

cancer, is a complex process which involves psychological, environmental, biochemical and other factors, but most cancer research has been fruitless because of insistence on artificially inducing the disease in animals rather than seeking preventive techniques.

A number of vaccines developed through animal experimentation, like those for polio and rabies, were hazardous because they had been derived from diseased animal tissue, resulting in severe reactions and death for some people. However, the development of many vaccines such as those for rubella, rabies and even polio can utilize human cells in the test tube, avoiding the contamination which results from utilizing animal tissue.

Insulin was initially developed through animal experiments, but although it lowers blood sugar levels, insulin does not counter the real problem of diabetics, namely the rapid deterioration of blood vessels.

Fortunately, human insulin can now be developed through genetic techniques. It should be remembered that insulin is not a cure for diabetes, which is currently the third leading cause of death in the U.S. and the leading cause of blindness.

The Responsibility of Science

The American Anti-Vivisection Society is not anti-science nor anti-research, but seeks to place responsibility on the biomedical research establishment to find alternatives to the use of animals. Although some medical progress may have resulted from animal experimentation, it is probable that our health care system would be more advanced if non-animal alternatives had been sought and implemented. Western medicine has become dependent on drug therapies and after-the-fact treatment of disease. Consequently, many individuals have abdicated responsibility for their own health, and preventive medicine has been relatively ignored in the frantic and lucrative search for "miracle" drugs and vaccines. As has been emphasized throughout this brochure, moral factors must always be a primary consideration in determining our actions.

Since scientific and academic advancement is often predicated on the number of journal articles published, pressures to "publish or perish" are intense, leading some scientists to fabricate fraudulent results. A book entitled *Betrayers of the Truth* has been published on this subject (see bibliography).

Another reason for the proliferation of animal experiments is the Western attitude that the purpose of animals is to serve humankind. This "reasoning" has been used as justification for exploiting animals over the centuries, as humans frequently perceived themselves as above and separate from nature. But a new awareness is emerging which recognizes the interconnected relationship of all creatures, including humans, each of which fulfills an integral function in its respective ecosystem. A reverence for *all* life and a holistic approach to the problems we face are essential if human life on this planet is to continue.



Dejected rhesus monkey sits in restraint chair. Multiple wounds are evident.