



UvA-DARE (Digital Academic Repository)

Thinking with La Cocina: fats in Spanish kitchens and dietary recommendations

Ibáñez Martín, R.

DOI

[10.1080/15528014.2018.1451039](https://doi.org/10.1080/15528014.2018.1451039)

Publication date

2018

Document Version

Final published version

Published in

Food, Culture and Society

License

CC BY-NC-ND

[Link to publication](#)

Citation for published version (APA):

Ibáñez Martín, R. (2018). Thinking with La Cocina: fats in Spanish kitchens and dietary recommendations. *Food, Culture and Society*, 21(3), 314-330.
<https://doi.org/10.1080/15528014.2018.1451039>

General rights

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <https://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

Thinking with La Cocina: fats in Spanish kitchens and dietary recommendations

Rebeca Ibáñez Martín 

Department of Anthropology, Amsterdam Institute for Social Science Research, University of Amsterdam, Amsterdam, The Netherlands

ABSTRACT

In Spain, dietary recommendations for “healthy eating” hinge on the nutrient content of foods. Drawing on fieldwork conducted in domestic kitchens, I argue that this essentializing approach fails to attend to the multiple “registers of valuation” of foods – and especially of fats – that are at work in the practice of cooking. This argument has policy implications: for dietary recommendations to transform eating practices it is necessary to take into account how, while cooking, actors draw on these various forms of valuation. Such a re-focus will make dietary recommendations more sensitive to the social and material conditions under which cooking is done and better attuned to the eating practices present in mundane culinary contexts.

KEYWORDS

Critical nutrition; dietary guidelines; fats; cooking; evaluative practices; everyday life

Introduction

In Spain, there is a tension between the practices of cooking and eating on the one hand, and the policies that aim to foster healthy diets on the other. In this paper, I argue that this tension not only undermines the effectiveness of nutritional interventions, but also moralizes eating to an unhealthy degree. Based on fieldwork in kitchens of Spanish households, I propose that better cooking and eating can be done ... better.

Spain's Agencia Española de Seguridad Alimentaria (Agency for Food Safety), created in 2001 in the wake of Europe's mad cow food security crisis, uses the (in)famous food “pyramid” to structure its dietary recommendations. This pyramid prescribes the balance in which the various food groups ought to be consumed so as to achieve a healthy diet. While such pyramids have been around since the 1970s (Nestle 2002), disseminating what were assumed to be general and universal truths about diets and food since then (Nestle 2002), today their content is usually customized to feature local staples and to cater to local customs and concerns.

In 2006 the Agency changed its name to Agencia Española de Seguridad Alimentaria y Nutrición (Agency of Food Security and Nutrition [AESAN]), adding a strong focus on

CONTACT Rebeca Ibáñez Martín  R.IbanezMartin@uva.nl

© 2018 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group. This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

promoting healthy eating, and including nutritional advice to prevent obesity¹. A new campaign ¡Come sano y muévete! (Eat healthy and move!) launched a new pyramid, featuring local foods. Together with other nutritional information designed to provide information to education professionals and consumers alike, the image is distributed through the agency's website, and on flyers widely available in doctors' offices, youth centers and public gyms (Figure 1).

The pyramid prescribes how much and how often to eat foods from each of its constituent food groups. Foods that contain fats feature in two prominent positions: the top middle and the top of the base of the pyramid. Drawings of red *chorizo* and fatty cuts of red meats, under the rubric *varias veces* ("occasionally"), almost touch the tip. Below, there are scattered nuts – walnuts and almonds. At the base of the pyramid are three groups of foods: different types of breads and a paper bag of flour, a bountiful bowl of fresh fruit and a wicker plate with vegetables on a green landscape, all recommended *a diario*, *varias veces* "daily, several



Figure 1. New nutritional pyramid: Come sano y imúévete!

times.” A green bottle of olive oil sits on its own at the base. Finally, almost touching the middle of the pyramid are cheeses, yogurt and milk.

The pyramid clearly recognizes fat, the protagonist of this text, as an essential component of the daily diet: fat provides the energy needed for action. At the same time, however, there is a message of restraint. Like many other local nutritional codes, Spanish recommendations are suspicious of the high caloric content of fats, considering that if consumed in excess, fat delivers a surplus of energy that, if not used in the form of physical activity, gets stored in fat tissue, leading to obesity and cardiovascular and other diseases. This food advisory, then, like others, offers the message that fat must be consumed regularly, but with restraint.

Food advisories are one of the variety of strategies that public health agencies use to communicate such messages.² Eager to educate and to help the public make responsible food choices – and so, to help prevent chronic disease – the agencies’ literature tends to reduce food to a metric of nutrients, while framing both eaters and cooks as passive receivers of their advice. Spanish nutritional recommendations about food and fat are no different: the dietary recommendations focus on nutritional information alone. However, this focus on food as a container of nutrients ignores the practices by which food is readied, cared for, prepared and consumed.³

As the locus of the transformation of ingredients into meals, the kitchen is a prime target for the dietary advisories aiming to intervene in and modify both cooks’ and eaters’ calculations about food. However, more than weighing nutrients happens in kitchens: cooks are anything but passive in their relation to food and nourishment. They value, they appreciate, they taste, they know, they remember, they interact with food rather than assessing ingredients in a purely calculative routine. Spanish nutritional advice takes neither such practices of making food nor the practices of eating it into account. As I will show, the scheme of restriction and control recommended by the Spanish food and health agency as the proper approach to fats is at odds with modes of cooking and eating together in Spain. Taking up kitchens as a relevant site for fieldwork is therefore a response to the neglect of these sites in dietary recommendations while, at the same time, affirming the sociocultural significance of cooking in Spanish daily life.

Rather than analyzing what cooks may learn about fats from dietary recommendations, this paper records how they value fats in practice – and how they act upon such valuations. My aim is not to reify such valuations, to “replace one set of truths [about food] with another” (paraphrasing Scrinis 2013: 405), but instead to illustrate the range of approaches to food that exists “out there,” in order to make a difference to how dietary advising is done. Showing the tension between day-to-day kitchen practices and dietary advice that fails to appreciate the persistence and power of such practices, this paper highlights the limitations of the current Spanish nutrition-oriented dietary approach in order to assist in making such recommendations less normalizing and more attuned to normal life.⁴

In summary, this paper considers how dietary recommendations can value and integrate versions of fats: versions of eating that have to do with cooking, pleasure, commensality and festivities, rather than with control. I propose that attending to *la cocina* can lead to a more practice-based, collectively oriented and situated approach to dietary recommendations that leads more effectively to “healthier” eating.

Fieldsite: kitchens and cooking

This article is based on fieldwork conducted in 16 cooking sessions in non-professional kitchens during 2011. Two of the sessions observed were in single-person households, the other consisted of parents and their children or included grandparents. Four households were in an urban setting (three in Madrid, one in Gijón), the rest were in rural areas of the North of Spain.

I recruited my informants using my extended network of colleagues and friends interested in food, cooking, agricultural and nutritional issues. I was a regular at a Foodlab in a cultural center in Madrid where I had the opportunity to meet cooks curious about my project. They offered to provide me with contacts, which enabled me to expand my network and to arrange cooking sessions in several cities of Spain. Once in a town for a cooking session, I would be usually referred to another friend of the cook so visited more than one household. This meant my network grew exponentially and rapidly. Typically, I attended a single cooking session per household but, as some of my interlocutors and I constructed stable relations that last until this day, I visited those more often, and attended many cooking sessions with them.

As I was interested in exploring the diversity of cooking practices in Spain, I selected these households for variety in cooking habits, and it made sense to explore such cooking practices as they unfolded in households in different cities, in configurations ranging from one member to several generations living, cooking and eating together. One of the people I observed was María, a single woman in Gijón, a provincial town in the north of Spain. Another kitchen I attended was that of Flora, who heads a household composed of three daughters, a granddaughter and her husband in Darbo, a town in the rural south of Galicia. I also cooked and ate with Alberto, an academic in his mid-30s who lives on his own in a small apartment in Madrid's city center, and watched Diego, who lives in the periphery of Madrid while he cooked for friends.

My selection process was guided by an interest in exploring diversity among cooking practices to do with fat, rather than an attempt to map these onto sociological categories such as gender, class, age or urban/rural living conditions. As the research was designed to document how cooking practices construe and juggle various realities about fats, other than my request to join them in preparing and eating an ordinary "everyday meal," I gave no particular directions to the cooks. I realize, of course, that my very presence created an un-ordinary situation, and the importance of fats in food and cooking was probably more in focus than usual because I asked about it.⁵ Whenever possible, I arranged to join the grocery shopping before the cooking session started, and I conducted in-depth interviews with the cooks either before or after the cooking itself. In each encounter, I disclosed my intentions to draw on the cooking sessions for academic purposes.

Despite its constrained locale, the kitchen proved a fruitful ethnographic site, and sitting around the kitchen table with the hosts who welcomed me proved to be a rich source for thinking and writing in the field of food studies. Conversation often elicited memories of past and future anxieties about health, work, food provision, sociability, money and time pressures of life. The complexity of the arrangements of daily life became evident in quite distinct ways during cooking and eating. Since the conversations I was having quickly showed that everyday cooks' considerations of fats contrasts starkly with government-issued

dietary advisories, in this paper a discourse analysis of such advice complements the ethnographic research.

Conceptual background and analysis

My conceptual analysis is grounded in valuation studies, with a focus on relationality that stems from material-semiotics. Valuation studies, an emerging field, focuses on empirically studying social practices where the value of something is established, contested, negotiated or arbitrated (Kjellberg et al. 2013). From valuation studies we learn that, and how, actors' references to various values account for their actions; the process of ascribing value to objects, practices or ideas is necessarily located in practices (Fochler, Felt, and Müller 2015). Material-semiotics, meanwhile, understands subject-object positions as necessarily connective: related to others, to objects and to the situation in which they unfold. Things thus exist by virtue of their relations to other things rather than being defined by essential and intrinsic enduring qualities. Such relationality moves us away from fixed identities, making visible how objects do not simply exist in themselves, out there, but by virtue of the relations wherein they are being crafted (Law 2004b, 2004a).

Bearing the lessons of material-semiotics in mind, I propose that valuation processes are grounded not only in ideas, ideals and discourses held in actors' minds but, importantly, also in material infrastructures (Kjellberg et al. 2013). Heuts and Mol's 2013 work on what makes a good tomato precedes me here. Listening to growers, sellers, cooks and consumers, considering "What *is* a good tomato? How is the valuing of a tomato done?", Heuts and Mol identify various "registers of valuation" that distinguish actors' engagement with tomatoes, emphasizing the situational character of valuing practices: what is good in one situation is not good in others (Heuts and Mol 2013: 129). I adopt this approach, tracing the varying values of kitchen fats in household cooking practices. In contrast to dietary advisories, I am not, myself, concerned with valorizing fats; I am not after a definitive classification of worth that make fats either good or bad. Instead, I aim to identify and acknowledge *cooks'* valorizing activities, by which *they* make things valuable, in the specificity of *their* practices. In other words, I map out *their* manifold registers of valuation.

Foods, nutrients and eating

The Agencia Española de Consumo, Seguridad Alimentaria y Nutrición (AECOSAN, Agency for Nutrition and Food Safety) provides information about the kind and quantities of foods that constitute a healthy diet. Such information is summarized in the (in-)famous food pyramid, in which our subject, fat, appears incorporated (in foods such as *chorizo*, nuts and cheeses), as well as as a separate entity (a bottle of olive oil). Details about *alimentos* (foods) and *nutrientes* (nutrients) are available on the organization's website in a series of separate, downloadable documents. "Foods" has a special four-page section, "*Conoce las grasas*" (Know fats), with the motto "*Grasas sí, en exceso no*" (Fats yes, not too much). This section not only distinguishes various types of fats (hard and fluid; butter versus vegetable oils), it also offers comprehensive information about the types of fats, how they appear on food labels and the risks associated with eating them.

It is clear that fats are special. They are acknowledged to be crucial to digestion, but also flagged as dangerous to the system, necessary while also constituting a risk. Accordingly,

the information document concludes with 11 tips about how to restrict their consumption. In order that this recommendation of moderation takes hold, AECOSAN performs a translocation – or transformation – of sorts: foodstuffs become nutrients, and nutrients are made countable.⁶ See, for example, how the webpage manages the equation of foods and nutrients:

Fortunately or unfortunately, we find no proteins, carbohydrates, vitamins or minerals on the supermarket shelves but foods in which they are contained. This is why it is very important to know them and classify them according to their main components because there is hardly any food consisting of a single nutrient in its purest form. Consequently, we make a classification of groups of foods sharing functions and providing similar amounts of nutrients. The most widely accepted classification for the general population was established in Spain in 1960s and contains 6 groups. (AESAN 2018)

This move to equate foods with its nutrient content has two effects. First – a point that has been made by many a critic of nutrition science – this calculatory logic⁷ turns food to filler in a “nutritional void.” Critiques of this hegemony of nutrition over food reject the strict standardization of food-body relations that it entails on the grounds that a “one size fits all” approach that assumes universal effects of nutrients on bodies does not, in practice, hold as generally as it implies. (Cf. A. Hayes-Conroy and J. Hayes-Conroy 2013; Kimura et al. 2014; Mudry 2009; Scrinis 2013). Second, this reduction of food to its nutrients pushes aside the possibility that *la alimentación*, what would inadequately be translated as “nutrition” in English, may entail more than providing nutrients to the body. Emilia Sanabria and Emily Yates-Doerr, noticing this inadequate capturing of the richness of the word “*alimentación*,” advocate employing the term “*alimento*” – that which nourishes the body – “to reinvigorate a valuable but underutilized concept, enriching the vocabulary with which to address the recent proliferation of scientific examinations of the relation between food and health” (Sanabria and Yates-Doerr 2015: 117). This reduction of food to its nutrients ignores the cultural, historical and national contexts tethers of eating, enjoyment and experience: in short, it neglects local knowledges and practical valuations of good or bad food (Guthman 2014; Guthman et al. 2014; Ransom and Wright 2013), and, in addition, it fails to take into account situated practices of what constitutes “eating well” (Martínez 2015).

Following Michel Foucault, many scholars have analyzed food recommendations as part of regulatory regimes, relying largely on investigations of the discourses present in such dietary advice (Lupton 1996, 2013). I, however, argue that there is something to be learned from the everyday practices around food, including the social processes that ascribe value to food-related objects and assess them as good, desirable, valuable or not. In such practices in Spain, foodstuffs are explicitly not subjected to calculatory logics. In this work, I offer insights into the “registers of valuation” of fats at work in local cooking practices. By documenting ways in which valuing is done in the kitchen, by analyzing mundane cooking practices more broadly, and by contrasting them with nutrition advisories such as the ones described above, I aim to contribute to the critical literature on nutritional recommendations and applied nutritional science (Biltekoff et al. 2014; Guthman 2014; Guthman et al. 2014; Kimura et al. 2014; Scrinis 2008; Yates-Doerr 2012).

La cocina: cooking is good to think with

The Spanish language splices cooking and eating together. Roberto, who is employed by an on-line university, has, since he started working from home, “invaded” the household kitchen, which was previously his wife Laura’s territory. Roberto loves *la cocina*:

My grandmother never let me enter her kitchen, nor anyone else. Not even my grandfather. My mother, on the other hand, enjoyed my company in the kitchen. When I was little, I spent a good part of the day in the kitchen, watching, observing, just being there. Partly I was there because it was the warmest place in the house. I was in charge of getting coal for the stove, and also went with my mother to the market every day. *Me gusta la cocina por la cocina de mi madre.* (Roberto)

This last sentence does not translate easily into English. *La cocina* refers to the place where one cooks, to the place where Roberto's mother cooked and where he spent the hours of the day. It also refers to the food itself, to the dishes Roberto's mother prepared and their particular taste. It is not clear, then, what Roberto's words *la cocina de mi madre* point to: "That is where my love for cooking comes from, because I love *la cocina* of my mother." Is Roberto referring to the spatial setting of the kitchen or to the remembrance of past repasts? This ambiguity is difficult to disentangle and is meaningful in itself.

This difficulty in disambiguation shows an entanglement of kitchen and food, of the place where food is cooked and the repertoire of foods that emerges from such cooking. A local characteristic of Roberto's story, this continuum between kitchens, cooking and foods, can be extended to the Spanish context: *la cocina* describes a range of things that can roughly be translated as the kitchen, the stove, the art of cooking, the food itself and the repertoire or food tradition that not only results from but also embeds all of the above.

Adding a suffix to *cocina*, the noun, makes a verb, *cocinar*, to cook. As a verb, the word continues to point to the linguistic and material continuity between place, act and repertoire, between where cooking occurs, *la cocina* (the kitchen), *cocinar* (cooking; to cook) and the corpus of foods and recipes resulting from cooking, *la cocina española* (Spanish cuisine) or *la cocina de mi madre* (my mother's cooking). The boundaries of the term "cocina" are different in different languages, they not only affect linguistic realms but, as Annemarie Mol (2014) points out, they also signify – and therefore enable us to grasp – cultural and material continuities and discontinuities at work in the empirical case at hand. Thus, food to be eaten, or *la alimentación* in Spanish, starts in cooking; *la cocina* (the food repertoire that makes *la alimentación*) starts in *la cocina* (the spatial territory of the kitchen) where *uno cocina* (where one cooks). How the terms are nested in the Spanish language carries information about how food is done in Spain. *La alimentación* is synonymous of *la cocina*. The intimate entanglement of the terms alimentation and cooking can be seen in that the nourishing foods that support the life of bodies, and the kitchen where one cooks and the activity of cooking are designated by the same word, *la cocina*. Registering this difficulty in disambiguation is crucial to our understanding of the shaping of fats as foods in cooking practices and eating appreciations.

What, then, about eating? Socioculturally speaking, commensality, the practice of eating together is still an organizing value of food practices in Spain. A 2012 report on food habits in Spain shows that it is customary to eat at home, in company: 92% of the respondents who live with a partner and with one child or more reported eating lunch at home; 95% reported eating dinner together at home⁸ (Díaz Méndez and Gutiérrez Palacios 2014). Specifically, in Spain people tend to eat at a home and in company, though, interestingly, not necessarily at their own home. Eating lunch in other households – at the homes of parents, in-laws, grandparents or the parents of close friends is common – and, especially at busy times, arranging to have dinner at another's home during the week is commonplace. Among people who live alone, in particular, this is not unusual: the study showed that 26.5% of

the surveyed people who live alone eat lunch with family or friends, and 22.9% also have company during dinner (Díaz Méndez and Gutiérrez Palacios 2014).

Commensality is a pattern that is far from lost in Spain: food and eating practices are collective affairs. As the authors of the report put it: “If you had to summarize the eating habits of the Spanish people, it could be argued that there is a culture of sharing food that helps put together the daily diet” (Díaz Méndez and Gutiérrez Palacios 2014 my translation). The sociability of eating is thus a significant aspect of Spanish food practices. This centrality of everyday cooking and eating together in Spain was confirmed during my interviews and observations: cooking meals is an important component and arbitrator of daily routines. Drawing on her work on the history of dietary health in the USA – which I believe can be extended to the case of Spain – Charlotte Biltekoff (2013) argues that we cannot understand the conflict between the facts of dietary health and the practices of eating unless we pay attention to the role of beliefs and values on both sides (Belasco et al. 2011). Attending to the relationalities embedded in Spanish cooking enables new ways of thinking about dietary practices and nutritional advice: relationality needs to be taken into account.

Valuation 1: fat as present past

Fats mobilize, and are valued through, memories of the past. Flora is a retired woman living with her extended family in a rural town in the north of Spain. She is warm and talkative, and happy to have the chance to talk to someone about her cooking. Many of Flora’s neighbors raise a pig each year for family consumption, a practice known in Spain as *la matanza del cerdo*. While her nuclear family does not do *la matanza* anymore, she knows people who do, and it plays a role in the net of reciprocity concerning the food she and her neighbors grow and keep – vegetables, meat, food scraps to feed the animals and preserves. As part of this exchange, Flora receives lard, bacon, pancetta and some pork meat once every year.

I meet Flora in her kitchen on a bright Sunday morning. She is cooking pigeons for Sunday lunch. She has lost most of her front teeth and is to get a complete set of dentures soon. In the meantime, she can barely eat solid foods. Making things more challenging for her, she is overweight and her doctor has put her on a diet. Consequently, she cooks for her family but does not eat the same food. Today, however, is Sunday, and she will eat whatever she likes, mashed. Her husband raises pigeons and chickens, and Flora has killed six pigeons, which are now on the stove in a big clay pot with tomatoes and onions. She uses olive oil for the stew, while sunflower oil waits in a deep pan for the potatoes that she will fry as a side dish.

When Flora was young, in this village where now, after retirement, she has returned to live with her mother and sisters, they practised *la matanza del cerdo*. The fat of the animal was used for cooking: her mother, she tells me, used to cook everything in lard. As she is telling me this, Flora feels a sudden wave of repulsion: “Thinking now of the taste it gave the food makes me feel nauseous.”

For example, Flora’s mother used to fry potatoes (a staple food in the village) in lard, and also made soup with lard. The family would eat that soup all week, until it was finished. On the first day the soup would taste good but, as the days passed, the lard in it would turn rancid, leaving Flora with unpleasant memories of lard. A change in the family’s circumstances affected Flora’s mother’s cooking habits:

Luckily, my mother took a job at Massó [a fish canning factory in the bay, where most of the village women worked until it closed in the mid-1990s]. Massó ran *el economato*, a company food store for employees, where my mother would buy olive oil in bulk. This meant a change in the family's cooking! We stopped cooking with lard! Olive oil was such a luxury then, because it was terribly expensive, for rich folks.

The story of Flora and her relation to fats in *la cocina* (both ways) points to the socioeconomic character of fat consumption: historically situated, socioeconomics inhabit traditional foodscapes (Sutton 2006). While Flora experienced a shift in the family's cooking habits and uses of fat in her early-20s when her mother took a new job in the city, in the village, lard – with its characteristic feature of turning rancid over time – remained the staple cooking fat. This reality contrasts with the image of Spain as a purveyor – and the Spanish people as consumers – of the “Mediterranean diet,” where olive oil is the featured fat. While Spain's dominant fat taste is supposed to be olive oil, this was not the case until quite recently. Spain is the largest exporter of raw olive oil but internally the use of olive oil is not as widespread as it is thought to be, and despite the predominance of olive oil being linked with a decrease in the risk of diseases associated with the consumption of saturated fats, saturated fats remain an issue for organizations like AESAN.

As we see in Flora's story, while olive oil may be taken to be the cooking fat in Spain, in northern parts of the country, it has not been used consistently until quite recently, partly due to economic reasons. The Mediterranean diet has rarely been considered in relation to socioeconomic factors. At the same time, the relational and socioeconomic character defining the uses of fats is not a tale of the distant past: Flora's community, for example, is still immersed in a gift economy where foods are exchanged among kin and friends. The best parts of the pig, ribs and shoulder, are limited in comparison with lard, bacon and pancetta, but, as the largest part of the animal – the layer of fat that covers the belly and the back – lard is among the most frequently exchanged gifts.

When Flora gets lard, she immediately freezes it. She explains, while peeling potatoes, that her younger daughter refuses to eat lard “as it makes you fat.” Consequently, Flora has to navigate her unwillingness to throw away food, her bad memories of lard and her daughter's nutritionally-based principles about fat. Knowing what are, nutritionally, the good and the bad fats is not enough here, Flora has to negotiate alternate realities: not wanting to waste food, her own reactions to lard, the continuing rural tradition of *la matanza*, with its complicated strings attached to gifts and exchange, and the health discourse that makes her daughter worry about lard.

Rather than treating these realities as non-existent by making complex real-life considerations about lard, pigs and exchanges disappear from dietary recommendations, I suggest putting the multiplicity of such realities on display. If pork meat and fat are not recognized as complex extensions from *la matanza* – a festive occasion for many of the families I visited during fieldwork, with strings attached and relationships built in – Spanish cooking/eating practices and government dietary recommendations will remain at odds. Perhaps even more importantly, as long as the various aspects of fat do not exist explicitly in nutrition discourse, this gap in the governance of fats – the failure to acknowledge and take into account culturally entrenched ways of eating – cannot be recognized.

While dietary recommendations frame fats as nutritional elements present in foods, in the knowledge of nutritional science the foods as such have no other value or meaning. The example of Flora's shows how her *cocina* – in every sense of the term – is saturated

with inherited values as well as newly acquired ones, all of them important in her negotiations with fat. These values, connected to past and present practices, are at work in her kitchen. The first lesson to be learned from ethnographic kitchen sessions is, then, that it is irresponsible to describe fats in isolation: fats in *la cocina* never figure alone – as they do in nutritional recommendations – they always figure in relationships. Following through such relations calls for methods that not only record actors' discourses but also attend to the relations between people, techniques, artifacts, grease and fluids. The resulting approach involves mapping relations that are both conceptual and material: Flora's cooking shows that fat is not simply fat, but carries with it a complex valuation, one in which both positive and negative assessments are at work, a valuation that involves socioeconomic as well as nutritional pressures, choices and concerns. These play out in the actual exchanges of (and about) lard – as part of *la matanza*, as an object of conversation with the ethnographer and ultimately as a staple to use or eschew in the practice of *la cocina*.

Valuation 2: culinary techniques and practices

Culinary practices give rise to, but also depend, on registers of valuation, registers that not only value different fats differently but that can themselves vary quite widely. Considering two very different fieldwork vignettes demonstrates this point. The first takes us again to the north of Spain, to Gijón, a major town in Asturias, the second to Madrid, the Spanish capital.

To begin, the story with María, a retired woman living on her own in her apartment in Gijón. Her husband passed away just a few years ago and she is getting used to the now empty space of her home. Her only son lives with his girlfriend in a small town close by: “[I] discovered my passion for cooking recently.”

I am struck by this statement, as María has been cooking all her life for her husband and son. Every morning, before going to work as a shop clerk, she was in charge of getting lunch ready for them. She woke early and, while having her morning coffee, prepared the food. Because her time was precious, her kitchen partner was the pressure cooker. The three members of the family would come home for lunch and return to work immediately after. At night, María would either fix something simple from leftovers, or prepare a soup, a salad, fried fish or meat. She has always cooked. But now that she is alone, she finds time for herself: “taking cooking classes,” she says, “I am learning how to cook.” In this I hear that María is making a distinction between the daily practice of feeding her family and the cooking that she learns in a place of education. And I learn where the difference lies.

María goes to cooking classes at the People's University three times a week. It is wonderful for her, she is widening her social circle now that she is living on her own. I carefully watch her hands working the dough for *bizcocho* in her immaculate kitchen. The door of the *patio* slams and she runs to secure it. The oven is warm, she says, ready to receive the dough:

I used to cook with olive oil, everything and always. But since I started going to cooking classes I have learned how good sunflower oil is for baking cakes, for instance. I didn't know that, but it is true, it gives a softer texture and taste to the cakes. It is not as healthy as olive oil, but the results are better for a sponge cake. You will see.

One of the lessons she has learned from her formal cooking training is how to discern and attach value to different fats when mixed with various ingredients or when used in a particular recipe. The value of each fat lies in the texture it gives to the resulting foods. María has learned to differentiate between textures and to value fats in relation to the effects they

produce. Texture becomes apparent through its relations to other textures: María can contrast the texture of *bizcocho* made with olive oil with the hitherto unknown texture of the *bizcocho* prepared with sunflower oil. The first will be heavier and more fatty on the palate, the second spongy and light, soft to the bite and fluffy in the mouth. The value of fat with regard to texture is clearly relational, not only in terms of the relation between textures, but also in terms of María's relations to the world: her newly acquired sensitivity to texture is shaped within a new network – the cooking classes at the University – of which she has recently become a part. The values emerging in the baking of the *bizcocho* arise out of this network and her participation in it.

In the other site, one of Diego's cooking sessions in his kitchen in the periphery of Madrid complements María's new-found sensibility for textures, relations and fats. Diego shows a similar concern with repertoires of cooking techniques, pointing out how they affect not only the taste of foods but also what he refers to as “culinary territories.” Diego is a generous man who enjoys having guests, and often cooks for friends at home. His story contrasts in this way, perhaps, with Flora's and María's: while Flora and María have been lifelong primary cooks, providing care for their families, Diego has always cooked for fun, on festive occasions, never as the habitual provider of nourishment for his household.

Diego is making mayonnaise on the steel table opposite me. He moves swiftly around his kitchen as he answers my questions. At one point, he offers a valuation of different kinds of fats:

Olive oil is great, although it's very strong and masks the taste of some foods. Take mayonnaise, for instance. I make mayo with sunflower oil. It has a milder flavor and gives the mayonnaise a softer texture. *En mi cocina* [“in my kitchen/cooking”], again, difficult to disambiguate) I use sunflower oil to make steak-tartar. Butter is special. I use butter in certain recipes to finish sauces, for example, to make *roux* for *croquetas*, you know, the French basic sauce cooking. Olive oil is what I use most of the time, but it contextualizes your cooking too much. Olive oil, peanut oil, or butter, each contextualize your cooking a lot. I mean, each has a strong meaning, I mean, within the geographical and cultural distribution of oils and butter in different cuisines. It would be contradictory to use olive oil in a Thai dish, you see. It is a question of coherence and incoherence that is engraved in the food prepared. It is a question of coherence.

Diego values fats differently, in accordance with a particular register. Coherence and respect for a given culinary tradition determine how to assign value to fats in his kitchen. As Diego resumes his task, sunflower oil, eggs, salt and a few drops from a squeezed lemon go into the mixing cup. He puts it all in the handheld blender and looks down to check if there is enough sunflower oil. The ingredients will soon come together in the cup and turn into a soft ivory mayonnaise.

These examples show that the study of valuation processes must focus on practices: as Lamont (2012) has argued so compellingly, valuing happens not inside the mind of an individual but in the *experiences* of daily life, in what people spend time doing. It then makes sense that an exploration of values attributed to fats requires a focus on cooking in practice – a practice where actors show their commitments, as subjects who engage with objects, employ knowledge and act. María and Diego are sensitized actors who discern between, and ascribe value to, fats, they have learned (and continue to learn) about the effects of various fats in the dishes that result from their cooking practice.

Actors, then, make sense of their actions and account for them depending on different registers of valuation: texture for María, and coherence in culinary regimes for Diego may be such registers of valuation. As what is a good or bad fat depends on such registers of

valuing – registers that emerge from culinary repertoires, valuation must be understood as a social process. Not congruent with one another, these two registers each emerge in a particular form, from and within a particular set of practices and social networks. Different cooking repertoires bring out different valuations of what is a good or a bad fat, in relational rather than absolute ways.

Valuation 3: affective practices in which fat is configured as disgusting

One of the valuations of fat that runs through registers, however, is disgust. Our final story, featuring Alberto, resonates with how disgust shaped Flora's reactions to lard in *la cocina*. A lanky man in his late-30s in a tiny kitchen, Alberto carefully places a deep cast-iron saucepan on the stove as he prepares pasta for dinner. He opens a jar of tomato sauce and empties the liquid into the pan, which has no fats of any kind: "No, this sauce doesn't need any extra fat."

Our conversation flows and then something falls on the floor, a drop of sauce. Alberto immediately grabs a napkin, kneels down, and cleans it up:

I can't stand *grasa*. Like, a greasy sink. It disgusts me. Or the smell of my clothes when I go to restaurants where there is a lot of frying going on, or even when I myself fry something. I have to change my clothes.

The term *grasa* in Spanish refers both to grease – dirty fat, such as that used in cars – and edible fats. The smell and texture of grease offend Alberto. He says he avoids frying in his kitchen because it gets greasy, the grease from fried food can cling to his clothes in a way he does not like. During our kitchen session, Alberto further explains that the feeling of disgust associated with fats emanates from two sources: the smell of a frying pan repels him, but so does the possibility of gaining weight. It is not only the materiality of fat that he hates (cooking oils leaving the sink sticky, making his clothes smell bad), but its material effects, weight gain or the creation of excess fat within the body itself. These powerful symbolic and material associations emerging from Alberto's cooking session show a valuation of fat that is deeply embodied and intensely emotional.

Scholars interested in exposing the ideological charge and prejudicial values of anti-fat politics have pointed out this relation of fat with disgust. (Hardy 2013; Oliver 2006), and feminist theorists have pointed out how the sexist ideal of the slender female body propagates this disgust towards fatty foods and fats (Pitman 1999), fostering a rejection of consuming fats or, conversely, sensations of guilt when it is eaten (Murray 2008). Alberto too does not want to eat foods cooked with fat, and expresses disgust both towards developing a fat body and towards the fat as a sticky, dirty and odorous substance in itself. His valuation of fat through affect resonates with Lupton's (1996) study of Australian attitudes towards nutrition, in which respondents identified greasy foods as slimy and repellent. In Alberto's account fat is de-valued, as matter out of place (Douglas 1966 [2002]) rather than a nourishing substance: it pollutes bodies, making them fat, and other matters such as objects and surfaces, making them dirty.

As I pointed out earlier, Spanish dietary recommendations regard fats as a component of food to be avoided. Dietary advisories state, quite explicitly, that even though fats are necessary for metabolic processes, overconsumption leads to obesity and health problems. In Alberto's *cocina* too, fats are to be avoided. However, for him, fats evoke negative emotions: fear (of gaining weight, of fat within the body) and repulsion (to filth). Deborah Lupton (2013) describes emotional reactions such as Alberto's as the "yuck factor" in the valuation

of fat. Drawing on Australian nutritional recommendations, she analyzes the mobilization of repulsion towards fat in anti-obesity campaigns as an “emotional recourse.” Whether or not such campaigns are effective, Lupton suggests that the guilt that underpins such messages is a matter for concern, as it burdens eating with anxiety rather than normalizing it.

Such emotional devices are not on display in the Spanish dietary campaign. In its effort to inspire healthy behaviors, while its recommendations do emphasize control and restraint in the consumption of fats, in so doing, the nutritional content of foods is isolated from daily engagements with eating. I propose that it is precisely this isolation that is of concern, and I hope that the ethnographic explorations above may provoke alternate narratives about fats, eating and food that take into account present values, the relations between those values and how people engage in the valuation of fat in their cooking practices. Like Lupton, I suggest that if disgust emerges as the predominant value from advisories of restraint with regard to fat, it is an undesirable response to eating. Learning from *la cocina*, the site where fat is used and eating starts, may result in a different approach to dietary recommendations.

Interfering and intervening in dietary advice

Conventional wisdom has it that the communication of science is best accomplished through knowledge and educating the public is the strategy of choice. Filling citizens’ information gaps, or so this literature has it, ought to modify their practices. In this effort to improve the public’s eating habits, nutritional recommendations can be viewed as a technology of sorts: a technology that carries information about good food and bad food and that, importantly, intervenes in people’s behavior in the face of such knowledge.

Information in the form of dietary recommendations thus intends to provide scripts that may help modify food consumption, and technologies of intervention adopt a one-size-fits-all approach. In dietary discourse, bodies are constituted as making up a single, unified public (Wynne 1992). This approach assumes that once knowledge has properly sensitized bodies to fats, those who inhabit these bodies will behave – that is, eat – accordingly. My analysis of *la cocina* shows the inadequacy of this method – at least in Spain. The approach, after all, relies on a separation of eating and cooking, a separation of mind and body and a separation of nutrients and foods. In the Spanish context, none of these separations works. My empirical work in kitchens shows how the territory of eating and the territory of cooking are entangled, that the variety of valuations of fats that we encounter in common households – variety in ways of framing, appreciating and cooking – renders them irreducible to pure nutrition. Although fats may solidify in nutritional recommendations, when heated up in *la cocina* they become fluid.

So here is what I propose: refusing to take for granted that the values that people attach to fats align with those established in nutritional science and following fats as they appear in home kitchens allows us to see fats in all their material relationality. The three ethnographic valuations of fats presented above each foreground the word “relation,” albeit in different ways. In these three cases, fats never stand alone but are incorporated in a material and symbolic territory: related to personal and collective pasts and memories; to specific culinary techniques and practices; and to affective practices. Thus, valuation – valuing what is a good or bad fat – is a social exercise that necessarily emerges within the social cradle of a practice, never in isolation or located in a void, always in connection. The stories

presented in this study also suggest that cooking can be described as a set of compromises, a negotiation among values, when different registers of valuation coincide in one *cocina*.

Rather than addressing how my informants *know* a fat is good or bad, these stories show how, in different settings, they *relate* to fats, *making* them good or bad for the action at hand (Heuts and Mol, 2013). Reflecting on these scenarios, I suggest that nutritional knowledge about fats, to the extent that it ignores this relational and situational aspect of valuation, is distributed with the intention of domesticating eating practices. I argue that, in order to organize dietary advice more effectively, analyzing cooking practices must be taken seriously. My intention is neither simply to debunk mainstream accounts of fat, nor to criticize them. Instead, in the tradition of scholars such as de Laet (2017), Martínez (2015), Mol (2014), Heuts and Mol (2013), Yates-Doerr (2012) and Vogel (2014), who ponder how rather than passing easy judgments, I suggest that nutrition science can learn to better attune itself to everyday and real-life eating practices: my objective is to raise questions and facilitate alternate practices.

Instead of coming up with a radical unified approach to fats that overlooks cooking and its centrality in Spain, I ask: How might dietary recommendations come to value and integrate versions of fats and, by extension, versions of eating that have to do with cooking, pleasure, commensality, festivities – rather than being restricted to the controlling tendencies of nutritional science? I suggest that one way to do so is to attend to *la cocina*. While dietary claims about fats are measurable, singled out, general, scientific and isolated in a void, in my collection of ethnographic stories, claims about fats are narrative, relational, specific, technical, social, festive and replete with effect. These descriptions from the kitchen are not just descriptions; hopefully, they can function as *interferences* in dietary advice, interferences that may open up a space for intervention in Spanish nutritional recommendations and invite the re-examination of a series of terms like control (restriction of fat consumption), eating (where eating starts) and cooking. How might focusing on *la cocina* provide a different, more practice-based, collectively oriented and situated approach to dietary recommendations that leads more effectively to “healthier” eating? If nutritionism has become the pervasive approach to food in public health discourse, if nutritionism’s recommendations should be criticized for their moralistic and normalizing tendencies (Martínez 2015), the attention to valuations in cooking on display here complicates the frameworks that such recommendations deploy, destabilizing in particular the framework of fats that is at work in nutritional recommendations in Spain. This complication, far from being a nuisance, may provide an opportunity to make dietary recommendations more socially sensitive and attuned to the eating practices present in mundane culinary contexts.

Notes

1. The problem of obesity is a relatively new topic in Spanish healthcare policy (Díaz-Méndez and Gómez-Benito 2010). In 2013 AESAN launched *The Observatory of Nutrition and Obesity Study* to gather comprehensive data on the subject, which showed that the Agency needs to gather up-to-date information to tackle the “problem of obesity.” This problem is, however, not unique to the Spanish context: according to the World Health Organization (2016), it is a global epidemic.
2. For an analysis of public health conceptualization, inception and communication strategy, see Broad and Hite (2014).

3. Brazilian health advisories are a notable exception: here, public health advice considers food in context, bringing the kitchen, cooking skills, environmental issues and commensality into their dietary recommendations (Saúde 2014).
4. For critiques of normalizing and moralizing tendencies in food advice, see Biltekoff et al. (2014); Hayes-Conroy et al. (2014); Mudry et al. (2014); Yates-Doerr (2012).
5. My presence altered the situation into one that is not quite so ordinary – accounting for that non-ordinariness is a challenge that every ethnographer faces.
6. For a discussion of the practices and consequences of turning food into nutrients, see Mudry (2009).
7. For the use of this term to denote the reduction of food to its caloric value, see de Laet (2017).
8. This study is based on a telephone survey conducted in Spain between February and August 2012, with a sample of 1504 people. Although stratified for representativity issues by age and gender, answers were not stratified by gender for questions that have to do with commensality, only for questions concerning meal preparation.

Acknowledgements

I am grateful to all who allowed me to learn from their cooking and eating, and thank Annemarie Mol, Marianne de Laet, Michael Penkler, Else Vogel, Emily Yates-Doerr, Sebastian Abrahamsson, Filippo Bertoni, Justine Laurent, Oliver Human, Anna Mann, Amal Chatterjee and two anonymous reviewers for their insightful comments on earlier versions of this article.

Disclosure statement

No potential conflict of interest was reported by the author.

Funding

This research was made possible by European Research Council [advanced grant number [249,397] “The eating bodies in western practice and theory” directed by Annemarie Mol (<http://whatiseating.com/>).

Notes on contributor

Rebeca Ibáñez Martín, Postdoctoral researcher in the Health, Care and the Body research group in the University of Amsterdam. She is currently studying an experimental nutrient recovery system from wastewater developed at the Netherlands Institute of Ecology and implemented in an ecovillage. She is concerned with the normativities and responsibilities involved in the system under development and with mapping the shifting moral landscapes of water treatment.

ORCID

Rebeca Ibáñez Martín  <http://orcid.org/0000-0002-8713-011X>

References

- AESAN. 2018. *Conoce las Grasas*. <http://www.plancuidatemas.aesan.msssi.gob.es/conocelagrasa/riesgos.htm>.
- Belasco, Warren, Amy Bentley, Charlotte Biltekoff, Psyche Williams-Forsen, and Carolyn de la Peña. 2011. “The Frontiers of Food Studies.” *Food, Culture and Society* 14 (3): 301–314.
- Biltekoff, Charlotte. 2013. *Eating Right in America: The Cultural Politics of Food and Health*. Duke University Press.

- Biltekoff, Charlotte, Jessica Mudry, Aya H. Kimura, Hannah Landecker, and Julie Guthman. 2014. "Interrogating Moral and Quantification Discourses in Nutritional Knowledge." *Gastronomica: The Journal of Food and Culture* 14 (3): 17–26. doi:10.1525/gfc.2014.14.3.17.
- Broad, Garrett, and Adele Hite. 2014. "Nutrition Troubles." *Gastronomica: The Journal of Food and Culture* 14 (3): 5–16. doi:10.1525/gfc.2014.14.3.5.
- Díaz Méndez, C., and R. Gutiérrez Palacios. 2014. "Patrones alimentarios de los españoles: Continuidad y cambio de la comida familiar." *Revista Panorama Social* 10: 9–24.
- Díaz-Méndez, Cecilia, and Cristóbal Gómez-Benito. 2010. "Nutrition and the Mediterranean Diet. A Historical and Sociological Analysis of the Concept of a "Healthy Diet" in Spanish Society." *Food Policy* 35 (5): 437–447. doi:10.1016/j.foodpol.2010.04.005.
- Douglas, Mary. 1966 [2002]. *Purity and Danger: An Analysis of Concepts of Pollution and Taboo*. London: Routledge Classic.
- Fochler, Max, Ulrike Felt, and Ruth Müller. 2015. "Unsustainable Growth, Hypercompetition, and Worth in Doing Research. Narrowing Regimes of Valuation in Doctoral and Postdoctoral Life Scientists' Work and Lives." *Pre-print*. Published by the Department of Science and Technology Studies, University of Vienna, March 2015 (Available at <http://sts.univie.ac.at/publications>): 1–23.
- Guthman, Julie. 2014. "Introducing Critical Nutrition: A Special Issue on Dietary Advice and Its Discontents." *Gastronomica: The Journal of Food and Culture* 14 (3): 1–4. doi:10.1525/gfc.2014.14.3.1.
- Guthman, Julie, Garrett Broad, Kendra Klein, and Hannah Landecker. 2014. "Beyond the Sovereign Body" *Gastronomica: The Journal of Food and Culture* 14 (3): 46–55. doi:10.1525/gfc.2014.14.3.46.
- Hardy, Kristen A. 2013. "The Education of Affect: Anatomical Replicas and 'Feeling Fat'" *Body & Society* 19 (1): 3–26. doi:10.1177/1357034x12441629.
- Hayes-Conroy, Allison, & Jessica Hayes-Conroy (2013). *Doing Nutrition Differently: Critical Approaches to Diet and Dietary Intervention (Critical Food Studies)*. Chicago, IL: Ashgate Publishing Group.
- Hayes-Conroy, Jessica, Adele Hite, Kendra Klein, Charlotte Biltekoff, and Aya H. Kimura. 2014. "Doing Nutrition Differently." *Gastronomica: The Journal of Food and Culture* 14 (3): 56–66. doi:10.1525/gfc.2014.14.3.56.
- Heuts, Frank, and Annemarie Mol. 2013. "What Is a Good Tomato? A Case of Valuing in Practice." *Valuation Studies* 1 (2): 125–146. doi:10.3384/vs.2001-5992.1312125.
- Kimura, Aya H., Charlotte Biltekoff, Jessica Mudry, and Jessica Hayes-Conroy. 2014. "Nutrition as a Project." *Gastronomica: The Journal of Food and Culture* 14 (3): 34–45. doi:10.1525/gfc.2014.14.3.34.
- Kjellberg, Hans, Alexandre Mallard, Diane-Laure Arjaliès, Patrik Aspers, Stefan Beljean, Alexandra Bidet, Alberto Corsin, Emmanuel Didier, Marion Fourcade, Susi Geiger, Klaus Hoeyer, Michèle Lamont, Donald MacKenzie, Bill Maurer, Jan Mouritsen, Ebba Sjögren, Kjell Tryggestad, François Vatin, and Steve Woolgar. 2013. "Valuation Studies? Our Collective Two Cents." *Valuation Studies* 1 (1): 11–30. doi:10.3384/vs.2001-5992.131111.
- de Laet, Marianne. 2017. "Personal Metrics; Methodological Considerations of a Praxiographical Approach." In *Methodological Reflections on Practice Oriented Theories*, edited by B. Littig, M. Jonas, and A. Wroblewski, 107–123. New York: Springer.
- Lamont, Michèle. 2012. "Toward a Comparative Sociology of Valuation and Evaluation." *Annual Review of Sociology* 38 (1): 201–221. doi:10.1146/annurev-soc-070308-120022.
- Law, John. 2004a. *After Method*. Mess in Social Science Research. London: Routledge.
- Law, John. 2004b. "And if the Global Were Small and Noncoherent? Method, Complexity, and the Baroque." *Environment and Planning D: Society and Space* 22 (1): 13–26.
- Lupton, Deborah. 1996. *Food, the Body, and the Self*. Edited by Sage. London: Sage.
- Lupton, Deborah. 2013. *Fat Politics: Collected Writings*. Sydney: University of Sydney.
- Martínez, Airín D. 2015. "The Juxtaposition of Comiendo Bien and Nutrition." *Food, Culture & Society* 18 (1): 131–149. doi:10.2752/175174415X14101814953800.
- Mol, Annemarie. 2014. "Language Trails: 'Lekker' and Its Pleasures." *Theory, Culture & Society* 31 (2–3): 93–119. doi:10.1177/0263276413499190.
- Mudry, Jessica. 2009. *Measured Meals: Nutrition in America*. Albany, NY: SUNY Press.
- Mudry, Jessica, Jessica Hayes-Conroy, Nancy Chen, and Aya H. Kimura. 2014. "Other Ways of Knowing Food?" *Gastronomica: The Journal of Food and Culture* 14 (3): 27–33. doi:10.1525/gfc.2014.14.3.27.
- Murray, Samantha. 2008. *The 'Fat' Female Body*. Springer.

- Nestle, Marion. (2002) 2007. *Food Politics. How the Food Industry Influences Nutrition and Health*. Berkeley: University of California Press.
- Oliver, J. Eric. 2006. *Fat Politics. The Real Story Behind America's Obesity Epidemic*. 1st ed. Oxford: Oxford University Press.
- Pitman, Gayle E. 1999. "Body Image, Compulsory Heterosexuality, and Internalized Homophobia." *Journal of Lesbian Studies* 3 (4): 129–139. doi:10.1300/J155v03n04_17.
- Ransom, Elizabeth, and Wynne Wright. 2013. "Constructing Culinary Knowledge." *Food, Culture & Society* 16 (4): 669–689. doi:10.2752/175174413X13758634981895.
- Sanabria, Emilia, and Emily Yates-Doerr. 2015. "Alimentary Uncertainties: From Contested Evidence to Policy." *BioSocieties* 10 (2): 117–124. doi:10.1057/biosoc.2015.17.
- Saúde, Ministério da. 2014. *Guia alimentar para a população brasileira*.
- Scrinis, Georgy. 2008. "On the Ideology of Nutritionism." *Gastronomica* 8 (1): 39–48.
- Scrinis, George. 2013. *Nutritionism*. New York: Columbia University Press.
- Sutton, David. 2006. "Cooking Skill, the Senses, and Memory: The Fate of Practical Knowledge." In *Sensible Objects: Colonialism, Museums and Material Culture*, edited by C. Gosden, E. Edwards, and R. B. Phillips, 87–118. Oxford: Berg.
- Vogel, Else. 2014. "Clinical Specificities in Obesity Care: The Transformations and Dissolution of 'Will' and 'Drives.'" *Health Care Analysis*: 1–17. doi:10.1007/s10728-014-0278-3.
- WHO. 2016. *Obesity and Overweight World Health Organization*.
- Wynne, Brian. 1992. "Misunderstood Misunderstanding: Social Identities and Public Uptake of Science." *Public Understanding of Science* 1 (3): 281–304. doi:10.1088/0963-6625/1/3/004.
- Yates-Doerr, Emily. 2012. "The Opacity of Reduction: Nutritional Black-Boxing and the Meanings of Nourishment." *Food, Culture and Society* 15 (2): 293–313.