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The role of pleasure in the development of eating behaviour during childhood

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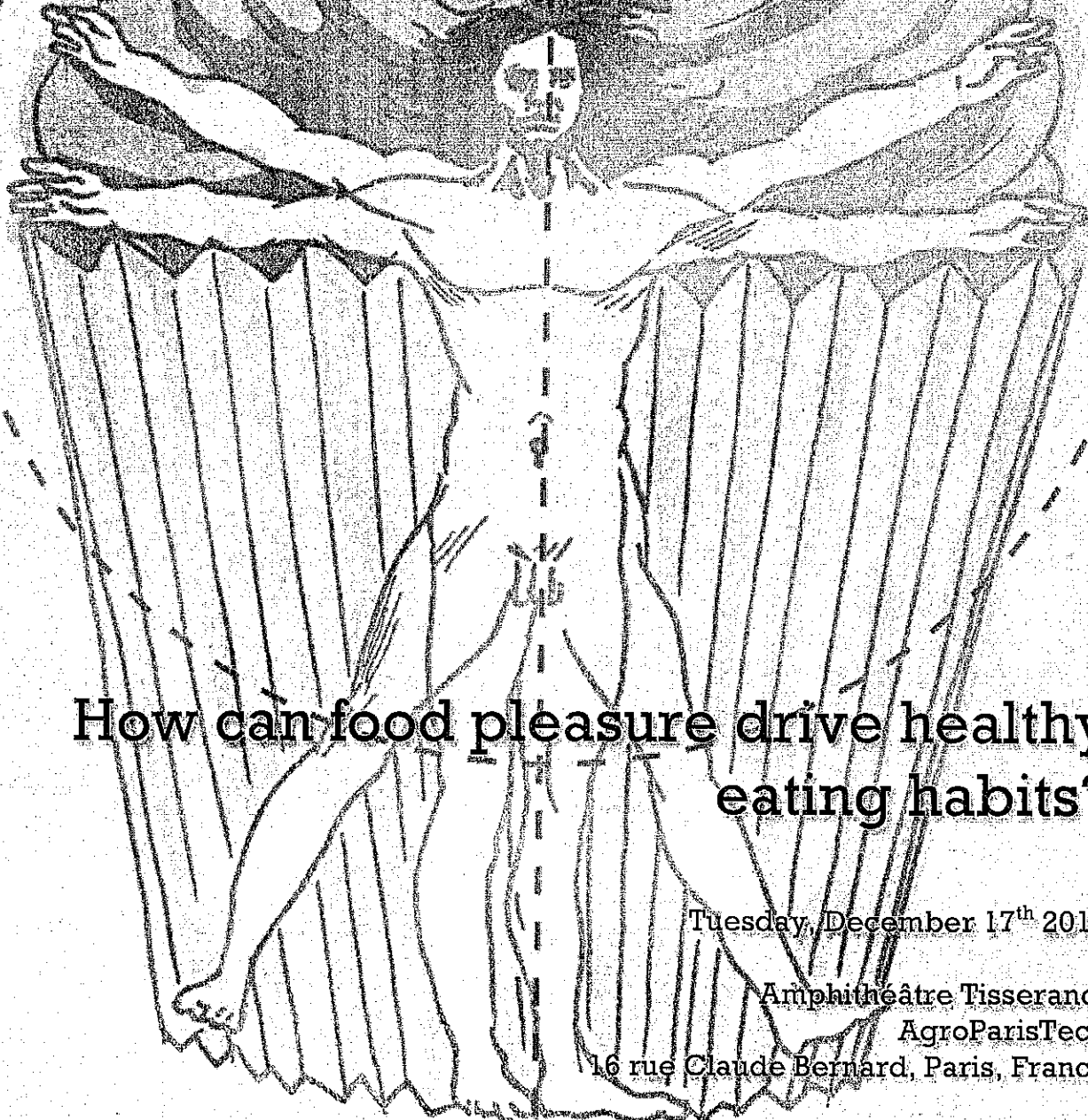
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How can food pleasure drive healthy eating habits?

Tuesday, December 17th 2013

Amphithéâtre Tisserand,
AgroParisTech
16 rue Claude Bernard, Paris, France



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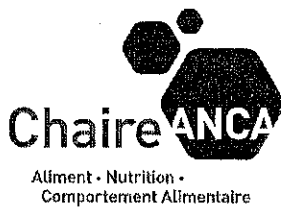


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Introduction

Food pleasure is one of the most important drivers of human dietary behavior. However, its role is complex and further research is needed to understand its effects completely. Food pleasure has multiple aspects: it can be related to product characteristics (nutrition facts, food composition, presentation, packaging, organoleptic qualities and so on), but it is also closely linked to consumer personality and expectations (themselves influenced by prior experiences). Moreover, the physiological mechanisms associated with food pleasure are numerous and can manifest in various contexts (for example spontaneous vs. acquired pleasure, emotional vs. sensorial pleasure). Thus, we will try to answer the following questions: What exactly is food pleasure? What is the role of pleasure in the making of eating behaviours. How can food pleasure lead to balanced dietary habits? To tackle these questions, experts and researchers from different fields (including nutrition physiology, neuroscience, psychology and consumer sciences) will discuss the crucial role that food pleasure plays in eating habits. They will highlight the fact that food pleasure can have various effects on health, sometimes potentially negative ones, but they will also discuss how food pleasure can be considered as a potential driver for behavioral changes. The symposium will be composed of three thematic sessions.

Firstly, the physiological, and especially the neurobiological aspects of food pleasure, will be discussed. Is food only limited to sensory experience during consumption? How can modern scientific techniques confirm consumer study based results?

In the second session, food pleasure will be presented as a key driver of eating behaviors in humans. How does food pleasure lead to dietary habits?

Finally, we will focus on the links between food pleasure and health. How can food pleasure leverage healthy eating habits?



Session - 2

The role of pleasure in the development of eating behaviour during childhood

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Eating is essential for survival, and we are born well equipped to ensure proper food ingestion. However, learning to eat has to occur quickly, in particular because the mode of feeding evolves dramatically during the first years of life, from tube feeding to family foods, through milk and complementary feeding. Moreover, very few food likes and dislikes are inborn, except the enjoyment of the sweet taste: food preferences are learned, essentially during the first years of life (1). Eating habits established in these early years will contribute to the development of subsequent eating habits (2-4). For this reason, it is fundamental to understand the most important early periods for the development of eating habits and the drivers of this development. The role of pleasure in eating is central, especially during childhood when cognitive drivers of food choices may be less prominent than during later stages in life. But where does food pleasure come from? Is it "good taste"? Or "plenty of calories"? Or "having a good time"? We will describe that all these aspects (food sensory properties; food rewarding properties; context of eating) contribute to drive eating in the youngest and contribute to learnt preferences through experience (5). The learning process of food likes may start during pregnancy and lactation, through the exposure of the infant to flavours from the mother's diet. Beyond these first flavour discoveries, the most important phase for learning to eat is likely to be the transition from milk feeding to a diversified diet, i.e. the beginning of complementary feeding. At this moment, infants start to discover the sensory (texture, taste and flavour) and nutritional properties (energy density) of the foods that will ultimately compose their adult diet, and parents are still in charge of providing appropriate foods, timing, context for eating. Infants learn concurrently food taste and energy density, which contribute to shape their ability to control food intake, from a qualitative and quantitative point of view. However, notwithstanding its importance, pleasure is difficult to evaluate especially in the youngest.



Sophie Nicklaus is a researcher and research manager at the French National Institute for Agricultural Research INRA (UMR 132, Team Development and Dynamics of Food Preferences and Eating Habits). She is interested in the creation and evolution of sensory perceptions and of food behavior. She works in collaboration with other teams on cohort studies focusing on food preferences in children.

Selected publications :

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2. Nicklaus S, Boggio V, Chabanel C, Issanchou S. A prospective study of food preferences in childhood. *Food Quality and Preference* 2004;15:805-818.
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