fat products, notably partly or entirely skimmed fresh milk and low-fat cheese. Because it is easy to maintain, preserve and use, low-fat cheese could help the dairy sector to win a large share of the market for animal protein for human consumption. In this connection it is important to bear in mind the effect of balancing the ratio of support prices, in other words of reducing the relative prices of products with a relatively high protein content.

It might be argued that a higher price for fat and a lower price for non-fat solids would be irrational, particularly since the real value of dairy fat falls as the market for it collapses. However, consumers are turning to skimmed products despite the fact that the fat that has been removed may represent a loss of over 25% of the non-water content of unskimmed milk. Prices are now very similar whatever the level of fat, which indicates that the consumer attaches little economic value to it, except, of course, in butter and cream. On the international market, powdered skimmed milk now sells for higher prices than powdered whole milk.
In a normal market situation a fall in demand should lead to a fall in price. The course of action recommended here is intended to bring about a normal situation. Only when consumption has been balanced should the ratio of support prices be changed in the opposite direction, since in all probability people will continue to turn away from dairy fat.

**International implications**

Disorder in the dairy sectors of developed countries adversely affects the health and well-being of people in developing countries and disrupts their dairy industries.

Protectionism and subsidy in the agricultural sectors of developed countries obstruct the current multilateral trade negotiations. It is mainly because the calcium associated with dairy proteins is regarded as essential that the dairy sector occupies such an important and entrenched position in many developed countries, seriously hindering liberalization. The dairy sector is largely responsible for the stagnation of the GATT negotiations.

Developed countries “dump” dairy surpluses in developing countries, thereby subjecting them to unfair competition. Food aid in the form of powdered skimmed milk is needed at times, but by and large it would be much better if the developed countries diverted the money they spend producing surpluses to the development of the food and agricultural industries in poorer countries. There should be no increase in the “dumping” of dairy fat when the people in producer countries buy less of it. This is a further reason for frequent and regular balancing of national support price ratios, something GATT could insist on even for national dairy sectors that are relatively closed to international competition.

Genetic material exported by developed countries often forms the basis of the modern structure of dairy stockbreeding in developing countries. The fact that genetic development in the exporting countries has been misguided until now clearly creates a problem for the recipients.

The rationalization of expenditure in developed countries is largely paid for by public development aid, yet at the same time huge sums are wasted on the international agricultural war and on the absurd basic policies of national dairy systems.

All of this causes hundreds of millions of the world’s people to remain in conditions so precarious that they understandably have no time to worry about the environment, overpopulation and other global issues. Consequently, more developmental problems can be expected to compromise the harmony of humanity if no action is taken.

The European Community and Canada are very influential in the running and development of the world dairy sector. Both have national dairy sectors strongly biased towards the production of fat in milk, and

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both are reluctant to look to the future and take appropriate action; indeed, they strive to ensure a strong demand for fat in dairy produce. Yet there is a significant demand for non-fat solids, and it would undoubtedly...
be even greater if the contrary pressures were removed.

Urgent measures should be taken to rescue national dairy sectors from this predicament. The health sector seems ideally placed to initiate action. There are two requirements:

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a decisive move away from fat and towards protein in the dairy industry, and balance in the production and consumption of protein and fat. To this end, special attention should be devoted to expanding the market for produce derived from skimmed milk, and the first steps should be taken towards balancing support prices. The changes should be effected as quickly as possible in order to avoid protracted disruption of the dairy sector. Every part of society stands to gain from the proposed reform, for which society as a whole should pay. Those who are involved in the milk sector, including the producers, are not responsible for the serious shortcomings in government milk policies. It is society as a whole, and not the milk sector, that should bear the cost of correcting them. Moreover, such correction is the only acceptable way towards expansion and greater welfare of the dairy industry.

The proposed new context could encourage an intensification of research into ways of increasing farm incomes, partly through better production of meat produced by the dairy sector. Real prospects of greatly improved productivity could open up.

Political and economic conditions, and the particular circumstances of the GATT negotiations, are shaking the foundations of the global dairy sector. New multilateral agreements are needed to correct the underlying faults of the dairy sector and to minimize the pain of transition through mutual assistance. However, if the fundamental nutritional questions are not taken into account, the results of negotiations cannot be satisfactory.

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The world dairy sector has to be completely reformed. The medium- and long-term purpose should be to compete with the other sectors that provide consumers with animal protein. The countries that complete these reforms must quickly gain a competitive edge in this field.

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