of insulin-like growth factor 1 on tissues of the digestive tract.

In addition to insulin-like growth factor 1, milk contains several other growth factors, which may have a role in neonatal gut development.⁷ Their importance for other consumers is problematical. As a recent National Institutes of Health panel report concluded: "Whether the additional amount of insulin-like growth factor 1 in milk from [recombinant bovine somatotrophin] treated cows has a local effect on the esophagus, stomach or intestines is unknown."⁸ Treatment with bovine somatotrophin also changes the nutrient content of milk—for example, the concentration of casein decreases and the fatty acid content is altered.⁹ Whether bovine somatotrophin would cause changes of biological importance to consumers would depend on the relative contribution of treated cows' milk to total milk and dairy products consumed and on the level of consumption. Milk is seldom free from contaminants, and mastitis in dairy herds results in low (and monitored) concentrations of certain antibiotics in milk. But if treatment with bovine somatotrophin increases the incidence of mastitis then consumers would be increasingly exposed to antibiotics in milk.³

These risks relate to consumption of milk and dairy products from cows treated with bovine somatotrophin. Paradoxically, greater risks might be associated with their non-consumption, because milk is an important source of calcium, protein, and vitamins. Public attitudes to bovine somatotrophin are influenced by the widespread suspicion that "commercial confidentiality" is being used as a cloak to obscure product deficiencies, with its manufacturers accused of selective publication of data. The implications for public health are clear: whether or not the suspicions are justified, consumer rejection of milk could lead to its substitution by far less nutritious alternatives.

Concern for consumer confidence led to calls for extending the criteria for assessing veterinary medical products to include an evaluation of likely socioeconomic impact. This proposal was recently incorporated into a draft regulation issued by the European Commission,¹⁰ for which bovine somatotrophin may well prove to be a test case. If bovine somatotrophin is not to cause yet another damaging food scare there is urgent need to adopt procedures for its assessment that are both open to public scrutiny and suitably comprehensive. Such assessments should include rigorously monitored blind trials.^{11 12}

T B MEPHAM

Reader in Lactational Physiology,
University of Nottingham,
Loughborough LE12 5RD

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Drug misuse and the Dutch

A matter of social wellbeing and not primarily a problem for the police and the courts

The Netherlands has a policy on drugs which is certainly individual and is sometimes described as soft because it condones their use. The Dutch believe, however, that a pragmatic approach aimed at seeking solutions is more effective than one that is emotional and dogmatic. They do not have a laissez faire attitude but they do not like a "war on drugs" either as that creates war language and a war atmosphere.

The Netherlands recognises that it is part of Europe, and it has made both possession of and trafficking in all drugs illegal. But the criminal law is enforced in a way that is intended primarily to decrease the drug supply and not to punish use. The government is aware that these two attitudes must conflict to some extent: legal restrictions are needed on the supply of drugs because of their harmful (primary) effects, but making drugs illegal creates additional (secondary) physical and social problems for both users and society. The effects of drug use are often confused with the effects of drug policy. The criminal nature of so many drug problems has blinded many people to the primary effects of drug use. This confusion has made the main focus of drug policy in most countries the fight against international drug trafficking.

Recognition of the side effects of drug use is the basis of the Dutch tolerance of users. This offers room for accepting pragmatic aims through which the side effects can be tackled.

Misuse of drugs is primarily seen, therefore, as a matter of social wellbeing and public health rather than as a problem for the police and the courts. The protection of health and social wellbeing is the primary aim, and the Ministry of Health has always played the leading part.

The criminal justice system maintains a clear cut distinction between drug users and traffickers. It avoids classifying the actions of users as offences since they would then no longer be accessible to any form of prevention or intervention. The use of discretion by the police and the prosecutions department allows tolerance of the possession of "hard drugs" (heroin, cocaine, amphetamines, and so on), which for cannabis extends not only to possession but also to the sale of small quantities. No special action is taken by the police to detect the possession of drugs for personal use or selling up to 30 g of cannabis products.

This policy has resulted in dealers selling small quantities of cannabis products in coffee shops—but it prevents users from going underground and sliding into the fringes of society where the risks may increase. If young people experimenting with drugs are obliged to buy the relatively less dangerous cannabis products on the illegal market where the harder drugs also circulate there is a great risk of their turning to the latter at some point.

Nevertheless, while drug users in possession of quantities

for personal use are not threatened by police activities use of drugs is not available as an excuse for committing crimes against property. Drug users are held responsible for their own criminal activities, like all other citizens, and they are prosecuted—but they may be referred to treatment facilities. This approach cannot, unfortunately, be offered to all addicts, and, indeed, around a third of all prison inmates are drug addicts.

Education on the risks of drugs (including cannabis) has been integrated into general health education. Youngsters have to learn to cope with the risks of life and to take responsibility. The Dutch believe that specific drug education, particularly when it emphasises the dangers by warning and scare tactics, is ineffective. There are no mass media campaigns.

Helping agencies do not wait for addicts to approach their offices: they take the help to as many addicts as possible. A wide range of accessible treatment, counselling, and rehabilitation services is on offer, and these have realistic treatment goals primarily directed at improving addicts' physical and social functioning. Immediate abstinence is not required. Non-moralising maintenance with methadone is one of the many modalities. Addicts are encouraged to try to retain relations with "normal" society as long as possible. This "harm reduction" approach does not prevent many addicts kicking their habit in drug free facilities. It has nothing to do with pampering addicts. Failure to provide this type of care and support would simply make matters worse and increase the risks to the individual and society.

Keeping close contact with addicts is also a prerequisite for achieving changes in behaviour aimed at preventing AIDS. Addicts can get condoms and clean needles free—important policies, but not a panacea. Prevention must be embedded in a broader care system. One of the services needed, for example, is open door centres for drug misusing prostitutes.

What are the results of both this prosecution policy and the prevention and treatment policies? Firstly, most Dutch youngsters are not interested in drugs. In the 10-18 age group the prevalence of cannabis use at the beginning of 1989 was 2.7%.¹ For heroine and cocaine the figures were 0.25% and 0.3; these percentages were 0.2% and 0.6% for the whole

population of Amsterdam.² Crack has still not reached The Netherlands.

Nationally, the number of drug addicts (about 20 000) has stabilised at about 0.15% of the population. The harm reduction approach has achieved more health consciousness among users, and most do not inject drugs—in Amsterdam less than 40%, and in some smaller cities injecting is a taboo. Another indication is the number of deaths caused by drugs, which was 52 in 1989 for the country as a whole; in Amsterdam there were 13 deaths (of residents) in 1990 in an estimated 5000 to 6000 drug addicts.

Perhaps the most striking feature is that the extensive aid network is capable of reaching most addicts—in Amsterdam 70-80%, in some smaller cities 100%. This could have been accomplished only by adopting realistic treatment approaches. Field studies among methadone clients and street addicts show that this approach is successful and that the typical addict is in no way an antisocial junkie.³

Finally, on the issue of AIDS prevention addicts are indeed willing to change their behaviour. Needle exchange does not lead to more drug use or to more injecting but to fewer people sharing syringes. Although the prevalence of HIV infection in Amsterdam in the high risk group of intravenous drug users is quite high, it has stabilised at about 30% since 1986 (H J A Van Haastrecht *et al*, international AIDS conference, Montreal, 1989).⁴ The proportion of patients with AIDS in The Netherlands who are intravenous users is 8.8%.

The problem of drug misuse is with us, and there is no realistic prospect of its eradication—but it can be successfully contained.

EDDY L ENGELSMAN

Director,
Division of Alcohol, Drugs, and Tobacco,
Ministry of Welfare, Health, and Cultural Affairs,
P O Box 5406, 2280 HK Rijswijk, The Netherlands

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Oral complications of cancer

Preventive treatment is vital and many specialties are required

Conventional cancer treatments such as radiotherapy and chemotherapy do not readily differentiate between normal tissues and malignant cells. The more intensive the treatment, the greater the damage to normal tissue—especially the bone marrow, the gut lining, and the oral mucosa. The suffering associated with oral mucositis is by far the worst part of the treatment for many patients receiving curative chemotherapy or undergoing bone marrow transplantation, and for those having radiotherapy for cancer in the mouth. If the pain and dysphagia alone were not enough, the ulcerated mucosa provides a portal of entry for infection; loss of weight and malnutrition may bring about further impairment of immune function¹; and if the symptoms are severe enough they may mean treatment has to be halted temporarily until the mucositis settles. The importance of maintaining the integrity of the oral mucosa during treatment was recognised in a recent consensus statement from the National Institutes of Health,

Oral complications of cancer therapies: diagnosis, prevention and treatment.²

The acute effects of radiation are mucositis, qualitative and quantitative changes in the saliva, and impairment of the nutrition of the mandible. Whereas the mucositis normally heals, xerostomia may never resolve—predisposing to dental caries. The long term effects on the mandible may eventually be manifest as osteoradionecrosis. The therapeutic index is narrow when oropharyngeal malignancy is treated with irradiation. All curative courses of radiotherapy carry a small risk of serious late morbidity.

There is no way of avoiding radiation mucositis but its impact can be reduced. Before the patient starts any intensive chemotherapy or local or systemic radiotherapy the oral cavity must be assessed with a view to eliminating sources of infection and chronic irritation.

The aetiology of dental caries in these patients is complex,