



Q & A With Catherine Roty

Q. First, tell us about the French government's vending machine project?

A. On Dec. 13, 2000, the French government announced it would launch a National Program on Nutrition and Health (PNNS) in 2001. Its overall aim is “to improve the health status of the [French] population by acting on one of the major decisive factors, namely nutrition.”

In 2002, the French Ministry of Health charged APRIFEL [Agency for Research and Information on Fresh Fruits and Vegetables] with encouraging young people to eat fruits and vegetables. APRIFEL asked CTIFL [Centre Technique Interprofessionnel des Fruits et Légumes] to study the technical feasibility and to determine the fruits and vegetables to be sold in vending machines to students. Two secondary schools in Bergerac (Southwest France) were the basis for our trials throughout 2003.

Q. What kinds of machines were used?

A. The choice of material was imposed by the fragility of the fruits – vending machines using revolving stainless steel trays with same-level delivery (i.e., without dropping the fruits) and, of course, equipped with a cooling system.

Jean-Pierre Hasson of Rodaprim, a fruit and veg wholesaler in Rouen, lent us a FIFO (first in first out) machine. He had approximately 40 machines all over Rouen – town hall, hospital, swimming pool, schools etc. CTIFL bought a shopper vending machine.

Refilling and maintaining the machines were carried out by Arzenton, a wholesale firm in Bergerac from the Créno group [a group of fruit and vegetable wholesale companies] and a member of UNCGFL (French Fruit and Vegetable Wholesalers' Association). The aim was to define on a real-life basis the threshold of profitability for a wholesaler or retailer taking care of ordering, preparing, washing and delivering the products and to draw up a guide of good hygiene practices.

Q. What challenges did you face?

A. There is an average temperature difference of 2°C between the upper and lower trays of the machine. The upper trays should be dedicated to fruits requiring low temperatures, in our case strawberries, followed by fruits that release ethylene – apples, pears, apricots – and then fruits without distinct temperature requirements – clementines, prunes, dried apricots, table grapes. The lower trays are for fruits susceptible to low temperatures – tomatoes, cherries, bananas and kiwifruit.

The humidity regulation systems of the currently available vending machines are not sufficient to keep fresh fruits and vegetables from drying out. Throughout the trials, a plate filled with water was placed in the lower part of the machines, and the water level was checked each time the machine was restocked.

The fruits sold per piece were placed on small plates to keep them from being tossed around during rotation. For fruits very susceptible to dehydration, we used plastic punnets. Juicy products were

supplied with a paper napkin. All fruits were washed, except the strawberries; a pictogram recommended washing them before eating.

Q. How was the program executed?

A. The vending machines were placed in a competitive environment. Both schools had vending machines offering hot and cold drinks, and sweet and salty snacks. The idea was to let the students make their own choices – not to impose the nutritional correctness.

The students declared they would try the machines at least once. If the offer were convincing, word of mouth would do the rest. Fruits and vegetables in vending machines suffer severe handicaps – taste uncertainty, lack of convenience, generic products hardly associated with a commercial environment. Among teenagers, one of the key factors to success for this concept is diversity.

Q. How much did the children pay for these items?

A. The prices were aligned with competing products and never exceeded 1 euro – a sort of psychological threshold beyond which the students considered the fresh products too expensive.

In the end, 82 percent of the students declared they had “bought more than once” from the fruit and veg vending machine; 60 percent said they had bought less from other vending machines, both drinks and snacks. That means the fruit and veg vending machines acquired a certain customer loyalty – mainly among girls.

Q. What's happening now with the program? Is it true that all vending machines are banned at schools in France?

A. Against a background of pandemic obesity and in order to avoid snacking among young consumers, a law in France specifies that “vending machines for drinks and food requiring payment and accessible to the pupils are prohibited in schools after September 1, 2005.”

This law stopped the enthusiasm created by the project. It condemns a distribution method but hardly changes snacking habits. Now, students buy sweets through the student board or leave the school premises and stock up at the local bakery or sandwich shops, where, of course, fresh fruits are totally absent.

At the end of 2007, the French Minister of Agriculture and Fisheries, in a wish to improve accessibility of fruits and vegetables – he should have said fresh fruits and vegetables since processed produce doesn't have the same constraints of storage, packaging or shelf life – requested two projects be carried out: a project of free distribution in primary schools and a new project involving vending machines with fresh fruits to be installed in agricultural (secondary) schools.

The primary-school children here are much younger than those that participated in our project, the products will be free, the distribution will take place in schools situated in less-favored areas, and the project will start in September 2008.

Q. What did you learn from the pilot program?

A. Minimally processed products would stand a better chance than their initial form – apple slices rather than a whole fruit, for instance. I'm afraid fresh fruit will never be a real alternative for sweets.

Excerpted from an interview by Mira Slott