

priorities for much-needed research, such programs are severely underfunded. These issues are further complicated by the rapid changes in agriculture, globalization issues (including trade restrictions and liberalization of regulations), and the control of foods by multinational corporations from farm to table.

There is a way to bring us to an effective solution to this growing problem. It is time for a new, comprehensive California agency that includes all the broad aspects of the food chain. The regulation umbrella must encompass both animal- and plant-based foods. Such an organization would have the clout to oversee critical issues such as the safety of genetically modified food products. This agency needs to be empowered to carry out coordinated surveillance and

diagnostic testing. Setting up an efficient system for reporting and responding to foodborne outbreaks would be another priority. Finally, to assure the quality of foods and consumer health — as well as animal and environmental health such an agency would guide credible research and testing programs.

We should begin with a major food-safety forum to lay these issues out on the table in a new way. Such a forum would recommend to our policy-makers a new structure addressing all aspects of food production safety, integrated monitoring of food products and public health, and assurance of the public health “from farm to fork.” This bold move would establish California again as a leader in setting world standards for food safety.

Science briefs



■ Supplements may contain high doses

Although they may protect against some forms of cancer when consumed in the diet, plant flavonoids may actually have the capacity to become carcinogenic at higher levels, scientists at the UC Berkeley School of Public Health report in a new study.

In the August *Free Radical Biology and Medicine*, UC Berkeley toxicologist Martyn Smith and graduate student Christine F. Skibola describe the many biological activities of flavonoids, showing that high levels of plant flavonoids can bind with and damage chromosomes and DNA in cell cultures. The effects follow a gradient, with protective effects at low levels and mutagenic effects at high levels.

The authors point out that no one could swallow in food anywhere near the amounts of flavonoids provided in some dietary supplements. In fact, Asians and vegetarians have less cancer than other people, in part because of their high consumption of flavonoids in soy, green tea and vegetables (see pages 26, 33).

Studies in the United States, Europe and Asia, for instance, show that people get 5 to 68 milligrams of the flavonoid quercetin in their diets per day. But a popular health food supplement recommends taking 1,000 milligrams in one swallow — 10 to 20 times more than even a high dietary intake of quercetin.

“That’s when we get worried,” says Skibola. “There is no rhyme or reason for the dosages recommended on these bottles. These com-

pounds need to be regulated.” Products such as *Ginkgo biloba* pills, grape-seed extract and flaxseed may contain high levels of flavonoids.

■ UC hosts food security symposium

The Community Food Security Symposium — UC’s first conference to explore the relationships among agriculture, hunger and community-based food systems — took place Oct. 10 and 11 at UC Berkeley. “I’m particularly pleased that many of the Division’s programs are working closely with the community to develop innovative approaches to these critical issues,” says UC Vice President Reg Gomes.

The purpose of the symposium was to share information among the University, government agencies and community groups, in order to develop community-based solutions, with agriculture as a critical link. The UC Food Security Workgroup, which organized the symposium, includes UC Cooperative Extension, UC Sustainable Agriculture Research and Education Program (SAREP) and USDA.

Symposium participants discussed programs linking small farmers with school lunch programs; community gardening projects; farmers’ markets and food stamps; and hunger in low-income communities (see pages 8, 10, 40, 47).

“UC can help consumers understand the benefits of nutritious, locally produced food, which in turn helps create markets for small farmers,” says Gail Feenstra, UC SAREP food systems analyst.



Suzanne Paisley

UC is working to link area farmers with school lunch programs.