

# Restaurant of the Future

“Really understanding consumer behaviour”

Visit Cofresco 21-10-08  
Dick Stegeman



# Restaurant of the Future is....



A normal university cafeteria?



Look inside...



Consumers being observed

## Drawbacks of current methods *Why a new approach*

- Almost 90 % of new food products have a life span of less than one year and the flop rate has been growing steadily
- Too many questions, too little observation of actual behaviour
- Too many single first impression preference tests, too little attention to changes in preference over time and situations
- Too little attention to the role of incidental learning and implicit memory in food expectation and food memorability
- Too little attention to the role of satiety on perception and liking
- Segmentation of consumers merely based on typologies and attitudes than on situation and behaviour

The interplay between product, individual and situation has hardly been studied

# Restaurant of the Future: joint investment project

- Consortium: university, large enterprise, two SME's
  - Wageningen UR: University/contract research organisation
  - Sodexo: World second largest foodservice company
  - Noldus IT: Software tools for observational research
  - Kampri: Professional kitchen manufacturer
- Budget: \$ 4,75 million
- November 2004: Consortium agreement signed
- October 2007: official opening Restaurant of the Future
- Third parties can join through research foundation: in July 2008, already 38 participants

# RoF: investment project Reasoning

- Food choice is predominant subconscious behaviour
- Discrepancies between what people tell you what they will do and what they are actually doing
- Traditional methods of consumer research (interviews, surveys, focus groups) thus have limited value, hence the measurement of food selection and consumption when and where it occurs →
  - observation of consumers in naturalistic context as prerequisite for product development and market introduction



# RoF: a multi purpose research lab ...

- A fully equipped sensory laboratory and kitchen
  - 16 cabins, incl. physiological sensors and face reading camera's
- A product development unit
  - Development kitchen with an adjacent panel room for individual testing and group discussions
- A fully equipped company restaurant and experimental kitchen
  - 200 regular visitors, 14 camera's, automatic registration systems
  - to develop and test new preparation techniques incl. molecular cooking

# RoF: a multi purpose research lab .... cont.

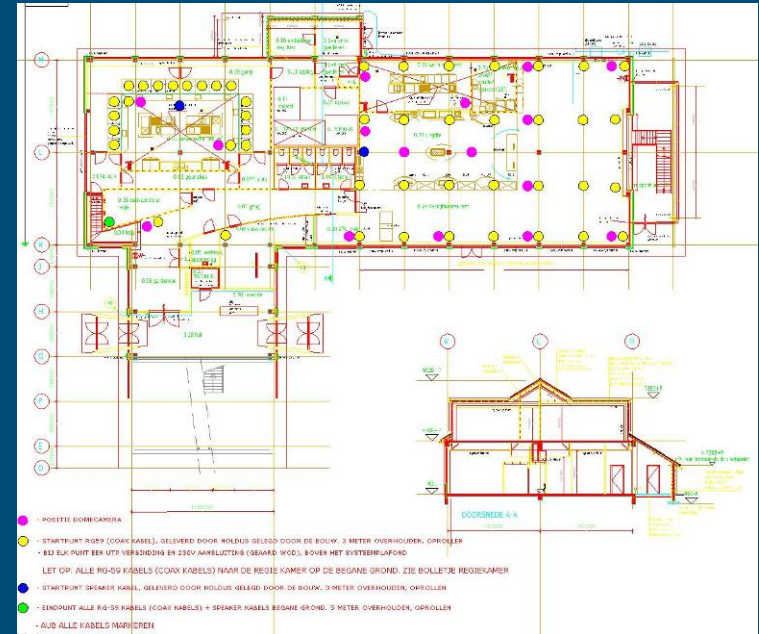
- A set of 4 identical rooms for situational studies
  - Variation of ambient odour, lighting, temperature, furniture
  - To study effects on eating behaviour, emotions, well being, and/or performance
- A psychological and physiological laboratory
  - EEG registration, olfacto and gusto meter, articulograph, eye tracking
- A café and bar
  - Parties up to 50 people, camera's, variation of furniture, lighting, wall and ceiling projection

All rooms are equipped with video camera's

# The Restaurant of the Future: a living lab



- Company restaurant
- Experience lab annex grand café
- Research kitchens
- Sensory laboratory
- Mood rooms
- Physiological labs



- 45 video cameras
- 7 video analysis workstations
- 3 kms of cabling



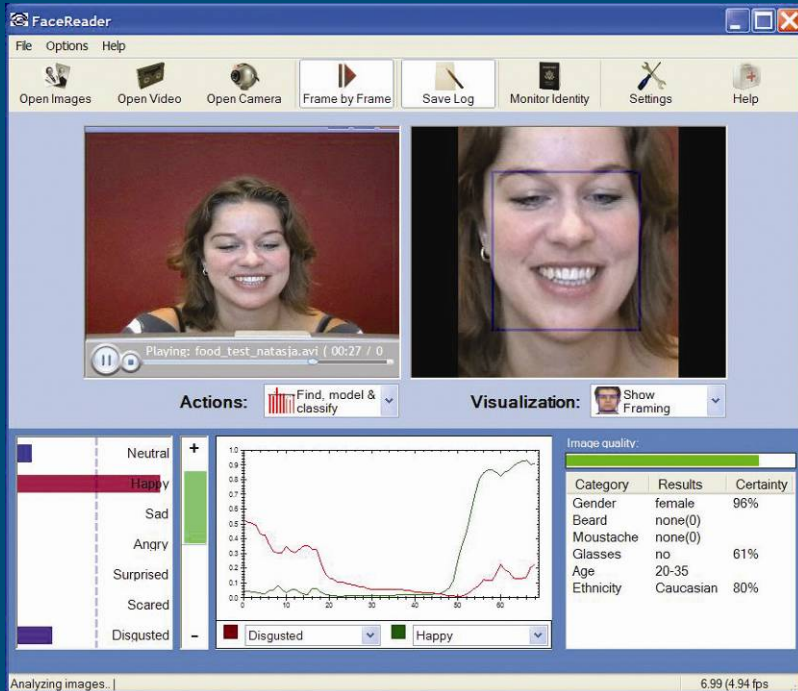
# Observational research: big brother in action...



- Observe food choice and consumption – 480 guests signed an informed consent

- Study effects of ambient variables on long term behaviour

# Sensory and physiological research



- Measuring physiological and emotional responses

- Study multimodal effects of food odor, taste and texture



# Restaurant of the Future in the press

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## Big brother watches you eat

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## 'Big Brother' restaurant opens to monitor diners

Posted Wed Oct 17, 2007 2:33pm.

**A new university research centre is tracking diners with dozens of**

"We want to find out what influence one stimulus, like light," the University of Wageningen spokesman Rene Koster said. "The changes must be small. If you make them too disruptive, people wouldn't like it."

"This restaurant is a playground of visible, or the reverse."

The stylish new facility has glass walls and self-service tills which allow diners to zoom in on individual diners and their

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Oct 18th **El restaurante del futuro**  
 María José Almirón



Uno se sienta en un ambiente atractivo, ordena su plato y se limita a saborear una buena comida con gran placer mientras charla con los otros comensales. La rutina es similar para todos los que asisten a un restaurante, ya sea de lujo o esas tabernas corrientes en las que nos sentamos a saborear unas tapas.

По материалам программы [Сегодня](#)  
**В необычном ресторане ставят опыты на посетителей** 11.11.2007, 20:16



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WAGENINGEN JOURNAL  
**In the Netherlands, Eat, Drink and Be Monitored**



Herman Wouters for The New York Times

The Restaurant of the Future serves as a canteen and research lab for Wageningen University in the Netherlands.

By MARLISE SIMONS  
 Published: November 26, 2007

WAGENINGEN, the [Netherlands](#) — At first sight, nothing betrays the strange happenings at the Restaurant of the Future, a spacious, bright university canteen where scientists and students stop in for food and

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