

## REPORTS AND COMMENTS

### Alternatives to animal use in education

Reflecting a growing concern in society about the non-essential use of animals in education, Article 25 of the Council of Europe Convention (ETS 123) *For the Protection of Vertebrate Animals Used for Experimental and Other Purposes* states that scientific procedures on animals should not be carried out for the purpose of education or training unless absolutely necessary. In recent years, alternatives to the use of animals for education have been developed in a variety of fields. This video demonstrates a selection of these alternatives. Teachers and students at various European universities describe the advantages of these systems and provide a commentary. The video demonstrates clearly the power, flexibility and the high quality of the graphics of some of the programs now available. Among the systems described are: 'SimNerv' a virtual frog nerve preparation, 'SimMuscle' a virtual laboratory for exploring the physiology of frog skeletal muscle, 'Digidiss' which simulates the dissection of various animals, and 'Microlabs' which simulates experiments in pharmacology. The latter includes videos of rats suffering tonic and clonic convulsions. 'Not nice', says the video, 'but it will not need to be repeated any more'. The package can be used to explore the effects of various drugs in several species in relation to the dose, route of administration, and time after administration. It can be employed, among other things, for teaching how to decide humane end points in toxicological experiments. Also demonstrated are the artificial 'Koken' rat which is used to teach various procedures including intravenous administration or blood sampling from the tail vein; and a system which uses artificially perfused organs collected from slaughterhouses rather than anaesthetized animals for training in keyhole surgery techniques.

In addition to providing what appear to be excellent alternatives to the use of animals for teaching, these new resources offer a number of other advantages including more efficient use of teaching time, flexibility and repeatability. This video is a good advertisement for the particular alternatives it demonstrates, and a good advertisement for the whole concept of alternatives in education. Viewers are referred to the EuroNICHE book *From Guinea-Pig to Computer Mouse: Alternative Methods for a Humane Education* for further information (see review in *Animal Welfare* 8: 188-89). The video is likely to prove a useful tool for helping to promote the wide range of excellent alternatives that are now available.

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*Alternatives in Education: New Approaches for a New Millennium.* EuroNICHE (1999). EuroNICHE: Leicester. PAL VHS Video. 33min. Available from NICHE-UK, 28 Fell View, Cockermouth, Cumbria CA13 9PQ, UK; or for North American orders from, Dr J Balcombe, HSUS, 2100 L Street NW, Washington, DC 20037, USA. Price £12.00 Western Europe and £6.00 Eastern Europe (or £8.00 and £4.00 for concessions); and US\$20.00 (or US\$15.00 for concessions).

### Welfare standards for dairy cattle

Under current world trade agreement rules, countries are not permitted to block imports of animal products on the grounds that the welfare of the animals involved is unacceptable. Attempts to improve farm animal welfare through national legislation for high standards risk backfiring if they increase production costs which then give a marketing advantage to overseas competitors with lower welfare standards. The danger of simply exporting problems in this way is a real one. Welfare assurance schemes such as the RSPCA's 'Freedom Food' initiative provide an alternative way forward. In these schemes, produce from animals kept to high welfare standards are labelled as such and sold at a higher price. A growing proportion of consumers are prepared to pay more for foods which have been produced to guaranteed high welfare standards. The quality of life for at least a proportion of the national herd of production animals benefits in this way. The foundations of these schemes are the codes that define the