

FEATURE

Vicious vanity

The facts and myths about animal testing

BY SUZY KOVINSKY

EVERY YEAR, 17 to 20 million animals in North America are subjected to painful procedures and killed in order to test the products that consumers purchase. Although no law specifically requires animal testing, rabbits, guinea pigs, dogs, rats, mice and non-human primates are poisoned, blinded, burned and asphyxiated in tests that have dubious relevance to human use.

THE DRAZE (EYE IRRITANCY) TEST

A concentrated substance, such as shaving cream or deodorant, is dripped into one of the animal's eyes, while the other eye serves as a control. Rabbits are most often used because their cornea is far more sensitive than humans'. Occasionally, dogs and non-human primates are used. The damage is measured according to the size of the area injured, the degree of swelling and the amount of blood, puss and irritation.

The animals cry out, claw at their eyes and move about frantically trying to escape the painful stimuli. Corneal damage may cause blindness. Other reactions include ulceration or opacity of the cornea, inflammation of the surrounding tissue, hemorrhage, and an obvious swelling on the inner eyelid.

The animal is usually tightly restrained for a number of days to prevent removal of the irritant. Pallia-



tive treatment is often non-existent and attempts to minimize the pain are token at best.

DERMAL IRRITANCY TEST

This test involves the direct application of the test substance to the shaved, abraded skin of an immobilized animal for a period of time. After examination of the resulting burns, rashes or blisters, the animal is either recycled into another test or destroyed.

ALTERNATIVES TO IRRITANCY TESTS

The most accurate means of testing a substance's irritancy is to conduct a battery of alternative tests. When testing new ingredients the manufacturer would initially compile a literature search using a database such as the one available through the National Library of Medicine.

New ingredients can be tested through the use of computer of mathematical models by comparing the test ingredient's molecular configuration the structure of known chemicals.

Cell tissue cultures such as those of human skin or eye tissue, can be experimented on, without harming the individual the tissue samples are taken from.

THE OTHER MAJOR category of product testing is Toxicity tests. The main objective of a toxicity test is to determine the dose at which a given percentage of test animals will die. The most common is the Lethal Dose Fifty per cent (LD/50), an archaic test which indicates the minimum dose of the test substance required to kill 50 per cent of the animals used in the experiment.

ORAL TOXICITY TEST

The test substance such as floor polish or shampoo is administered orally to the animals through stomach tubes, capsules or mixed in food.

Most tests are two weeks long: 14 days of diarrhea, gasping, excessive defecation, loss of appetite, salivation, vomiting, bleeding from the eyes, nose and mouth, wheezing, convulsions, paralysis, and for some, death.

Any survivors are killed and examined. The exact cause of death is often confounded by food and water deprivation, confinement and stressful living conditions. Death may also result from blockage or rupture of the internal organs because of the sheer volume of the test product ingested.

ACUTE DERMAL TEST

The test substance is held in immediate contact with the shaved, abraded skin by means of a rubber sleeve for 24 hours or more. Mice,

rats, guinea pigs, rabbits and dogs are generally used for these tests.

The animals are immobilized and subjected to continuous exposure of varying dosages and concentrations of the substance until the required percentage of animals die.

INHALATION TOXICITY TEST

Animals inhale gaseous products, such as hair spray, until the required percentage of animals die. Rabbits, rats and guinea pigs are immobilized in exposure chambers and sprayed for thirty seconds every half hour for a total of ten exposures. After the observation period, any survivors are killed and examined.

CHRONIC TOXICITY TEST

This test is usually carried out on rabbits and dogs (typically beagles) to determine if small doses of the test substance becomes toxic over long-term exposure. The substance may be mixed with food, or administered via a stomach tube. The test usually continues for two years and any remaining animals are killed and examined.

ALTERNATIVES TO TOXICITY TESTING

There are a number of sophisticated and reliable toxicity testing methods that do not inflict unnecessary suffering on animals. As in irritancy testing, any new substance can be checked using a database as well as using computer and mathematical models. Toxicity tests can be conducted on cell and tissue cultures with reliable results.

EFFECTIVENESS/RELIABILITY OF THE TESTS

The many differences between animals and humans make results

from animal tests difficult to extrapolate to humans. For example, while rabbits are commonly used in eye irritancy tests because they have large eyes and are easy to handle, these factors do not make them good models for human eyes. Rabbits produce tears much less effectively than humans and, unlike humans, have a well developed third eyelid. They also have a larger orbital gland and possess fur encircling the eye.

The tissue thickness, structure and acidity of the fluids are quite different in the two species.

The tests are extremely subjective and inconclusive as well. A substance like aspirin which is useful to humans, kills cats. Penicillin is toxic to guinea pigs but has saved many human lives.

Some researchers caution against the use of animal-based test results lest some commercially valuable product be falsely rejected or a dangerous one accepted. It is also important to remember animal tests do not keep harmful products off the market — obviously bleach or hair dye would be highly toxic if consumed or used inappropriately.

An increasing amount of companies are recognizing the value of non-animal based testing. Cosmetic and toiletry companies are producing cruelty-free products, some of which are widely available. If you are interested in receiving a cruelty-free product list, please contact the Nova Scotia P.I.R.G. office or the Gazette.

Information courtesy of the Toronto Humane Society

DESIRE

The fur you wear has no feet fox, in a trap,

chewed its foot to the bone, then dies a long death, its vein a faucet

on snow. The shoes you wear are the skin of a calf who lived a conveyor belt life. Without

mother or touch of any kind, it reached for a nipple

and was fed a chemical gruel. Your lipstick was force-fed down the gullets of mice and rats

until their stomachs distended in agony; your powder filled

beagle stomachs until they burst. Even your shampoo was dripped

into rabbits' eyes until they went blind and crazy in a bolted vice.

Now if you undress, I'll desire you.

For a moment I'll go crazy in your smell and follow each strand of your hair to the moon

beyond the moon. But then I'll vomit on your perfumed skin, because

you've become all that died for your beauty.

from *Recipes for Flesh* by James Strecker