

Food Safety. Consumers' Reaction to a False Alert: Listeria in a French Cheese

Eric Cahuzac, Daniel Hassan and Sylvette Monier-Dilhan*

Main focus of food safety economics

- Impact of information, according its origin -scientific or not- on consumption habits
- Measure of the willingness to pay for a reduced food safety risk
- Voluntary versus mandatory approaches to food safety
- Impact of a crisis on consumption (mad cow for example)

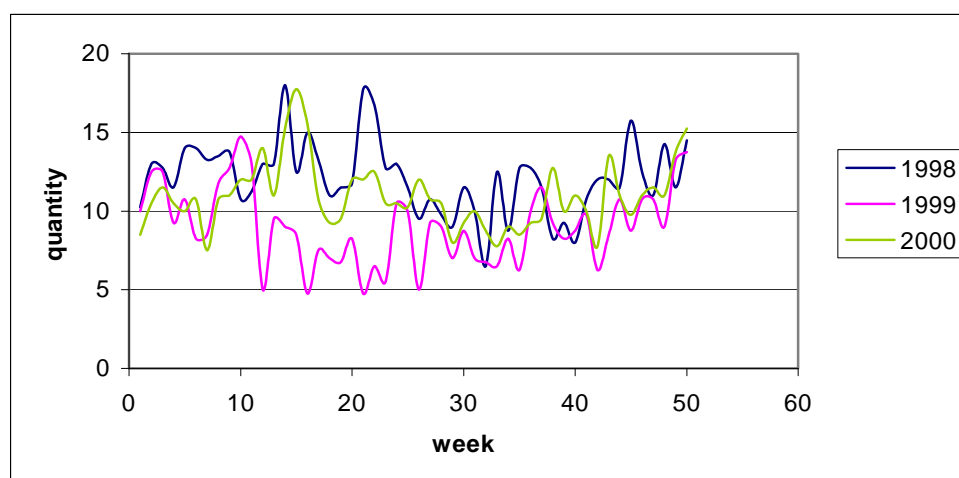
—► Listeriose is a **major risk** occurring from consumption of raw milk cheese, pork butcher, uncooked vegetables... In 1992, 250 people have been infected and 60 of them died, due to consumption of pork butcher.

—► Our study deals with a Listeria **false alert** which concerns a famous French raw milk cheese : the Camembert, a traditional production from Normandy, in the west of France. The alert takes place in March 1999. Only one brand is accused, called “B” brand. Media coverage is first negative, giving substance to the idea of food-contamination. A few weeks later, it became positive and aims to clarify the true nature of the alert.

—► **Data** comes from the 1998-1999 French survey collected by a specialised firm, the Secodip. This dataset provides information on all purchases of Camembert. For each purchase, the brand chosen and the quantity bought are known, and for each household, several demographic parameters, such as age, household size and occupation are collected.

—► Main results:

- The crisis lasts for almost 4 months (14 weeks), which is important



* INRA – Economics, Toulouse France. Correspondence: cahuzac@toulouse.inra.fr; hassan@toulouse.inra.fr; monier@toulouse.inra.fr.

- It has a deep depressing impact on global consumption: -40%. During this period, the probability of leaving the brand grows up by 21% and reaches 66.4%.
- Each type of consumer reacts to the alert:
 - Big eaters are concerned; usually they never stand out of the market for a so long period
 - Education does not allow consumers to realize the false nature of the alert
 - Only people living in Normandy have a different attitude: the probability of deserting is 30% weaker, perhaps due to better information.

Abandon probabilities

Variables	Probability
In average	66.4%
Living in Normandy	37.1%
Consumption habit of “B” brand :	
Small	79.4%
Middle	52.5%
Big	22.2%

- The population at risk (specially the elderly) does not react differently than the rest of the population This result reflects the lack of scientific information concerning the disease.
- There is not “side damages” for pasteurised milk camembert and other brands of raw milk camembert.
- On the contrary, several consumers leaving B brand transfer their demand on other raw milk brands.

—► These results are obtained using different **binomial and multinomial regressions analysis**.