

answers: First, the government may have rejected cannabis studies to avoid any challenge to its view that pot is dangerous and medically useless. Second, pot may just be dangerous and medically useless.

The drug wasn't always so controversial in the scientific establishment. The *U.S. Pharmacopeia*, a doctors' listing of remedies begun in 1820, first included cannabis in 1870. The

Pharmacopeia didn't drop pot until its 1942 edition, the first published after cannabis was outlawed in 1937. Eventually most physicians began to view the drug as little more than a crude intoxicant. They tended to favor new-fashioned drugs that were refined by pharmaceutical firms into pure chemicals. Raw marijuana contains some 400 compounds.

It wasn't until the '70s that modern

methods were applied to test the medicinal effects of cannabis. As Earleywine recounts, a UCLA study designed to confirm police reports that pot dilates pupils found instead a slight constriction. That's how doctors discovered the drug could help glaucoma sufferers by reducing intraocular pressure. In the years after that discovery, 26 states opened therapeutic research programs.

What Marijuana Does to Your Body

Negative effects

BRAIN

Causes changes in brain chemistry. Marijuana hinders the neurotransmitter acetylcholine, a chemical that triggers various types of signals throughout the nervous system

MOOD AND BEHAVIOR

Leads to difficulty in concentration, attention to detail and learning new, complex information. Also impairs time perception as well as certain aspects of memory—at least in the short term

HEART

Increases the work of the heart. The changes in heart rate and blood pressure are the same as those found in a person under high stress

LUNGS

Is more irritating to (50% more tar than tobacco) and has a greater effect on the upper airways (sinuses and larynx) than tobacco. May cause lung, head and neck cancer

SEXUAL PERFORMANCE

May reduce the number and quality of sperm and damage their mobility, possibly affecting fertility

BLOOD FLOW

Decreases blood flow to the limbs, which in extreme cases may require amputation

Positive effects

PAIN

Increases sense of euphoria. May help minimize pain from migraine headaches and from the spread of cancer

EYES

Reduces intraocular pressure; helping those afflicted with glaucoma

SPASTICITY

Believed to help calm spasms from spinal-cord injury, MS and possibly epilepsy. In the early 1900s, cannabis tinctures were marketed as antispasmodics

STOMACH

Helps restore appetite in people who have lost weight from cancer or AIDS

NAUSEA

Combats nausea from chemotherapy and helps minimize vomiting

