availability of both the protein and non-protein nitrogen from human milk is high.

Protein supplements could be inappropriate in many cases, especially as the energy content of human milk varies too. Routine protein supplementation of maternal milk for infants with energy deficiency or catabolic states, particularly that induced by dexamethasone, could contribute substantially to uraemia and hyperaminoacidaemia. Large pragmatic studies of early growth and developmental outcome are therefore vital before routine supplementation of maternal milk can be justified. Meanwhile there is no substitute for assessing individually babies who fail to grow. Plasma urea concentration can be useful as a discriminator of protein and energy deficiency in these.17

A stronger case can be made for supplementing maternal milk with phosphorus18 and possibly calcium. Very low birthweight infants fed unsupplemented human milk have significantly lower bone mineral density at discharge than those fed low birthweight formula, and differences persist at 1 year.19 There is uncertainty about the age at which they resolve. Whether they matter in the long term is another question. A multivariate analysis of factors affecting the length of preterm infants at 18 months found that feeding with human milk was associated with a significant length deficit of 1 cm.20 The relative contributions of nitrogen, energy and mineral deficiency were unclear, but the additional deficit associated with a pronounced increase in plasma alkaline phosphatase activity in the neonatal period, a marker of metabolic bone disease of prematurity, suggests that mineral deficiency played the greater part.

New concepts about the influence of early diet on development programming and adult disease raise more questions about the nutritional management of preterm and growth retarded babies. But how can the current arguments for and against human milk be balanced? It seems that low birthweight babies fed human milk tolerate it more quickly than formula, are less prone to necrotising enterocolitis, and have fewer bacterial infections. If the mother’s own milk is used they will probably be slightly shorter but more intelligent at the age of 7 than those fed formula milk.12 These findings, ranked in importance and considered with their global implications for the 22 million low birthweight infants born annually, are persuasive reasons for encouraging and supporting all mothers who choose to breast feed their preterm baby.

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Health protection and the European Community

Plenty of scope for improvement

The European Community already plays an important but limited part in relation to health services—for example, harmonising the regulations on pharmaceuticals. It also has an established record in health promotion—for example, in the programme Europe Against Cancer, which has led to legislation on the tar content of cigarettes and health warnings on cigarette packets. But there is growing agreement that the European Community should increase its role in promoting health.

The community will need to develop priorities for action. Two important guiding principles are that the community should support activities that are best done at a supranational level and that action should be taken as close to the citizen as possible (“subsidiarity”). The European Community is primarily a regulatory body with responsibility for trade policy and other aspects of economic and social policy. It is therefore particularly well placed to undertake the approach to health promotion that is sometimes called health protection. This consists of legal and fiscal measures, regulations, and policies ‘in the tradition of the public health measures that have so benefited the health of Europeans over the past century. Ratification of the Maastricht treaty, with its chapter 129 on public health, will enshrine in European law that “Health protection shall form a constituent part of the Community’s other policies.”

Health protection includes policies specific to health, as well as others that are more general but have an important health impact. The community has a good record in such aspects as health and safety in the workplace and environmental regulations relevant to health. We await strong legislation on tobacco advertising—the case for which is unanswerable but which is still beingblocked by a minority of member states, including Britain.

The general community policies with an important impact on health include the single market and its regulation, taxation, agricultural policy, environmental protection, and socioeconomic policy concerning the poorer sections of the
community’s population. The introduction of the single market at the beginning of this year was intended to increase prosperity and may thereby benefit health. But it will also have more direct adverse consequences as market forces bite. For example, a member state with high standards of poultry production faces being undercut by countries whose poultry is cheaper because of lower costs and lower standards. The fear is that standards will tend to fall—if not to the lowest common denominator then to the lowest enforced level. This makes setting of standards crucial. Although the Single European Act of 1986 reinforced the Treaty of Rome’s commitment to “a high level of protection,” this is effective only if the minimum standard is both defined and effectively enforced in each particular policy area.

Increasing taxes on tobacco and alcohol can play an important part in reducing harm as their consumption is sensitive to price. This is likely to be particularly effective among young people. The problem has been that existing differences in national taxation make a new level an inappropriate reduction in some member states and a politically impossible rise in others. As harmonisation is not feasible the topic is being fudged. The possible solution would be to set a directive for progressive, annual increases in each member state so that the tax would rise towards an eventual higher target but from nationally specific baselines.

The Common Agricultural Policy, at some £25 billion a year, consumes 59% of the community’s budget. It determines the quantity and price of key raw materials and foodstuffs and substantially influences the type of agriculture practised and the wellbeing of rural populations.

The billion pound subsidy given to growing tobacco shows the problems of the policy and its implications for health. As the tobacco varieties produced by member states correspond poorly with demand within the community a large proportion of the crop is exported, mainly to eastern Europe and north Africa. There, the product itself directly damages health and, in addition, because it is sold at giveaway prices, undermines local production ("economic dumping"). Despite the expense of this policy and the lost opportunity to use the resources more constructively the community imports three quarters of its tobacco requirements. This has arisen because the rules are unnecessarily complex, weak, and poorly monitored and, above all, are determined politically, with scant regard for economics. Public health concerns are totally ignored. It would be quite possible to meet the objectives of this policy—income support and security in poor rural areas (which are themselves relevant to health)—by conversion to other crops, including forestry.

Many of the same criticisms apply to the production of food. Good nutritional standards should be one of the principal aims of agricultural policy. It would be possible to increase the supply and lower the price of healthier foods such as fruit and vegetables to encourage greater consumption; and converse policies could be used to discourage the consumption of tobacco, sugar, and fat, especially saturated fat. This could slow or even reverse the recent trend for increasing consumption of fat in southern European countries and would have obvious potential benefits for northern countries, where coronary heart disease is so prevalent (probably largely due to diet).

Last year’s reform of the Common Agricultural Policy was introduced mainly to address rising costs and overproduction. Remarkably, no mention was made of public health. The policy should be reformed to make healthy choices easier. At the same time the opportunity should be taken to introduce policies that are sensitive to the development needs of the Third World and to incorporate objectives to safeguard the rural environment. In last year’s reform a small step was taken to encourage more ecologically sensitive agriculture.

More generally, the links between environmental and public health concerns ought to be made more explicit. The community has a long and important record in environmental protection and has recently adopted the fifth environmental programme, which aims to establish a coordinated management plan in place of the previous single standard, reactive approach. But the links with human health are not made explicit.

The existence of socioeconomic inequalities has important implications for health. The community can do much to improve the public health by means of economic policies that reduce poverty, increase the prosperity of disadvantaged regions, and improve economic and social cohesion in other ways. Recently, the commission has proposed that health projects could be eligible for grants from the regional fund for the poorer countries. Certain groups, such as migrants and non-European Community citizens who are resident within the community, are especially vulnerable.

How can public health objectives be effectively introduced into more general economic and social policy? One way would be to introduce a system of health audit, analogous to the well established requirement for an assessment of the environmental impact of new capital projects. The term audit is used to emphasise that it applies to existing as well as new policies and that it is a continuing process. Each directorate general (community “ministry”) would be obliged to produce an initial report describing how it proposed to meet the health protection requirements within its own competence and regular subsequent reports reviewing progress towards agreed targets.

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