

## How HACCP Started

---

□ Referring to the article, "How *Food Technology* Covered Space Feeding Over the Years" (March, p. 52), there appears to be a true lack of recognition of the origin of HACCP.

The Pillsbury Co. [mentioned in the article as developing HACCP to ensure that the foods to be used in the space program would not be contaminated with pathogens] did reduce to practice the concept of HACCP. However, the concept was imposed on Pillsbury by NASA contract requirements, and I was the sole scientist in charge of flight food and nutrition at NASA Houston when this requirement (the first to be imposed on the food industry for measurement and monitoring of food pathogens) occurred.

First CCP was a requirement in all activity pertaining to Apollo systems. With the help of Natick Labs, I had required the measurement of food pathogens in Project Gemini, and these were part of the specifications (chemical, physical, and microbiological) that were developed. I used these for Apollo because the only difference was feeding one more astronaut and I could not justify reinvention for Apollo purposes.

The contract to implement all this went first to Melpar Corp., with Pillsbury as the subcontractor. When costs got ridiculous, the contract was reissued directly to Pillsbury. Dr. Howard Bauman, a microbiologist and director of research, led the Pillsbury team that reduced the requirements to the practice subsequently labeled HACCP. Pillsbury had been one of the subcontractors (for bakery items) in Project Gemini, so they already had some experience with some of the specifications. Now you have the full history of HACCP.

—Paul A. Lachance, Professor and Chair, Dept. of Food Science, Rutgers University, New Brunswick, N.J.