factors play a role also have genetic and other environmental determinants," according to the report of the committee that was chaired by geneticist Arno Motulsky of the Center for Inherited Diseases at the University of Washington.

Admittedly, "Diet and Health" for all its magnitude says very little that is new or surprising. The one exception is fiber. As anyone who watches television or reads popular magazines knows, fiber is in-especially the fiber in oat bran, which is said not only to prevent cancer but also to lower cholesterol. The Motulsky committee has its doubts. Careful review of what is known about fiber revealed that its benefits are "not nearly as much as we've been led to believe." Fiber is difficult to analyze chemically. The idea that fiber is fiber is fiber is wrong. And interactions among fiber and other foods are often unclear. If fiber-rich foods are good for you, it may not be the fiber at all that confers a dietary blessing on the system. It's just not clear, the panel says.

The special value of "Diet and Health," Motulsky believes, is not that it is news but that it is comprehensive and scholarly. Unlike most previous reports (the recent report of the Surgeon General being an exception), the Motulsky report evaluated data for a number of chronic diseases, considered dietary interactions, and tried to balance risk factors for the whole spectrum of diseases. Although the "Diet and Health" guidelines are generally consistent with previous advice, there are more "specific, quantitative recommendations," Motulsky says.

What is the downside of all this? Even the committee recognizes that adopting the ideal diet will require time and attention. A certain mathematical ability would also be handy for counting calories and figuring out whether one's carbohydrates come to 55% of the total, for instance. It would also be useful for figuring out how to keep daily protein to "1.6 grams per kilogram of body weight or 0.026 ounces per pound."

But most of all, reasonable adherence to an ideal diet means rejecting fast food, canned soups laden with sodium, most frozen concoctions, and rich restaurant food—in short, it means changing the American diet by substantially changing the way the food industry produces the products that fill the supermarket shelves, because the average American does not limit the diet to fresh fruits and vegetables, lean meat, and skim milk

Many people see special problems in eating out. But there is hope. One committee member reported with approval that New York's four-star Four Seasons restaurant now offers a gourmet "spa cuisine." Another noted that in any "decent" restaurant, one

can get a healthful meal by telling the waiter what you want and how you want it prepared—the menu be damned.

The real challenge in all of this is what committee calls "implementation"—an important policy issue that is the domain of yet another committee that hopes to report

within the year. Its advice will be aimed not at the average eater but, rather, at the food and restaurant industries, airlines, school cafeterias, and federal policy-makers. The goal: make low-salt, low-fat food de rigueur throughout the land.

■ BARBARA J. CULLITON

GM, Hughes Settle Stock Fight

General Motors has agreed to pay the Howard Hughes Medical Institute (HHMI) nearly \$1 billion in real money this year as part of the settlement of a dispute over the purchase price of Hughes Aircraft, which GM bought from the medical institute in 1985. The institute will get another \$1 billion or so by 1995.

When the late Howard Hughes created HHMI in 1953, he gave it Hughes Aircraft as its sole (and ultimately very valuable) asset. When the institute sold the aircraft company to General Motors, the \$5.2-billion sale price included a complicated arrangement in which GM paid in part with \$2.7 billion in cash and in part by giving HHMI 99.5 million shares of a newly created class of GM stock—H (for Hughes) shares. Those shares turned out to be less valuable and less liquid than anticipated, which left HHMI feeling strapped for cash despite its status as the largest medical philanthropy in existence. In addition, Hughes felt it improvident to have its investment portfolio tied so exclusively to a single company. After all, a good portfolio is a diversified portfolio.

While HHMI was worrying about getting its money, GM was having second thoughts about its purchase arrangement when problems arose over the value of contracts that Hughes Aircraft had with the

federal government at the time it was sold (Science, 23 December, p. 1630). GM was unhappy at having to pay a \$200-million penalty to the government over a disputed Navy contract with Hughes Aircraft and wanted to get its money back from the Hughes institute. HHMI trustee Irving Shapiro, former chairman of DuPont, accused GM of "unseemly" behavior in the case and said that the \$200 million was just petty cash to GM.

The frosty and public argument that erupted between GM and HHMI has now been settled. George W. Thorn of Harvard, who is president of the HHMI trustees, calls the new agreement "very satisfactory" because it provides the institute with "the liquidity we desired." Six hundred and seventy-five million dollars in cash and \$300 million in promissory notes for 35 million shares of stock can do that.

The rest of the money from GM will arrive in stages over the next 5 years as the institute executes various agreed-upon options for selling 55 million additional shares of GM H stock, either to the motor company or on the open market.

As for General Motors, its chairman is quoted as saying that with \$6.8 billion in cash on hand, it can afford the \$975-million buy-back of stock from the medical institute. Good thing.

BARBARA J. CULLITON

An Arbitrator for Space Policy

The President filled a critical post among his advisers on space policy when he returned from Asia on 2 March. He chose Mark Albrecht, a legislative assistant to Senator Pete Wilson (R–CA), to be executive director of the National Space Council, a new coordinating body created by law in 1988. The council will be chaired officially by Vice President Dan Quayle. It will include nine other members representing the secretaries of State, Defense, Commerce, and Transportation, also the Office of Management and Budget, the President's chief of staff, the national security director, the director of the Central Intelligence Agency, and the admin-

istrator of the National Aeronautics and Space Administration. Albrecht is not well known to Washington's civilian space community. His boss sits on the Armed Services Committee and has been more interested in military programs. Albrecht has developed his expertise accordingly.

The biggest challenge facing Albrecht, congressional aides say, will be to negotiate peace and find common ground among the competing interests on the space panel. One former congressional aide says: "Albrecht is very bright, very competent, but nothing can prepare you for that kind of work. It's like war."

IO MARCH 1989 NEWS & COMMENT 1283