# So many eating styles to consume an ice cream bar.

# consumers #behavior #food portion

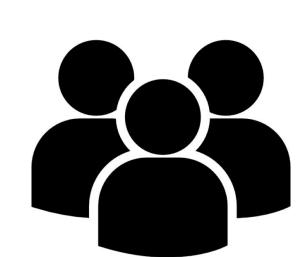
Interactive poster: D links for more content

Food sensory tests are often based on a single intake of products despite sensory experience is clearly dynamic along food portion. Some recent studies reported further development consisting in evaluating consumer's perceptions between successive intakes of a same product. Nevertheless, consumer eating behavior is not taken into account in such approaches.

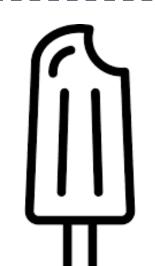


### **Objective**

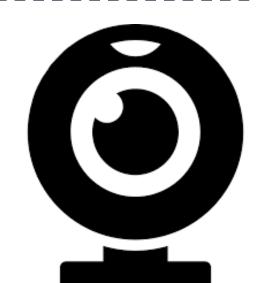
To investigate 'styles' of consuming ice cream bars in order to develop more suitable sensory protocols in the future.



30 consumers 15 women, 15 men Aged 18–60 years



1 tasting session
Sensory booth conditions
Ice cream bar: full portion



Video recording
Live coding by experimenters
Typology of intakes and orientations

# Typologie of intakes

Three specific behaviors identified concerning the mouthing:

- **❖ Behavior # 1**: action of **licking** the surface of the ice with the tongue 

  ▶
- **Behavior** # 2: action of crunching ice with the teeth
- **Behavior # 3**: action of **sucking** the surface of the ice with the lips

## Orientations of consumption

Different patterns can explain the direction of ice cream consumption:

- ❖ Behavior # 1: the subject consumes ice vertically, from the top of the ice to the bottom
- **Behavior** # 2: the subject consumes the **contours** of the ice before to eat the center

# Overview of consumption profiles

Each line represents the consumption sequence (divided in 4 periods) for a consumer.

The final period corresponds to the last intake (few ice on the stick).

The others three periods correspond to the third of the total number of intakes.

Period 1	Period 2	Period 3	Period f
Тор	Тор	Cont	Cont
Тор	Тор	Тор	Тор
Тор	Тор	Cont	Тор
Тор	Cont	Тор	Тор
Тор	Тор	Тор	Тор
Тор	Cont	Cont	Cont
Тор	Тор	Тор	Тор
Тор	Тор	Cont	Тор
Тор	Тор	Cont	Тор
Тор	Тор	Cont	Cont
Тор	Тор	Cont	Тор
Тор	Тор	Тор	Тор
Тор	Тор	Cont	Тор
Тор	Тор	Cont	Тор
Тор	Тор	Тор	Тор
Тор	Тор	Cont	Тор
Тор	Тор	Тор	Тор
Top	Top	Cont	Top

Period 1	Period 2	Period 3	Period f	
Тор	Тор	Тор	Тор	
Тор	Тор	Тор	Тор	
Тор	Тор	Тор	Тор	
Тор	Тор	Cont	Тор	
Тор	Cont	Cont	Cont	
			r	
Period 1	Period 2	Period 3	Period f	
Тор	Cont	Тор	Тор	
Тор	Тор	Cont	Тор	
Тор	Тор	Cont	Тор	
Period 1	Period 2	Period 3	Period f	
Тор	Тор	Тор	Тор	
Тор	Тор	Тор	Тор	
Тор	Тор	Тор	Тор	
Period 1	Period 2	Period 3	Period f	
Тор	Тор	Тор	Тор	
Orientation:				

Top: Top part Cont: Contour

- ✓ Four general intake profiles have been identified and majority of the subjects are led to consume the ice vertically.
- ✓ Over the consumption, the subjects are more and more to consume the ice contours.
- ✓ The final period is characterized by two major behaviors: scraping or sucking the stick.
- ✓ Perspective: this observational study questions about the strong importance to take into account **individual eating style** along food portion before defining sensory protocols.



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Intake type:









