

# Controlling or Trusting Children's Taste: Making Sense of Taste Education

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## Abstract

In critiques of contemporary food culture and its many risks, children are very often framed as a particularly vulnerable group in need of guidance in order to avoid obesity and other epidemics. The fears of a massive food illiteracy of the coming generations and the subsequent food related health problems is often used to legitimate extremely normative food education for children and control mechanism such as nudging, shaming and self-policing.

In this paper, we want to focus on how taste is used in contemporary food education. We will do this by critically discussing a series of academic studies that design and evaluate taste education programs for children. Our main argument is that most of the literature on taste education has a very reductive understanding of taste and is essentially totally distrustful concerning children's taste. Taste is seen as a barrier for 'correct' eating habits and not as an important sense, a source to pleasure, or a central way of sensually understanding and approaching the world. In other words, taste literacy becomes a tool to push children towards 'hegemonic nutrition'.

Theoretically, the paper is inspired by the reworking of Foucault's governmentality concept in recent food studies and learning studies. Through this theoretical framework we develop our critique of the existing literature in the aim of proposing alternative taste pedagogy. This pedagogy is based on trust rather than controlling.

## Background

Over recent decades, one particular French initiative has received much international attention and had great influence on teaching and research on taste, children and learning: *Les Classes du Goût*, which was launched by the French chemist, philosopher of taste and oenologist Jacques Puisais who began teaching taste courses in 1974 in and around the central French city of Tours. Over the following decade, he developed taste lessons for children; introduced nationally, the project was spread over a school year and consisted of ten lessons with different themes. This work was suddenly terminated in 1998 when the national organ with responsibility for the taste classes, Conseil National des Arts Culinaires, was closed down in part due to a looming financial scandal. Over the course of the preceding period, no less than 100,000 children had attended Puisais's taste lessons (Mac Loed & Politzer, 1). The following year, his work was taken up again by the newly founded L'institut du Goût, which has attempted to continue and further develop the principles behind Puisais's taste classes. Since the 1990s, a number of other countries have

developed an interest in Puisais's pedagogy of taste, making efforts to integrate these methods into their own teaching systems. The new partners have formed a collaborative organization called The Sapere Network, which includes a number of European countries.<sup>1</sup>

## Method

This paper is based on a critical literature review of existing research on children, taste and learning. Most of the studies we have found and included investigate and evaluate teaching inspired by Puisais in five countries: France (Reverdy et al. 2008), Sweden (Jonsson et al. 2005), Finland (Mustonen & Tuorila 2009; Mustonen et al. 2012; Mustonen et al. 2009), The Netherlands (Battjes-Fries 2014) and South Korea (Shon et al. 2012; Kim & Chung 2014). Extensive work on Puisais-inspired taste education is also taking place in Switzerland, but for which no studies have been published to date. We have also found a number of studies on taste education that do not involve Puisais: this is the case in some British studies, where Puisais appears to be less renowned than in the continental school of taste. Furthermore, three American studies deal with school garden projects, which are not based on Puisais's vision but stem instead from an American tradition for working with cooking and taste in school gardens (Libman 2007; Heims et al. 2009; Parmer et al. 2009).

Drawing on our analyses of literature on children, food, taste and learning, our focus is knowledge and values, which makes it important to try to understand what kind of childhood is constructed: what competencies and action possibilities are the children perceived to have? What can and what should be disciplined? What concepts of taste, values and learning approaches are used in the studies? How should health be weighed against enjoyment? How are the children's integrity and critical decisions weighed? The central research question is: how is taste used in contemporary food education?

In this paper we focus on some issues that appear in research literature on children, food, taste and learning. We have identified some specific points of interest on the basis of the above questions, which have guided our reading of the 14 selected studies. The analysis begins with the arguments for initiating taste education as proposed in the studies and ends with reflections on leaning and taste education in a critical health education perspective informed of earlier work by Wistoft (Wistoft, 2009; 2013).

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<sup>1</sup> Se <http://sapere-asso.fr/>

## Neophobia Crisis

Several of the studies explicitly take neophobia as their point of departure, describing the fear of tasting new foods. Many discussions address how to define neophobia precisely, and particularly what causes it: is it a physiological phenomenon or the result of cultural influence? Even though there is no consensus in the research field, most researchers agree that the answer is a combination. However, a number of studies highlight that children around the age of two are most likely to be apprehensive about new taste sensations and strange foods. This apprehension is typically explained as a result of ‘healthy’ scepticism caused by the children’s becoming mobile and thus able to take their own food rather than being fed by their parents. (Dovey et al. 183).

Several studies point out the health-related problems of an unvaried diet, making neophobia a diagnosis. Interventions aim to investigate whether taste education can be used as a cure. Consequently, even though several studies emphasize that taste is developed in interplay between sociology and physiology, they still rely on the assumption that neophobia *can be unlearned* to give way for taste neophilia. A consistent argument assumes that repeated exposure to new foods over time will result in children’s acceptance of taste. A so-called neophobia scale has been developed to measure degrees of neophobia (Pilner and Hobden, 1992); it is used in several of the studies to measure the effect of the taste education.

Overall, the studies confirm that taste education has an effect in relation to neophobia. However, in many cases, the effect is smaller than expected, and appears to diminish over time (e.g. Reverdy et al. 2008; Mustonen & Tuorila, 2009; Battjes-Fries et al. 2014). Therefore, most studies recommend more extensive taste education in order to increase the effect of reduced neophobia.

## Taste as Barrier

It is important to define the understanding of taste and the pedagogical framework that are the starting points for these interventions. In most of the selected studies, taste is presented as something negative – i.e. a barrier for a proper, healthy diet. The general assumption is that children’s diets are not varied enough, or that children eat too few vegetables or national dishes. At the same time, taste is construed as something fluid, which can potentially be changed, corrected or ‘fixed’, so that the children will eat more of what is good for them.

Reverdy et al. (2008) reflect on why the effect of the taste education was not more significant: “Was it a matter of true loss of neophobia or rather a temporary phase of neophilia under the influence of a conscious effort to conform to the behavioral norms imposed by the

education program? Did “reasoned” and conscious choice temporarily overrule intuitive decision making...” (Reverdy et al. 2008, 161). This illustrates a distinction between reason and intuition in relation to taste. Intuition – i.e. the ‘corrupting’ intuition that has ruined modern food culture and, particularly due to the exposure to sugar, has lost contact with the body’s natural needs – is associated with wrong taste because it promotes unhealthy food consumption.<sup>2</sup> This is seen in contrast to the taste of reason, which can be changed over the period of a teaching course, putting the ‘corrupted’ intuition on the right track. Unfortunately, according to the study, reason is inferior to intuition; therefore, taste only changes as long as teaching addresses the taste of reason. Based on this, Reverdy et al., in keeping with many other studies, conclude that an effort should be made to teach taste more intensively from an earlier age, following the assumption that a more concentrated effort will help the right and reasonable taste get rid of the troublesome and sugar-craving intuition. This pertains both to the neophobia studies and the studies in which taste education aims to make children eat more fruit and vegetables. In these examples, the children are meant to internalize the ‘reasonable’ taste so that they will intuitively make the reasonable choice, meaning fruit and vegetables – or neophilia. This intention is perhaps most explicitly expressed in Dovey et al. (2008), who call for “a multi-faceted approach to get children independently to choose and include fruits and vegetables in their diets” (Dovey et al. 2008, 190).

### **Controlling Children’s Taste**

With these examples, it becomes very clear that the purpose of taste education in the majority of the studies is behavioural modification and control of children’s taste. Control appears in different forms, and slightly different motivations are given for modifying children’s taste.

One of the most notable examples of taste control strategies appears in the review *Should Healthy Eating Programmes Incorporate Interaction with Foods in Different Sensory Modalities?* (Dazeley et al., 2012), where several sense-based and experimental teaching forms are criticized. The criticism mainly concerns the fact there is no proven long-term effect or that the results of the study are not properly verified with control groups. The authors suggest a different approach:

School-age populations are perhaps better served, at present, by classroom interventions that are not primarily based on sensory interaction with foods, such as the *Food Dudes* programme, developed for children aged 4-11 years by psychologists at the University of Bangor. This intervention draws on the

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<sup>2</sup> (Andersen 2015, 27).

psychological principles of modelling and rewarding healthy eating behaviors well as repeated taste exposure to target foods. Every day for 16 d[ays], children are presented with a portion of fruit or vegetable, which they are required to taste in exchange of a *Food Dudes* sticker with the added incentive of a small prize (such as a pencil case) if they eat the whole portion. The exposure regimen is supported by a daily *Food Dudes* video, in which four cartoon super heroes gain special powers by eating fruit and vegetables in order to do battle with General Junk and his junk Punks (Dazeley et al., 2012, 774-775).

This approach – using rewards and showing cartoons of superheroes eating fruit and vegetables while fighting junk food – is underpinned by a study that proves that this method had a long-term effect, i.e. the children ate more fruit and vegetables and less junk, also after the course ended. The *Food Dudes* method and other similar methods thus highlight behavioural change as the pedagogical ‘goal’. Behavioural change means modelling children’s taste, making their senses adapt to the predefined right taste.

### **Control and Pedagogy I**

In relation to these taste courses and their analyses, it is pertinent to question from a pedagogical standpoint: are we really dealing with pedagogical activities? Control and pedagogy are not the same thing – although many of these studies seem to disregard the difference. An ambition such as the one presented in Dovey et al. (2008) – to make children voluntarily or independently eat more fruit and vegetables – merely expresses a desire for individuals to subject themselves to predefined practices, health ideals and truths. It is not learning, if learning is perceived as realization, individual decision-making and development of competency – c.f. a reflective ideal of *Bildung*, where learning is characterized by *expansion of consciousness* and *reflection* on new insight, knowledge and, in the present context, actions and taste experiences (Wistoft, 2009). This also pertains to the *Food Dudes* project, which can be seen as an example of the same teaching practice, coaxing and rewarding children into eating in accordance with a predefined ideal that is not up for discussion. This is neither insight nor expansion of consciousness; even less is it development of competency. Some form of education undoubtedly takes place on these courses, but it is education that does not aim at learning; it only allows for control. Perhaps this practice is an efficient means to achieve goals, but the goals are not learning orientated; they only operate with modelling and behavioural control. What is produced and desired are not perceptive, competent individuals but rather what Foucault calls “docile bodies”; a concept introduced by

Foucault in an analysis of the birth of the prison system in his book *Surveiller et punir* (1975). Foucault argues that over the course of the 18<sup>th</sup> century, a change occurred in the way that the state exercised power over disobedient subjects. Corporal punishment and threats of violence were replaced with different forms of disciplining, which would become the dominant form of execution of power. The disciplining took place in institutions, poorhouses, the military, schools and prisons where:

The human body was entering a machinery of power that explores it, breaks it down and rearranges it. A ‘political anatomy’, which was also a ‘mechanics of power’, was being born; it defined how one may have a hold over others’ bodies, not only so that they may do what one wishes, but so that they may operate as one wishes, with the techniques, the speed and the efficiency that one determines. Thus discipline produces subjected and practised bodies, ‘docile’ bodies. Discipline increases the forces of the body (in economic terms of utility) and diminishes the same forces (in political terms of obedience).

The purpose of taste education in the examples found in the literature is only slightly different and aims at the same disciplining strategy. Through the disciplinary effect of repetition, pupils are meant to internalize the preconceived values and ideal practices related to taste, so that their bodies (and tongues) ‘intuitively’ act in accordance with the dietary ideals.

## **Control and Pedagogy II**

At first glance, the school garden studies provide more leeway than the *Food Dudes* approach and similar studies, especially due to the spatial freedom and emphasis on varied, physical activity. Nevertheless, the purpose of the education is just as fixed and normative, and taste is still something that needs to be ‘fixed’ in a very specific way: “Gardening has been demonstrated to increase children’s nutrition knowledge and preference regarding fruit and vegetable consumption and to change behaviors regarding vegetable consumption” (Parmer et al. 2009, 216). Again, the focus is on knowledge about nutrition (at the expense of *food*) and how the pupils’ intake of fruit and vegetables can be increased. In that sense, taste is conceived of as nothing but a preference for fruit and vegetables.

This focus is also found in other school garden studies. Libman (2007) writes about developing agency in relation to food choices (p. 91), but only when it comes to making the right, healthy food choices and avoiding fast food. Taste is still perceived as a barrier for

good health, or as something which, through adjustment, can motivate a healthy diet. Developing competency and agency in relation to taste is equal to unlearning unhealthy habits and choosing healthy food. Action and competency are reduced to acceptance of, and compliance with, the predefined norms. Similar to Foucault's description of the processes of disciplining the body, the tasting pupil must unlearn 'disorders' and internalize the ideals of power. In that sense, the purpose of education is to make the body docile when faced with these ideals. Therefore, it is important to maintain that 'hands-on' activities do *not* equal participant involvement, and that teaching which includes the body does not per definition give the pupils ownership or freedom to draw experiences and conclusions that may lead to free food choices. That depends entirely on the framework and purpose of the garden education.

### **Docile Tongues**

There is a strong connection and resemblance between how these studies conceive of taste education. All the studies largely follow the same logic, taking their point of departure in a kind of diagnosis of crisis that defines the miserable state of contemporary food culture. The diagnosis varies slightly, but contemporary food practices are consistently presented as unhealthy and food culture as heading in a very dangerous direction. In that connection, children are described as a particularly vulnerable group whose taste can be led astray, which may have disastrous consequences if taste education is not introduced to bring their taste back on the right track. The prescribed education entails disciplining of the sense of taste, leaving no room for individual taste experience and independent food choice.

As described, the new, dominant control technologies of the 18<sup>th</sup> century aimed, according to Foucault, at moulding, disciplining and standardizing bodies into 'docile bodies' modelled after the ideals and systems of power. In the same vein, contemporary taste education, as described in the literature analyzed here, aims – more or less explicitly – at making children's tongues docile so that they will obey the concepts of correct nutrition defined by institutions of power. The crisis has been diagnosed; the only discussion in the literature regards what method is the most effective. How can children's tongues be made as docile as possible? How can lasting obedience be ensured?

From our pedagogical perspective, this is not pedagogy but control. It is not possible, with such narrow goals and methods, and limited understandings of taste, children and learning, to practice pedagogical activities that will create a framework for children's

development of competencies and make them capable of making informed and reflected food choices.

Perhaps the approach can be explained with the disciplines in which the studies have been conducted, and the nutrition-orientated and scientific methods to which value is ascribed. It is clear that some goals are defined for children's diets, while other, scientific, goals can be monitored with summary methods: numbers can be applied. The learning goals we find to be missing are more difficult to put numbers on; they require a fundamentally different perspective on pedagogy and taste, expressed in reflective and critically motivated education that will teach children to make informed food choices. The goals cannot be predefined, and the children must be involved in a far more reflective process with an eye to the significance and meaning of taste, as well as the aesthetic, cultural and social dimensions of taste. Measuring this form of education and learning would require completely different scientific methods and designs, and it would be necessary to talk with the children to incorporate their ideas and experiences of food; perhaps they would even have to be the starting point. Also, it would require very different initial reflections on the pedagogical task, including a reflective clarification of the values and forms of knowledge involved, as well as the roles played by teachers, pupils and researchers.

### **Conclusion: Taste as a Resource**

Our suggested pedagogy of taste is not rooted in regulation, guilt and control. On the contrary, it facilitates development of awareness, competency and reflection in relation to taste. In that sense, it is a countermove to manipulation and control, bearing in mind that we should not manipulate children's taste or coax them into tasting in order to get them to like specific foods. Like adults, children are independent individuals with *integrity* of their own, which taste is an important part of. Children's integrity can be seen in the way they value honesty and truthfulness concerning the motives behind their actions. In other words, the integrity we as adults need to protect in children is their experience of the value of reaching their own goals. They need to be made aware of (their) taste, and we must give them room to experience, practice and value that awareness.

Such pedagogy of taste requires a new conception of children, taste and learning, and not least the interplay between them. It requires that we view taste not as a barrier but as a resource – a resource that encompasses a multitude of realizations and perspectives on the world.



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