

How consumption prescriptions affect food practices: Assessing the roles of household resources and life-course events

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Abstract

Food consumption has become the subject of many prescriptions that aim to improve consumers' health and protect the environment. This study examined recent changes in food practices that occurred in response to prescriptions. Based on practice theories, we assume that links that connect practices with prescriptions result from evolving social interactions. Consistent with the life-course perspective, we focus on distinctions between public prescriptions and standards that individuals consider relevant to their lives. We rely on quantitative data and the results of qualitative fieldwork conducted in France. Our results suggest that consumers may change food practices when they reach turning points in their lives. They may reconsider resources, skills and standards. Middle- and upper-class individuals are more likely to adopt standards consistent with public prescriptions. Possible explanations are that they trust expert knowledge sources, their social networks are less stable and smaller gaps exist between their standards and prescriptions.

Keywords

Food consumption, France, life course, prescriptions, social differentiation, theories of practice

Introduction

Currently, a significant number of food consumption studies have attempted to explain the impact on consumption practices of prescriptions issued by authorities for common good reasons. Until the 1990s, the question of how individual food practices may change over time remained out of the limelight of sociological consumption studies (Bourdieu, 1979; Douglas, 1972; Halbwachs, 1913). At that time, sociologists attempted to explain the variations in practices that occurred between different social groups within a particular society at a particular time. Although Bourdieu's habitus theory could account for the evolution of practices (Bourdieu, 1972), Bourdieu (1979) demonstrated a limited interest in the dynamics of social practices.

Some recent studies attempted to explain food practices based on a behaviourist model. They hypothesised that consumers seek to obtain goods or adopt practices that match their expectations and, in particular, their values. These studies also employed another less-explicit hypothesis. They assumed that a straightforward relationship can be established between goods and values (e.g., vegetables are healthy; fast food is unhealthy but it gratifies the taste buds). Therefore, to bridge the gap between practices and prescriptions, these values must be altered (e.g., through information campaigns). However, these studies did not seem to account for the fact that practices tend to lag far behind opinions (Southerton et al., 2011).

The theories of practice (Reckwitz, 2002; Warde, 2005) have made innovative contributions to sociological enquiry. Practice theory offers significant potential to provide explanations for how practices change. This approach considers practices as objects for study. It attempts to explain how practices successfully recruit practitioners (Halkier et al., 2011). Practices are considered 'blocks' (Reckwitz, 2002) composed of 'doings', locations, temporalities, infrastructures and emotional and physical states. Blocks also comprise the symbolic component of 'sayings' (i.e., the discourse that helps provide social meaning for the practice). For example, a particular practice may be connected with a prescription that exists in the public space. Halkier (2009a) discovered that food consumption may be considered 'environmentalised' to a greater or lesser extent, depending on the degree to which it is constructed as an environmental conservation activity. Some consumers may overlook this aspect, even though others may incorporate it (i.e., somatised: one respondent explained how, when she walked down the aisle of a supermarket, her body reacted to the sight of organic cauliflower).

This theory's major breakthrough, with respect to this article's topic, was to suggest that practices could not be separated from prescriptions. On the contrary,

prescriptions belong to the 'sayings' that constitute a practice. If sayings are considered a component of a practice, and if a practice may be considered socially constructed, then the link between practice and prescription may be considered a social fact. This approach leaves room for the existence of a complex and potentially conflicting relationship between the spaces of practices and related prescriptions. For example, sales narratives about freezers issued by manufacturers and salespersons have evolved over time. Initially, the freezer was advertised as a device used to store home produce surpluses for later consumption. Later, it was advertised as a tool thrifty housewives could use to engage in lower-priced bulk buying. Eventually, the freezer was advertised as an 'imperative of convenience in the management of everyday life' (Shove and Southerton, 2000: 305). Thus, the link that connects a particular practice and a particular set of prescriptions is socially constructed. This link can change dramatically over time. However, this approach is limited because it focuses on practices and overlooks relationships that exist between practitioners and prescriptions. Therefore, the way the endorsement/rejection of practices relates to the endorsement/rejection of prescriptions cannot be analysed.

In many cases, the research based on the theories of practice has barely studied the identity of recruits and conditions conducive to recruitment to a given practice. For example, Shove and Southerton (2000) revealed that the sweeping success of the freezer resulted from changes in consumer targeting, sales pitches and the actual uses of the freezer. In addition, its success was accompanied by design changes, as well as by the integration of the freezer into the kitchen to complement the microwave oven. Shove and Southerton demonstrated that the freezer's popularity was related to the consumer's belief in the importance of maintaining control of his/her schedule. This concern that has appeared recently may have been stronger among the middle and upper classes (Chenu and Herpin, 2002; Southerton and Tomlinson, 2005). Therefore, the recruitment of practitioners to practices does not result from a random process. In France, farmers purchased the first large freezers. Then, urban working-class households and, ultimately, middle-class families in large cities acquired smaller freezers (Guillou and Guilbert, 1989).¹

In contrast, the life-course perspective focuses on when consumption patterns change and on the individuals that change them. In this context (Bisogni et al., 2005; Devine et al., 1998), biography serves as the topic studied, as well as an analytical tool. Firstly, many surveys acknowledge that important biographical transitions, such as the initiation of cohabitation with a partner or the first birth, offer opportunities for alterations of food routines (Bove and Sobal, 2006; Garabuau-Moussaoui et al., 2002; Marshall and Anderson, 2002). Southerton (2006) also points out that the organisation of leisure activities changes during different stages in the lifecycle. Secondly, by analysing – and asking subjects to analyse – changes that occurred during those biographical transitions and asking subjects to describe how they happened to endorse given routines at particular times in their biographies (e.g., shopping at a particular place or organising dinner), it is possible to discover the contexts that influenced those changes.

Bisogni et al. (2005) offer a theoretical framework that may be used to analyse changes in food consumption. They distinguish between food management skills, standards and circumstances. Food management skills are acquired competences, such as recipes, budget management skills or knowing the shops and their products. For brevity's sake, this paper will not address those skills and will rather focus on standards and circumstances. Standards are the norms a particular individual considers appropriate to his/her particular situation, and to which s/he compares his/her food consumption. Finally, circumstances account for changes in resources that occur primarily because of exogenous factors, such as social or economic factors. Circumstances evolve during an individual's life course that may affect skill acquisition, as well as the standards the individual uses to assess his/her own deeds. The concept of a standard is particularly appropriate for the present enquiry because it can be distinguished from the prescriptions that circulate under different forms in the public and commercial space (e.g., information campaigns, opinions voiced by physicians or activists, food labels). Standards are what each individual may consider appropriate to his/her case, irrespective of the individual's contentment with the consistency levels that exist between his/her standards and food consumption.

The topic of this article, prescriptions for food consumption, is extremely rich. We assume that prescriptions are created by specialised experts. For example, in general, nutritional and environmental guidelines are issued by a variety of professionals, such as physicians, public decision-makers or advertisers. In addition, these prescriptions primarily focus on issues related to the consequences of consumption, such as calorie intake, rather than on consumption itself. This applies to nutritional prescriptions developed by nutrition and public health experts from national (e.g., the *Five a day* programmes, or the 2001–2006 *Plan National Nutrition Santé* developed in France) or supranational bodies. These prescriptions are often vilified by social actors; for example, lower-class households claim these prescriptions are out-of-touch with the constraints that affect their family's daily food consumption (Régner and Masullo, 2009). A number of sociology-of-health studies have criticised the moralising aspect of 'health education' for frequently disregarding the living conditions of the individuals it hopes to 'educate' (i.e., those it hopes to enrol in the practice of healthy food consumption). In this study, we also examined what may occur when more than one field of prescriptions are considered. For example, pre-prepared salad can be healthy. Nutrition specialists frequently praise them because they provide a convenient way to consume vegetables and fibre. However, simultaneously, environmental activists criticise them because their production generates excessive water consumption and packaging.

Thus, because the current study hoped to discover how prescriptions alter food consumption, three hypotheses were developed. The first, borrowed from the life-course perspective, proposes that individual standards are not carbon copies of prescriptions. Standards are 'the expectations that participants [hold] for what and how they should eat' (Bisogni et al., 2005: 286). Therefore, standards are individual-specific. They include the features of prescriptions available in the

social space that each consumer retains and considers appropriate for him/herself. Standards can evolve over the course of a lifetime. The second and third hypotheses were derived from practice theory's assumptions that practices include references to prescriptions and that the links that connect prescriptions and practices develop from the construction of practices. These links are subject to change. Therefore, one goal of this study was to explain encounters between individuals adhering to specific standards, and practices connected to prescriptions.

This study does not attempt to provide a decisive statement on these encounters. Rather, it solely attempts to present different research lines based on two sets of empirical data: (1) an in-depth qualitative survey of food practices maintained by about 30 households located in Southwest France; and (2) a statistical analysis of data collected from a French consumer panel. Firstly, we provide a detailed description of both studies. Secondly, we use the quantitative data to highlight the complexity of the links that connect prescriptions and practices. Thirdly, based on interview data, we examine the ways various links that connect purchases and prescriptions have been collectively constructed and validated. The following section demonstrates how life-course turning points can serve as windows of opportunities for the adoption of new practices. In the last section, we argue that an individual's social position influences his/her propensity to revise standards when he/she begins to adopt or question his/her consumption practices.

Study design

We employed two methods in this study. We analysed data collected from a consumer panel in 2007 that was representative of the French population. This cross-sectional dataset did not allow accounting for the dynamics of the life course. Therefore, we conducted a qualitative in-depth survey of shopping routines and biographies of a small number of subjects who resided in Southwest France. During coordination meetings we pooled the results achieved by the quantitative and qualitative analyses and checked their consistency (or tried to explain apparent contradictions).

Statistical data

The quantitative arm of the present study consists of a secondary analysis of opinion and purchase data collected from the 2007 consumer panel Worldpanel.² The data provider collected the total food purchases of nearly 7000 households over a one-year period. Access to this data enabled a detailed study of certain products: dairy nutraceuticals³ (health norm), low-fat dairy products (anti-fat dietary norm), vegetables (dietary norm), organic products (environmental norm) and pre-prepared salads (nutritional norm – vegetables – in conflict with environmental norm). We selected these products because of their perceived status as vehicles for innovation. They also offer potential associations with nutritional and/or environmental prescriptions through public, activist or marketing discourses.

The Ministry of Agriculture created the French organic certification, AB (*Agriculture Biologique*), in the early 1990s. It is equally available to industrial and small-scale producers, large corporations and activist networks. AB is the only environment-oriented public standard. However, various studies have shown that AB products are consumed for health reasons, rather than environmental reasons (Hughner et al., 2007; Lamine, 2008). The remaining products were relatively recent innovations. Economic actors have alleged that the commercialisation of these products could facilitate consumers' accommodations to nutritional norms and/or encourage consumers to improve their health. The facts related to pre-prepared salad are specific. As a vegetable, it epitomises the ideal of a light and healthy dish. It can be associated with nutrition-oriented consumption. However, its production is frequently criticised by environmental groups because it is a water-guzzler. In addition, this 'minimally processed' product, which many believe is the paragon of ready and convenient food for busy urbanites, is sometimes considered (too) innovative and expensive.

We performed a logistic regression analysis to predict the probability that a particular type of household would consume each product from the selected items. We also employed earlier findings on fresh vegetable consumption obtained from a sub-panel of the Kantar Worldpanel (approximately 2500 individuals). When vegetables are sold without packaging or certification, they are subject to minimal marketing efforts. However, specific and explicit prescriptions urging consumers to eat vegetables circulate widely in the social space. These cross-sectional data do not allow the disentangling of life-course differences from cohort effects.

Qualitative study

The qualitative arm of our study complements the quantitative analysis in two directions: (1) access to life-course dynamics; and (2) collection of information related to standards and representations. The analysis was based on a survey conducted with about 30 households. It involved an array of methods. During biographical interviews, we recorded individuals' food practices throughout their histories. When we obtained the interviewee's consent, we additionally collected two other materials. We carried out a second interview in order to identify resources actors mobilised when they chose foods. The related questions focused on current food practices: (e.g., how they shopped, prepared and consumed meals and how they coordinated their activities with other household members). Finally, we accompanied 10 respondents during their grocery shopping. These respondents also completed food diaries during a two-week period. We recruited the study population through personal networking. We were careful to include a range of cases to meet parameters such as age, household structure, social background and type of housing.⁴ The life-course analysis focused on turning points related to changes in each household's composition (one-person household, couple, retired or working status, presence or absence of children). In addition, it became clear

that other types of events considered crucial in the literature, such as health events, were significant (Lamine, 2008).

Food purchases and prescriptions related to health and the environment

We began the statistical analysis of food purchases with the assumption that we could assess selected products based on environmental and nutritional prescriptions. Indeed, initially, we assumed that it would be reasonable to hypothesise that households' purchases would testify to the existence of a certain amount of consistency in the set of norms that guide shopping. However, the socio-demographics (all things being equal) associated with the consumption of those different products suggested that this assumption may not always apply.

As shown in Table 1, the results of the logistic regression analysis revealed that the structure of each household exerted a strong influence on purchases of organic products, low-fat dairy products, nutraceuticals and pre-prepared salads. Men who lived alone did not tend to purchase these products as frequently as women who lived alone. Couples' purchases were similar to purchases from women who lived alone, except that couples tended to buy more nutraceuticals and vegetables (Plessz and Gojard, 2013). Finally, households with children bought more of the selected products, with the exception of organic products. In addition, age exerted strong impacts on purchase probability. As age increased, the probability of the purchase of organic products and nutraceuticals increased. However, the purchase of pre-prepared salads decreased. In contrast, purchases of low-fat products did not follow a linear pattern: purchases appeared to peak in the middle of individuals' working lives. Table 2 summarises the results of the logistic regression analysis for the following households: men who lived alone, families with at least one child, and elderly households, regardless of their structure.

Thus, men who lived alone consumed small amounts of all selected products (i.e., they rarely purchased organic products, low-fat dairy products, nutraceuticals, pre-prepared salads and fresh vegetables). Families with children consumed more low-fat dairy products, nutraceuticals and pre-prepared salads. However, they did not purchase more organic products than average, although these types of products are frequently consumed because they are considered healthier (Lamine, 2008). Consumption of fresh vegetables by families with children showed no remarkable features. Elderly households rarely purchased pre-prepared salads. However, they frequently purchased vegetables, organic products and nutraceuticals.

Interpretation of these results is not straightforward. When each product was associated with prescriptions that allegedly promoted consumption, purchases appeared to be inconsistent. For example, families frequently purchased nutraceuticals. However, they did not purchase many vegetables and they only purchased average quantities of organic products. Elderly households rarely purchased pre-prepared salads. However, they purchased significant quantities of vegetables.

Table 1. Purchase of a selection of products at least once in a year according to socio-demographic characteristics: logistic regressions (standardised coefficients).

	(1) Organic products	(2) Low-fat dairy products	(3) Nutraceuticals	(4) Pre-prepared salads
Woman alone	0	0	0	0
Man alone	-0.683***	-0.966***	-0.453**	-0.386***
Couple	0.0941	0.171	0.424***	0.0296
Couple with child	0.144	0.370***	0.917***	0.326**
Wealthiest 15%	0	0	0	0
Next 30%	-0.265**	0.0154	-0.0979	-0.228*
Next 40%	-0.543***	-0.0761	-0.0982	-0.484***
Poorest 15%	-0.697***	-0.225	-0.294*	-0.574***
Rural	0	0	0	0
Small town	0.207**	0.0611	0.0543	0.0802
Average city	0.206**	0.122	0.145	0.236**
Large city	0.348***	0.196*	0.227**	0.309***
Paris	0.406***	0.317**	0.347***	0.448**
Middle school	0	0	0	0
High school	0.208**	-0.129	0.0739	0.0993
Baccalauréat-Bac. + 2 yrs	0.255**	-0.175	0.120	-0.0684
More than Bac. + 2 yrs	0.524***	-0.230*	-0.121	-0.119
20 years	0	0	0	0
30	0.376***	0.225	0.731***	-0.271*
40	0.569***	0.317*	0.490***	-0.521***
50	0.683***	0.303*	0.567***	-0.715***
60	0.807***	0.172	0.750***	-0.957***
70 and above	0.682***	-0.476**	0.584***	-1.330***
Intercept	0.0936	1.170***	-2.311***	1.098***
N	6946	6946	6946	6946
ll_0 ^a	-4485.2	-3577.0	-3824.3	-4708.0
ll	-4350.6	-3427.9	-3707.5	-4497.7
p (ll=ll_0)	9.29 ^{e-47}	1.18 ^{e-52}	1.67 ^{e-39}	4.66 ^{e-78}

*p < 0.05; **p < 0.01; ***p < 0.001

^all_0: log-likelihood for the null hypothesis model. ll: log-likelihood for the alternative hypothesis model.
p(ll=ll_0): probability for the alternative model to have the same log-likelihood (and thus same goodness-of-fit) as the null hypothesis model.

They were frequently consumers of organic products and nutraceuticals. Only men who lived alone appeared to endorse consistent practices: they remained indifferent to the products under study and they appeared to be unaffected by prescriptions.

Although class represents a classical, albeit debated, determinant of food consumption, in the present study, the effects of income and educational resources

Table 2. Summary of products over-consumed or under-consumed by three types of households.

Products	Men living alone	Families with child	Elderly households
Organic products	--		++
Low-fat dairy products	--	+	
Nutraceuticals	--	++	+
Pre-prepared salad	--	+	---
Fresh vegetables	--	-	++

Note: Information on fresh vegetable consumption is from Plessz and Gojard (2013).

were not consistent across purchases. The probability to consume organic foods, pre-prepared salads, and nutraceuticals was lower for poorer households. However, their chances to purchase low-fat dairy products were not significantly lower than those of richer households. If we hold all other characteristics constant, education exerted a negligible impact, with the exception of organic food purchases. The size of each individual's city-of-residence appeared to exert a greater impact, with some consistency across products. The more urbanised the residential area, the greater the individual's probability to consume all four products commonly sold in supermarkets or specialised shops (these shops are more numerous in cities).

The conclusion of this section proposes several questions that we will address in the following sections. Firstly, a comparison of attitudes with purchases is a poor indicator of the propensity of households to implement their standards, because it is a highly complex procedure. In the next section, we will attempt to demonstrate that the establishment of a link that connects a product and a prescription results from a social activity that implies the actions of many different actors, including a consumer who may reject suggested 'product-prescription' matches. Secondly, among the household characteristics tested, individuals' ages and household structures appeared to exert strong impacts on consumption. Economic and cultural resource indicators exerted a lower impact. With respect to single men (irrespective of age), as well as divorced or widowed men, they purchased products that differed radically from products purchased by women who lived alone (De Saint Pol, 2008) as well as women who lived with partners. Men who lived alone appeared to be relatively unaffected by nutritional and environmental prescriptions (Donkin et al., 1998). However, this sample, which consisted of more than 6000 households, was cross-sectional. The fact that both an individual's age and household structure exerted strong effects on his/her purchases suggests there should be a focus on the life course, even though we cannot rule out the possibility that there are also differences across birth cohorts.⁵ Therefore, we will explore the qualitative data to identify the specific effects of life-course events. Lastly, we observed that class position exerted a mild and rather inconsistent impact on purchases of the selected products. We will employ qualitative fieldwork to conduct a further

investigation of the links that connect social position and the ways respondents managed prescriptions when they revised their standards and consumption.

Linking food practices to nutritional and environmental prescriptions

It can be difficult to account for the quantitative data presented in the preceding section, because products are not accurate conduits of prescriptions. In fact, the relationships that exist between prescriptions and products are ambiguous in two respects. Firstly, products contain different characteristics that tap into the necessities of daily life. Pre-prepared salad is a convenient alternative to raw, unwashed salad. Thus, the convenience parameter can outweigh environmental concerns. In addition, some foods are not available in 'light' or 'organic' versions. Product prices also contribute to this situation. The price differential between organic and standard products is highest for meat and relatively high for fruits and vegetables. The price differential is limited for unprocessed staples such as fats, eggs and milk. Even though elderly consumers may be familiar with environmental issues and the alleged beneficial effects of organic products, they tend to consume more unprocessed products (Monceau et al., 2002). Secondly, each product can relate to more than one prescription: with respect to pre-prepared salad, a consumer may simultaneously disagree with environmental prescriptions and agree with nutritional prescriptions (i.e., eat vegetables). Therefore, an individual who attempts to establish his/her standards on both environmental and health concerns may face a serious dilemma.

In this section, we argue that the link that connects a given practice and a prescription may be rather implicit or, even, ambiguous. This link can assume different forms over time and encourage controversies to develop within the social space. Most importantly, practices frequently refer simultaneously to more than one prescription (e.g., nutritional and environmental). It is unclear whether the *grandeurs* or 'orders of worth' (Boltanski and Thévenot, 1991) practices maintained with respect to these norms are similar. Indeed, the qualitative fieldwork performed for this study demonstrated that the establishment of a relationship between a practice and a prescription is a social activity that involves many different agents. This complex process involves: (1) many actors (e.g., sources of prescriptions) who issue 'good practices'; (2) manufacturers and distributors who employ a selected set of prescriptions to promote their products through packaging and certifications; (3) activists who argue about practices that may best serve their causes; and, ultimately (4) ordinary consumers who must judge whether information provided is relevant and reliable. For example, in the interview reported below, the provision of water poses an intricate problem that becomes a collective debate topic among informed acquaintances.

They are friends who are very careful about what they eat so . . . when we speak they tell us about it . . . they made us pay more attention to things we didn't think about before, you see.

Such as, for example?

Such as water, for example. How often have we asked the question: Should we drink bottled water? Tap water? Things like that . . .

(Rina, 57 years old, retired teacher, living with partner, three children who have left the family home, lives in a house with vegetable plot in a rural area)

The development of the link that connects food practices and prescriptions borrows from multiple sources:

Furthermore, I think you should eat meat at least once a day. Thus, one time will be meat and one time will be fish or carbohydrates, or eggs, you see. We substitute – and vegetables, as well . . . So, at least one dairy product . . . and in the morning, cereal, and for a balanced breakfast, fruit. (Sylvie, 35 years old, unemployed, two children, lives in a flat in a rural area)

The discourse above seems to borrow from nutrition specialists. The speaker combines words such as ‘carbohydrates’, ‘one dairy product’ and ‘substitute’ with statements that appear in advertising (‘balanced breakfast’). This extract reveals that actors proficiently combine various sources of prescriptions in order to connect their practices and their standards.

In the following extract, Sylvie gives her opinion of certifications. Producers and distributors rely on these symbols to establish links that connect practices and prescriptions. However, actors do not necessarily consider these links legitimate.

Frankly, when I see a certification, what springs to mind is the agrifood business. I really don’t like that, so I tend to go for small producers. And I make sure that it is organic. You know, they can tell you it is organic, and then, you know, it is full of insecticides and all sorts of things . . . For me, a label means that it has been processed and I really don’t like that . . . I don’t like quality labels. (Sylvie, 35 years old, unemployed, two children, lives in a flat in a rural area)

In the discourse above, the speaker rejects the organic certification because it involves a form of standardisation that reminds her of the worst aspects of the agrifood system.

Ultimately, the construction of a nexus of ‘doings’ (in this case, purchasing a specific food) and ‘sayings’ (prescriptions related to health or the environment) appears to be a complex activity. The consumer may not possess the knowledge required to do this. Therefore, the consumer must find a trusted expert. We will examine how this choice is made later in this article. Health and environmental issues possess many dimensions. Thus, even when knowledge is available, a consumer may struggle to judge whether a product is consistent with a prescription. Suppliers (Dubuisson-Quellier, 2013a) as well as activists (Dubuisson-Quellier,

2013b) suggest the existence of connections between practices and prescriptions (e.g., through certifications, brands or other marketing devices) that consumers may negotiate, interpret or, possibly, reject. Ultimately, prescriptions related to health and the environment may lead to the development of contradictory consumption practices that the consumer must reconcile in some way or another. The following section provides an examination of how life-course turning points may cause a consumer to reconsider his/her standards (i.e., his/her position with respect to existing prescriptions) and practices. In the last section, we suggest ways that a consumer's social position may affect standards and practices he/she may adopt.

Life-course turning points as opportunities to adopt new practices and standards

The statistical findings revealed that age and household structure are associated with different food practices. Although the biographical interviews were not representative of the entire French population, they strengthened the notion that turning points that occur during the life course are associated with changes in food practices. This section focuses on some mechanisms that may explain why turning points that occur in family trajectories may encourage consumers to adopt new food practices.

Firstly, standards evolve throughout life courses when families integrate new prescriptions and discard previously integrated prescriptions. The birth of the first child has been identified as a potential turning point that may encourage the increased consumption of organic products (Lamine, 2008). In this type of situation, couples and individuals may be more receptive to a series of prescriptions that emphasise individual and, in particular, parental responsibility. Food consumption is a sphere in which consumers may exercise these types of responsibilities more easily. Therefore, frequently, nutritional and health norms may be naturally integrated into this prescriptive space (Régnier and Masullo, 2009). In the discourse below, Christophe's six-month old baby has reached the weaning stage. Similar to many middle-class parents (Gojard, 2000), Christophe reflects upon his baby and his personal food patterns:

When the baby came, quality went up a level. However, we were already becoming more careful, ever since my wife became pregnant. As far as the baby is concerned . . . Currently, he is eating out of jars. So, you could say it is pretty draconian. We are very selective because we have friends whose kids have had food allergies and all that . . . So, as far as food colouring and added sugar are concerned, maybe we are a bit excessive, but, really, we check out everything. We are very careful. And when I think about later on, when he'll start to eat the same thing as us, yes, it's clear that we'll pay even more attention to quality, traceability, and certifications. (Christophe, 32 years old, engineer, lives with partner, one infant child, lives in a house in a suburban area)

Secondly, sociability varies throughout the life course. It exerts impacts on both consumption and standards. For example, eating together is one feature of a proper meal (Bugge and Almas, 2006; Marshall and Anderson, 2002) that, in essence, is based on family sociability. Couples often describe the early stages of cohabitation as a period in which partners tune in to each other's rules and norms (Bove and Sobal, 2006). Therefore, during this time, food practices' social and commensal dimensions become stronger. The excerpt below illustrates this concept. Jeanne explains why living with her partner prompted her to cook more frequently.

Nah, even when I was with Mickaël. It is not the same when you are a couple! I cook a lot, at least, a lot more than when I was on my own. (Jeanne, 23 years old, student and cashier, lives in a student room in an urban area)

Wider social networks also serve as spaces in which socialisation to food prescriptions and practices can occur. Residential mobility, a component of some biographical events, tends to induce dramatic changes in social networks. Southerton (2002), in his study of class identification, demonstrates that the impact of mobility on sociability ties may affect social representations and categories. In the current study, residential mobility also appears to encourage changes in standards and consumption. In the discourse below, Virginie describes her early university student years as a time in which she became politically aware. She also developed a more reflexive approach to food. She stated that she had a rather liberal approach to food during her childhood and teenage years. As a middle-class child, she resided in a suburban area. Her parents worked quite hard and late. Therefore, she and her older sister frequently cared for themselves. When she returned from school, she usually snacked on soft drinks and chocolate bars. Her meals primarily consisted of frozen ready-to-eat meals. When she left home at age 18, her food patterns changed dramatically and this resulted in a major weight loss, which she proved with photographic evidence. She attributed this change to her reduced income, which forced her to maintain tight control over her food expenses. She also described a socialisation process in which she became close friends with students who were deeply involved in ecology and alter-globalisation networks. As a result, she became more thoughtful about her food habits. She began to buy larger amounts of organic food and use shorter distribution channels.

Actually, it's pretty clear that, when I came to Toulouse, I began to come across – unintentionally I guess – what you could call left-wing ideas – well, I suppose it's a bit messed up, the whole notion of left-wing ideas. However, I started to hear about these things at university from people who really influenced my political ideas. They ultimately exposed me to all sorts of alternative ideas, networks, things that were happening that made me aware of all these ideas. The first thing was GM food. And, like pulling on a thread, this led to a totally different way of thinking about food, much more activist, much more concrete. (Virginie, 26 years old, PhD student, lives with partner in a flat in an urban area)

Similarly, Rina, one of the respondents mentioned earlier, reflected on food and water consumption during conversations with friends. Therefore, sociability networks serve as crucial spaces in which individuals can experience and integrate new prescriptions and acquire food management skills that facilitate shifts in practices. These networks can change e.g., because of residential and occupational mobility and, typically, when individuals leave parental households or enter the labour market.

Finally, turning points can be accompanied by alterations of constraints faced by individuals. They can also be affected by the structure of their resources, whether they are temporal or financial, or whether they pertain to shopping locations, food preparation and storage devices. For example, when children leave the parental home, this alters not only their own food practices but also their parents' consumption. However, this does not mean that the parents must endorse rigorous standards. Rather, it is similar to a form of liberation that frees consumers from the inextricable nexus of constraints that mould family routines (Cardon and Gojard, 2009). The couple in the 'empty nest' simplify and rearrange its food practices around routines that depart from former habits, such as shopping, growing vegetable plots, eating the same foods for dinner ('one salad for the two of us, that's ideal'; 'we don't mind eating the same foods all the time'). Cardon and Gojard (2009) provide evidence that the same process may occur during widowhood.

In conclusion, we argue that an actor's organisation of consumption and standards is more likely to change when turning points occur during his/her life course. When these turning points occur, the resources and constraints that structure the household's food patterns also change, intentionally or not. The set of prescriptions deemed appropriate by an actor will also change and the actor may integrate new prescriptions into standards he/she has determined for himself/herself or for the family. Ultimately, the network of sociability may experience a significant reshuffling. This may encourage the actor to become acquainted with new prescriptions and practices as he/she simultaneously reconsiders his/her standards. However, Bisogni et al. (2005) demonstrate that standards do not always remain consistent with practices. The subjects in their study did not always reject standards they acknowledged they had not met. In fact, the subjects were frequently unwilling or were not in positions to modify their consumption.

Class position and the acknowledgement of expert prescriptions

The present study's empirical data, as well as results published in other studies, tend to suggest that members of the middle classes are more likely to revise their standards and integrate expert prescriptions, such as prescriptions issued by the medical profession and prescriptions contained in health education messages. In this section, we highlight the elements of our qualitative survey that can help us understand why middle-class households tend to adopt higher health and

environmental standards. We also offer tentative explanations for the fact that, in the quantitative data, cultural and economic assets did not appear very salient.

Firstly, middle-class respondents may possess more opportunities to adopt health and environmental standards because their networks of sociability undergo more changes throughout their lifetimes. Overall, they possess wider networks of sociability and they contribute to associational networks to a greater degree (Pichler and Wallace, 2009). Consequently, they possess more opportunities to become familiar with prescriptions and practices. In addition, their networks are likely to evolve throughout their lifecycles. This applies to the aforementioned respondent, Virginie, who had a middle-class background. To pursue higher education studies, she left the family home and moved to another city. Currently, she socialises with activist friends. This type of trajectory would be rare for children raised in working-class families because those children tend to pursue shorter courses of study. In addition, as students, they are less likely to be able to afford to leave parental homes (Perret, 2007).

Secondly, highly educated individuals may be significantly more inclined to question food patterns. Their dispositions are highly integrated and naturalised. Carole, a university lecturer, relies on a wide variety of media to gather food-related information. For example, she reads food-related documents, surfs the Internet and shares information with her friends and her professional network without being aware of it. She considers these actions relatively 'ordinary' behaviours. She does not believe she has more expertise than other people do. She believes the prescriptions she usually articulates are quite trivial and very common.

Yes, but I think more and more of us know about this stuff. Information is coming out . . . I read that – sometimes I'll go on the Internet to find something out – plants for hot drinks. I'm always careful, though. I think we are all pretty well informed now. Yes, I'm interested in it. Well, it does interest me, but I'm not an expert. It's more like the amateur or just the average person, the average woman. There are just more and more of us who know a bit about these products. I know you shouldn't just cut out butter because of the Vitamin A, so I know a bit . . . for oil, I know that certain oils are better than others. Bread, I'll buy wholemeal bread, not white bread, same story for pasta. (Carole, 37 years old, university lecturer, single, lives in a flat in an urban area)

In contrast, working-class respondents rarely mentioned the Internet as an information source and guide for food practices. To a significant extent, they refer to friends and acquaintances in order to accommodate food-related prescriptions. Sylvie's trajectory is quite interesting. She retained food habits from her working-class background. Although she is cost-conscious, she devotes a significant portion of her budget to food purchases so her children – her eldest is 15 years of age – eat properly and that their needs will be fulfilled. Sylvie consumes a large amount of vegetables primarily because she likes them. However, she also cooks meals chosen by the children at least twice per week. Sylvie is a florist who resides in a rural area. She reports that she likes everything related to the land. Certain

features of her food patterns are very similar to the food patterns of middle-class individuals who have gathered significant amounts of food-related information from books and networks. For example, Sylvie has banned additives. She prefers to buy what she refers to as 'natural foods'. She bakes her own bread and purchases foods from local producers.

How are you going to know that the small producer is organic?

Because he is local, because I've come to know him, because I buy vegetables in season, because clearly otherwise... if he sells me carrots, let's say, in March, and he tells me it is organic, I'll ask him if he takes me for an idiot! (Sylvie, 35 years old, unemployed, two children, lives in a flat in a rural area)

In contrast with Carole, who overvalues knowledge she gained from the Internet, books or friendship networks, Sylvie succinctly states the reasons for her choices. She has largely incorporated the knowledge to which she refers. She bakes her own bread because she perceives she has time on her hands and because it allows her to re-experience the taste of 'the thick-crust bread' of her childhood. She shops at local producers because she has come to know them through regular encounters. Some of her statements, such as her use of the terms, 'local', and pesticides, which she terms 'insecticides', are similar to terms used by middle-class consumers who are strongly inclined to engage in reflexive food practices. This is not surprising, because the media regularly employs these ideas. However, middle-class consumers tend to back their practices with scientific expertise. In contrast, Sylvie defends her practices by citing her own tastes and experiences (cf. her reference to producers she knows, what she believes in and what she likes). She also cites persons she knows personally, rather than impersonal sources of knowledge.

Other scholars have described this type of differentiated relationship to expert food prescriptions. For example, with respect to infant feeding, Gojard (2000) demonstrated that middle-class mothers relied on their physicians and on books. On the contrary, working-class mothers referred to their own mothers. Over time, a mother's opinion about child and adult feeding may remain more stable than expert prescriptions. Indeed, in the case of infant care, expert prescriptions have undergone rather startling revisions. Similarly, Régnier and Masullo (2009) suggested that working classes have developed a 'taste for liberty' with respect to food. They tend to free themselves from nutritional prescriptions. Therefore, they transform the food space into a locale that allows psychologically comforting consumption. In contrast, middle-class individuals possess a 'taste for necessity'. They are more inclined to subject their food consumption to health imperatives imposed by experts. Finally, the gaps that exist between standards and prescriptions are probably smaller for the middle classes than they are for the lower classes because prescription producers are, in general, members of the upper classes. Therefore, they may design prescriptions acceptable to other members of the middle and

upper classes. These prescriptions may even be consistent with their own standards (Boltanski, 1971).

However, the explanations provided above fail to account for the finding that in our quantitative analysis of purchases (see Tables 1 and 2), education solely exerted an effect on organic food purchases. This may have occurred because the interviews revealed respondents' perceptions of standards and practices. In the interviews, respondents may have attempted to be reflexive. The purchase data collected every food they bought over a year. Purchases reflect the standards individuals strive to achieve. However, they also reflect the multiple and contradictory demands that affect households' food provisioning. Firstly, as noted earlier, the links that connect standards and purchases are multiplex. They also may be unequally familiar and unequally accepted by consumers (e.g., the environmental cost of pre-prepared salad is not as widely known as the health benefits of vegetables). Secondly, although middle-class households faced fewer economic constraints than working-class households did, all surveyed households have to deal with time and coordination constraints when preparing meals. Halkier (2009b) suggests that cooking styles may differ based on the specific context of each meal. Similarly, cooking times, which are lower in middle-class households, exert positive impacts on fresh vegetable purchases for all social classes (Plessz and Gojard, forthcoming). For all these reasons, the practices may not meet the standards. For example, Carole claims she believes it is very important to eat three meals a day. However, the diary she completed during a two-week period revealed that she skipped two lunches because she had to attend work meetings. These are examples of 'circumstances' highlighted by the life-course perspective that affect food consumption, in addition to consumers' standards.

In summary, middle-class individuals face more frequent and important changes in their networks of sociability than members of other social classes do. In addition, they appear more willing to attempt to change their standards to integrate expert prescriptions. However, their consumption may remain tied to other domestic or work circumstances.

Conclusion

The objective of this article was to analyse the impact of prescriptions on food consumption by using two complementary theories: the theories of practice and the life-course perspective. According to the theories of practice, the links that connect particular practices with prescriptions are socially constructed. They develop because potentially evolving social interactions occur among actors. The life-course perspective developed by Bisogni, Devine and others (Bisogni et al., 2005; Devine et al., 1998) differentiates between a prescription and a standard. It offers a biographical approach that provides a better understanding of why consumers adopt prescriptions (and turn prescriptions into their standards) and, if skills and circumstances are favourable, why consumers transform prescriptions

into practices. This approach stresses the fact that gaps exist between standards and practices.

The current study employed two complementary empirical surveys. We analysed purchase data collected from a representative sample of over 6000 French households over the year 2007. In addition, we conducted a qualitative in-depth study of a limited non-representative sample of households. We obtained the following results.

Firstly, the link that connects a particular practice and one or more prescriptions is socially constructed and proceeds based on the contributions of a variety of agents. This link is not explicit, unique or stable. The quantitative analysis of purchases provided more riddles than answers. We concluded that no straightforward links connect prescriptions and purchases. The analysis of the qualitative fieldwork confirmed that many actors (including consumers) debate about ways to connect practices and prescriptions. We argue that some prescription producers successfully and clearly articulate the connections that link nutritional prescriptions with some food practices. Programmes such as *Five a day (Manger bouger* in France) explicitly articulate these connections between prescriptions ('for a healthy diet...') and practices ('...eat five fruits and vegetables per day'). In contrast, environmental norms have not stabilised in the same manner. The content of environmental norms continues to change. In addition, the articulation of environmental norms into practices remains more controversial than prescriptions about food practices. This might be explained by the fact that the public concern about the environmental consequences of food consumption is recent in comparison with nutritional concerns. Therefore, the connections between environmental 'sayings' and specific 'doings' are topics of debates conducted by a wide range of social actors.

Secondly, biographical turning points, and, in particular, family events surveyed in this study, created ideal opportunities for individuals to adopt new food standards and practices. The quantitative data provided robust evidence that age and household structure deeply affected food purchases. The qualitative study revealed that biographical events involved exposure to new blocks of practices and prescriptions primarily through the alteration of individuals' networks of sociability, as well as through changes in resources and constraints that affect domestic food consumption. Within a practice-theoretical framework, this means that any specific food practice is more likely to recruit (or lose) practitioners who have reached turning points in their lives, because these are occasions during which they reconsider resources, skills and standards.

Finally, we argued that upper-class individuals were more likely to change standards based on expert prescriptions. However, this does not imply that working-class individuals are less prone to change. Rather, it implies that working-class individuals' acknowledgement of expert prescriptions makes them less likely to alter their standards and practices. Working-class individuals' networks of sociability, which are instrumental for the integration of prescriptions into standards, probably tend to undergo fewer changes throughout their life courses.

In addition, the existence of differentiated class cultures may affect working-class individuals' choices of legitimate and relevant sources of prescriptions. Lower-class individuals tended to consult their intimate circles. Upper-class individuals tended to consider expert, impersonal and written (or Internet) sources. However, the quantitative analysis of purchase data suggested that middle-class practices might not be as consistent with their standards as respondents' discourses suggested.

This research calls for some comments about implications regarding the public policies on obesity prevention or sustainable consumption. Firstly, it highlights some limitations of conceiving consumption policies in terms of individual attitude and value change as it has already been emphasised by many studies and comments (Evans et al., 2012; Shove, 2010). Our respondents have more chances to change their practices at biographical turning points, and if the new habits arrive through a relevant channel, such as their family or social or professional networks. Secondly, although most of the national and European policies treat health, safety and environmental prescriptions (we could also add waste prevention prescriptions to the list) as overwhelmingly consistent, our respondents have to negotiate these prescriptions, which pull in different directions, into their food practices (Watson and Meah, 2013). Nevertheless, even though strong contrasts and conflicts emerged across the different prescriptions, households perform food practices without any specific friction. This result calls for a deeper understanding of how individuals build their own standards for everyday activities of shopping, cooking and eating. This might help policy makers to focus on those practices that would increase the consistency of a variety of prescriptions.

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Notes

1. It might be interesting to determine whether freezer use by early adopters changed following the evolution of recruitment or whether 'generations of practices' were supported by certain social groups or generations of users. However, this question lies beyond the scope of the present study.
2. We chose 2007 because, during the early stages of this research, data collected in 2007 were the most recent data available. At that time Worldpanel was maintained by TNS; since 2008 it has been run by Kantar. Data collection: respondents scanned the barcodes printed on every type of food purchased for home consumption with hand scanners. Kantar provides a large array of characteristics for products and respondents.

3. We studied the top two products sold in 2007.
4. The survey was conducted between 2009 and 2010 by students enrolled in the Public Policy Evaluation and Management programme at *Université Toulouse 2 – Le Mirail*, under the supervision of the authors.
5. If age denotes differences across birth cohorts, it means that each birth cohort has acquired specific purchase habits in its youth and maintains them over the life course.

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