cializes in religion, but his move reflected the mood of discontent in their ranks. Blacks today make up less than five percent of the Church's 52 million American members. Black Catholics are a minority among blacks and "an anomaly among Catholics." There are 1,100 mostly black parishes and only 300 black priests. Black priests are rarely assigned to highly visible positions or as pastors in white parishes. There are only 11 black bishops, all but two of them serving under white bishops in dioceses with large black populations.

The Church's legacy of racism is not forgotten. Early Catholic leaders supported slavery as an easy way to win converts, and even after emancipation, blacks were consigned to the side areas or balconies of Catholic churches. They were excluded altogether from Catholic schools. Yet some early black Americans "responded to Catholicism's internationalism, its black saints, its claims to be a Church for all peoples." Newly arrived slaves also found in the Church's incense, libations, and feast days something more like their own African forms of worship than the austere Protestantism that prevailed in colonial America. Today, encouraged by Rome, blacks in some parishes celebrate mass with gospel choirs and practice baptism by immersion.

Yet, discontent simmers. Some black Catho-

lics favor a new canonical rite for themselves, a separate denomination within the Catholic Church with its own liturgy, canon law, and clergy. The rite, if approved by Rome, would make the African-American denomination the second-largest black church in the United States, after the Baptists.

But many black Catholics are wary. There is concern, says Elie, that "'resegregating' the Church would be economically foolish for parishes," and would overburden the few black Catholic priests. Furthermore, Elie suggests, their long, if painful, history of loyalty to the Church makes blacks hesitate to isolate themselves from it. After all, "The current strains do not approximate the agony of slavery or segregation, and a new separatism is widely perceived as a betrayal of the black Catholic tradition rather than its culmination."

Supporters of the separate rite argue that the Church places too much emphasis on assimilating its members into mainstream American society; blacks "moving freely in the margins," says outspoken black Catholic priest Lawrence Lucas, would be better able to maintain a critical distance from society. Yet for all its possible benefits, Elie believes, the isolation of blacks within a separate rite "would be a great loss to the American Catholic Church—and American society as a whole."

SCIENCE, TECHNOLOGY & ENVIRONMENT

The Rise and Fall Of Oat Bran

"Reconcilable Differences" by Ingram Olkin, in *The Sciences* (July-Aug. 1992), The New York Acad. of Sciences, 2 East 63rd St., New York, N.Y. 10021.

Remember when oat bran was all the rage? A small 1984 study indicated that it dramatically lowered high levels of cholesterol. Then, a 1987 book, *The Eight–Week Cholesterol Cure*, trumpeted the humble bran's wondrous properties. Finally, a 1988 article in the *Journal of the American Medical Association* proclaimed it a more cost-effective treatment for high cholesterol than any available drug. By the end of that year, oat bran was "in" among the health-conscious—the '80s' answer to bean sprouts. The Quaker Oats Company's sales of what was once the stuff of childhood tantrums increased sixfold, and David's Cookies was selling 100,000 oat-bran muffins a week.

But two years later, the bubble burst. A 1990 study showed that refined wheat, used in plain

old white bread and other now-scorned baked goods, although lacking the soluble fiber of oat bran, has the same effect on cholesterol levels—and does not produce the gastrointestinal distress that oat bran does. The study's authors suggested that oats and refined wheat reduce cholesterol simply by replacing the fatty foods that people would otherwise eat.

The mass delusion about oat bran could have been avoided, contends Olkin, a Stanford professor of statistics and education. If "all available oat bran studies [had] been meticulously analyzed before the furor of the late 1980s," he points out, "the evidence for a health effect would have looked flimsy indeed. A handful of small trials studying only eight to 15 people—minute samples by statisticians' standards—did

suggest oat bran has a positive effect. But the results of other studies were marginal."

There is an important lesson here, Olkin maintains: Scientific studies should be subjected to tough scrutiny, using the rigorous methods of science. More than 9,000 scientific studies of various kinds are carried out each year. Through the application of sophisticated statistical techniques, he says, what has come to be called "meta-analysis" can provide "a quantitative synthesis of data from a group of studies on a given question" and thereby yield "a conclusion based on a much larger sample than any single study." In this way, he contends, the weaknesses of individual studies often will be exposed, and patterns sometimes will appear that were invisible to the original investigators. "Virtually all studies have flaws or biases." Olkin says, "and it may well be that the only way to ascertain the truth is to search for patterns in an aggregate of studies." Call it the Oat Bran Rule.



Wellness Update: Thirty-year-old man starting on the twenty-fivethousand-pound oat-bran mustin he must consume over forty years in order to reduce significantly his risk of death from high cholesterol

America's muffin days: The health-minded among us just could not get enough oat bran to eat during the late-1980s craze.

Global Warming— Just Hot Air?

"Warming Theories Need Warning Label" by S. Fred Singer, in *The Bulletin of the Atomic Scientists* (June 1992), Educational Foundation for Nuclear Science, 6042 S. Kimbark Ave., Chicago, Ill. 60637.

A treaty to ward off catastrophic global warming by requiring nations to control emissions of carbon dioxide and other greenhouse gases was the main agreement to emerge from the "Earth Summit" in Rio de Janeiro earlier this year. The pact, however, set no deadlines for the nations to act. That toothlessness was much deplored, but it may not, in reality, have been a defeat for the global environment. University of Virginia environmental scientist S. Fred Singer points out that there is no scientific consensus that a greenhouse warming threat even exists.

The Washington-based Science and Environmental Policy Project (SEPP), a research group Singer directs, surveyed more than 120 U.S. atmospheric scientists in the summer of 1991. Of the more than 50 who responded, an over-

whelming majority (85 percent) agreed that there is no clear evidence that any greenhouse warming resulting from human activities has occurred during the past 100 years. Moreover, nearly all of the respondents doubted the adequacy of the models used to predict future changes in the global climate.

Other surveys of scientists who are actively involved in global-climate research have told a similar story. A November 1991 Gallup poll of 400 members of the American Meteorological Society and the American Geophysical Union, for example, found that only 19 percent believed that human-induced global warming has taken place during the past 100 years.

As such surveys indicate, Singer says, most climate scientists believe that while some