## **OUTSIDE INFLUENCES**

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## Mapping the global food system

NEW YORK—Could a new Rockefeller Foundationbacked effort to "map" the quality of foods around the world have the same impact on global agriculture and food security as the Green Revolution that Rockefeller backed in the mid-20th century?

That's the hope of scientists, physicians, activists, and celebrity chefs who traveled here from all over the world on April 23 and 24 to launch what Rockefeller officials are calling the Periodic Table of Food Initiative.

The point of the initiative is to encourage the consumption of a greater variety of foods rather than the small number of plants and animals that make up the diets of most people in the world today, and to produce them in an environmentally sustainable way.

Rockefeller and its advisers tapped two organizations to lead the PTFI Secretariat: the American Heart Association, which was picked as "a leader in human well-being," and the Alliance of Bioversity International and the International Center for Tropical Agriculture in Colombia, which was selected as "a leader in agriculture and the environment."

With \$20 million in funding from Rockefeller and \$30 million more from other sources, the PTFI Secretariat will pay for scientists to make detailed measure-

ments of the composition of foods and put them in a table comparable to the Periodic Table of Elements that scientists use as a common basis.

The Periodic Table research program begins with hard science to develop more detailed descriptions of a food's biomolecules, but the description of each food will also include "cultural traditions surrounding the selection for use in agriculture and culinary preparations."

The Rockefeller Foundation does not portray the project as a direct response to criticism of the Green Revolution of the 1940s, but comparison between the two agricultural initiatives more than 80 years apart is inevitable.

As Rockefeller Foundation President Rajiv Shah noted, John D. Rockefeller established the foundation in 1913 "to pursue scientific philanthropy." In 1941, at the urging of Henry Wallace, an Iowa seed breeder who served as Agriculture secretary in the Franklin Roosevelt administration, the foundation established a research station in Mexico to increase yields for small Mexican farmers. It evolved into the International Maize and Wheat Improvement Center, where American agronomist Norman Borlaug worked on the hybridization of corn and wheat. As the Cold War progressed, the U.S. government became con-

cerned that hunger could lead to communist revolutions in developing countries and urged Borlaug to make yields the top priority. Borlaug shifted to large-scale production that resulted in higher yields through the use of advanced machinery, irrigation, and pesticides. Borlaug replicated his success in India and was credited with saving the lives of as many as 2 billion people, winning the Nobel Peace Prize in 1970. Most countries have adopted Borlaug's scientific approach, but critics have charged the Green Revolution with damaging the environment, encouraging large-scale farms, and even reducing the quality of people's diets through too much dependence on cereal grains.

John de la Parra, director of Rockefeller's global food

portfolio, said in an interview that he taught students at Harvard and other universities that the Green Revolution was created "out of clear necessity," but that the "technocratic solution" had unintended consequences. He hopes the nine "centers of excellence" around the world that will work on the Periodic Table can provide a broader way of looking at what foods should be grown and how.

It will be interesting to see how the Periodic Table project addresses meat, given the widespread view among environ-

mentalists that raising animals for meat increases global warming. At the launch meetings in New York, speakers barely mentioned meat or fish and conference meals were mostly plant-based. But de la Parra, who grew up on a farm in Alabama, and Selena Ahmed, the global director of the Periodic Table Initiative, both said the researchers will study the composition of meat animals and the methods of raising them. Part of the Periodic Table agenda is to include indigenous foods that have been endangered since colonization. Ahmed, who lives in Montana, noted that the bison was central to the food supply of Native Americans.

Roy Steiner, senior vice president for the food initiative at Rockefeller, has said it will take 30 years to see results. In the short term, PTFI includes programs to educate young researchers about "foodomics," the combination of food chemistry, biological sciences, and data analysis.

With \$50 million to unite researchers and activists all over the world, Rockefeller's Periodic Table project bears watching.  $\Box$ 



Contributing Editor Jerry Hagstrom is the founder and executive editor of The Hagstrom Report, which may be found at www.HagstromReport.com.