

Sparkling interest in restaurant dishes? Cognitive and affective processes underlying dish design and ecological origin. An fMRI study

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Highlights

- Cognitive and affective processes underlying dish design and ecological origin
- Reactions in the patron's brain during the visualization and the decision-making
- Well-presented dishes activate areas linked to the network of emotions.
- This affective component is kept at the moment of choosing a restaurant dish.
- An ecological menu provokes neuronal responses related to cognitive processes.

Abstract

This paper aims to verify to what extent the presentation of a restaurant dish and the origin of its food provoke reactions in the consumer's brain during the visualization and the decision-making process, from an exploratory approach. The two independent variables singled out for study were whether the presentation was well or poorly presented and if the ingredients were ecological or non-ecological.

The results applying the functional magnetic resonance image (fMRI) methodology reveal that well-presented dishes activate areas in the brain linked to the network of emotions indicating that the visualization in restaurant menus is not a purely cognitive and self-reflexive process but retains a strong affective component. Furthermore, the presence of this component is kept at the moment of choosing a dish, as observed by the activation of the cingulate gyrus, region linked to the regulatory processes of emotions. Hence, research ratifies the existence of an emotional factor during the entire process of decision-making carried out in a restaurant. Yet it is true that exposure to an ecological menu provokes activation of the medial frontal cortex, a region connected to higher reasoning and attention, suggesting that stimuli from well-presented dishes of ecological origin trigger neuronal responses related to high-level cognitive processes.

The practical implications derived, along with its limitations and the future research opportunities, are interesting for both developing theory and also practice. Therefore, scholars are encouraged to further test some research proposals (e.g. moderating role of salubrity or simultaneously eye tracking method).

Keywords

Ecological foodstuffs; Restaurant dish; Presentation; Decision-making; Functional magnetic resonance; fMRI

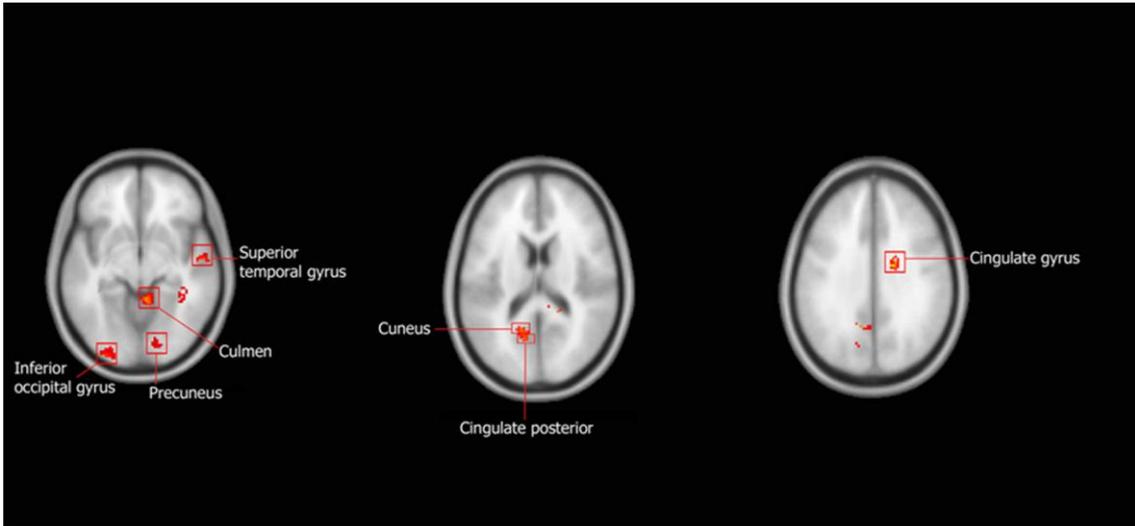


Fig. 2. Comparison of well-presented vs poorly presented dishes.

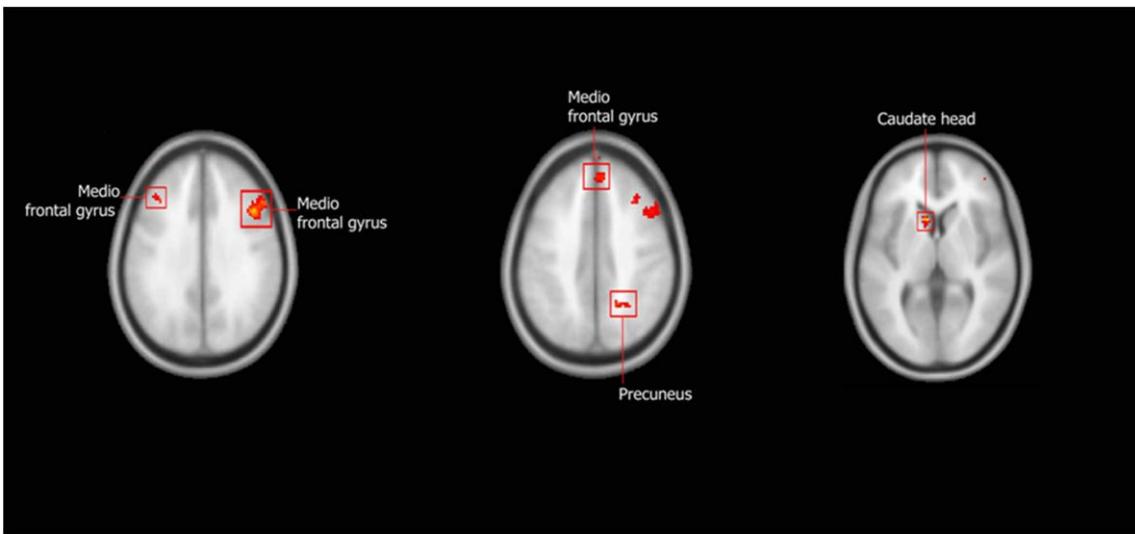


Fig. 3. Comparison of an ecological menu+well-presented dish vs non-ecological menu+well-presented dish.

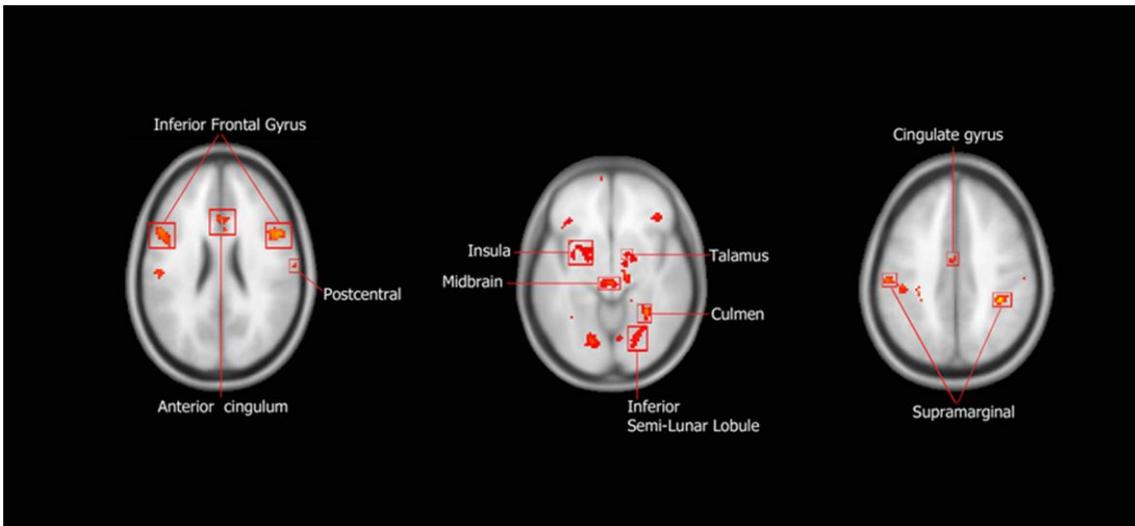


Fig. 4. Final choice vs well-presented dish.