



Embodied Memory, Affective Imagination, and Vigilance: Navigating Food Allergies in Japan

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Abstract “Food is relationships isn’t it,” Yamada san stated in 2017, neatly capturing the importance of food in social life. This article, drawing on the experiences of people with severe food allergies in Japan, illustrates the complexities of safely managing allergies when food—and the importance of sharing the *same* food—is so important to social life. In particular, I argue that individuals develop and practice skills of vigilance and situational awareness to mitigate physical and social risk which emerge through an affective imagination of what they feel *could* happen in the future, built on embodied memories of what has been experienced prior (e.g., severe allergic reactions and difficult social experiences with food). The development and enactment of these skills of vigilance happen through an ‘education of attention’ (Gibson in *The ecological approach to visual perception*, Psychology Press, New York, 1979; Ingold in *The perception of the environment: essays on livelihood, dwelling and skill*, Routledge, London, 2000) developed over time and in different social settings and constitute a somatic mode of attention (Csordas in *Cult Anthropol* 8:135–156, 1993) which shapes social interactions and aims to mitigate against any potential perceived social costs for not being able to eat everything.

Keywords Food allergies · Embodied memory · Affective imagination · Education of attention · Vigilance · Japan

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Introduction

Ten-year-old Hana Suzuki¹ walks along the lake pathway, holding hands with her mother. It's a hot day and lots of people are out and about, relaxing, chatting, and enjoying the view of the lake. As they walk, I notice Hana suddenly tenses slightly. I follow her line of sight and see that she is watching an ice cream coming towards her. While continuing to engage in the conversation, Hana keeps track of where the cone is. As the ice cream draws nearer, she edges her body towards the side of the path until it moves past. Her mom is also aware and tracking the cone and she also shifts her bodily positioning, angling slightly forward as if to protect Hana as they open some space between themselves and the cone. Throughout such tracking the conversation between us all continues. After we pass the ice cream, I ask them about their movements and Hana's mom replies that because of Hana's severe allergy to milk they always try to be aware of her allergens. In summer, when so many people are walking in the park with ice creams in hand, it is easy to notice them. Hana nods at this and says that she prefers to avoid them if possible.² We can see, in this short example, how a parent and child are navigating their environment through practicing situational awareness and vigilance of allergens in their vicinity.

While maintaining physical safety is a core concern for people with food allergies, managing food allergens in the environment goes beyond the material and incorporates the social.³ As one woman framed it in 2017: "Food is relationships isn't it" (*shoku wa kankei desu ne*). Food is, of course, crucial to much more than physical survival. Most of our relationships with others involve consumption of food and drink, and our social bonds, kinship, friendships, and work relationships frequently revolve around food. It is thus often considered to be at the center of human life (Counihan and Van Esterik 1997). In Japan, food is a key component in building and sustaining relationships and there is a strong social focus on everyone sharing the same food. This is reinforced from an early age through, for example, the school lunch program (*kyūshoku*) where students eat the same meal together in their classroom (Allison 1991; Onabe 2010). It is also seen in adulthood in many

¹ All names in this paper are pseudonyms, and some details have been changed to preserve anonymity.

² Most people only react severely if they ingest their allergens, though some have rashes if the allergen touches their skin. That being said, some people do react severely to allergens on touch. For example, in the UK a young man died in 2017 after a classmate flicked cheese at him and it hit his skin. He ended up having an anaphylactic reaction exacerbated by asthma.

³ There is a small but growing body of research in the social sciences on food allergies. For example, Nettleton et al. (2010) has focused on narrative analyses of lay accounts; Glabau (2016) has explored the moral life of autoinjector medications which become mediating commodity objects between patients, parents, and doctors in the US; Waggoner (2013) has looked at the transformation of peanut allergies into a public health epidemic through interactions between medical professionals, patients, biomedical categories, and institutions among others; and I have previously published on aspects of risk in the UK (Cook 2017) as well as on microbial aspects of care (Cook 2018, 2019b). In psychology there has been an increasing body of research that discusses the emotional and psychosocial aspects of food allergies, on quality of life as well as on experiences of trauma and PTSD after anaphylactic experiences (Akeson, Worth, and Sheikh 2007; Dunn Galvin and Hourihane 2016; Herbert and Dahlquist 2008). Thus far, however, there has been relatively little attention paid to *how* food allergy experiences are embodied and learned through both individual bodily experiences as well as the embodied responses of others such as caretakers.

spaces, such as in *izakaya*'s (taverns) when people typically share dishes rather than having their own individual meal.⁴ Being able to eat anything is a mark of a cooperative person and expressing strong dislikes and likes has typically been considered a sign of a problematic or difficult person (Cook 2019a). Social interactions and relationships can therefore become complicated when people have food allergies and have to refuse consuming certain foodstuffs. Many individuals I have worked with have felt this to be an “undesired differentness” and stigmatizing (cf. Goffman 1963:5).⁵ People with allergies (and their parents) consequently develop strategies and skills to manage both the physical and social risks of food allergies. This is especially the case for people who experience severe reactions, which in rare cases can end in death.⁶ Knowledge of a potentially fatal outcome, even if rare, makes management of allergies an integral part of the life of those with food allergies, especially those who have experienced anaphylaxis and carry auto-injectors of adrenaline as their first line treatment. Yet, given how important food is to social life in Japan, managing the social aspects of food allergies is also critical.

When Hana and her mother (introduced at the start of the paper) physically edged aside out of the way of an ice cream, they of course didn't expect the ice cream to jump off the cone and launch itself at her, but they were very much expressing their lived experience of ‘being in the world’ (Csordas 1993). Hana (and her mother) wanted to know where her allergen was in relation to herself and she physically attempted to distance herself from it. Not all people with severe allergies vigilantly

⁴ Most social eating in Japan, among adults especially, includes sharing a number of different dishes with everyone at the table. For example, in *izakaya* (taverns), the food is placed along the middle of the table and everyone uses chopsticks or utensils to take food from the dishes and put it on individual small plates. This allows for a certain freedom to not take particular dishes, but at the same time makes ordering complex for people with food allergies. This is especially the case if they don't want the people at the table to know about their allergies or if they don't want to handle the complexity of asking which dishes are safe for them, especially if they have multiple allergies.

⁵ General knowledge of food allergies in the public arena has been increasing, largely as a result of a child dying in Chiba in 2012, but also because the national television broadcaster (NHK) has broadcast some TV programs on food allergies and potential new treatments. In addition, there has been an increasing number of advertisements of ‘allergen-free’ foods. Most people in Japan have therefore now heard of food allergies, but this doesn't necessarily translate to understanding what food allergies are, or the fact that people have to avoid even small traces of the food they are allergic to.

⁶ Allergens are something that allergic bodies' immune systems (over)react to, to varying degrees, “in response to something that is normally harmless” (Brown et al. 2015), in this case, food proteins. Reactions vary in severity: mild reactions may include hives or mild swelling of the lips or face (among other possibilities). In severe cases, individuals can experience anaphylaxis: a reaction of more than one bodily system such as the skin, mucous membrane, respiratory, digestive, nerve, circulatory and systemic organs. Symptoms can include hives, swollen throat (or other areas of the body), wheezing, dizziness, passing out, chest tightness, trouble breathing, difficulty swallowing, vomiting, diarrhea, stomach cramping, and a feeling of impending doom (AAAAI 2018). Anaphylaxis is the biggest physical risk to those with food allergies because it can, in rare cases, lead to death or impairment. According to Japanese Ministry of Health, Labour and Welfare (MHLW) figures 71 deaths were linked to anaphylaxis in 2011 with 5 of these caused by food (the rest were related to wasp/bee stings). In 2013 there were 77 deaths, 2 of which were attributed to food (JSA 2014). It is considered, however, that fatal anaphylaxis is under-recorded due to mortality coding issues (Tanno et al. 2017). Typically, food allergy related anaphylaxis was talked about by my interlocutors who had experienced severe reactions in terms of the possibility of dying. A little discussed scenario, however, is survival with significant impairment and disability as a result of swelling of the airways leading to oxygen deprivation to the brain (Worley 2017).

track their allergens in the environment as obviously, but most talk about how, if their allergen(s) are on the table or in the vicinity they are aware of where they are and where they are moved to—for example, a dish that is passed from one end of the table to the other. They continue to talk and interact as usual, but their attention is divided: part is on the conversation or activity they are doing, and part is focused on where the risk is located. This is not necessarily a conscious process but instead a tacitly developed tactic that is part of a problem-solving skillset that emerges out of embodied experiences of allergens that are often experienced as scary and, for some, as traumatic. Such skills are learned and developed over time. While we might think of skills as individual attributes Ingold reminds us they are “not an attribute of the individual body in isolation but [are an attribute] of the whole system of relations constituted by the presence of the artisan in his or her environment” (2000:291). We can therefore understand the development of food allergy related skillsets, such as the practice of vigilance and situational awareness, as a process of ‘enskilment’, which can be understood “as the embodiment of capacities of awareness and response by environmentally situated agents” (Ingold 2000:5). It is, as Ingold (1997:111, 2000:37) drawing on Gibson (1979:254) observes, an “education of attention,” in this case to allergens and the wider environment, “in which learning is inseparable from doing, and in which both are embedded in the context of a practical engagement in the world” (Ingold 2000:416). While Ingold stresses the participatory aspect of enskilment, learning how to be skillfully vigilant and situationally aware of food in social and material environments is an ongoing embodied practice and process. I suggest that the development and enactment of skills of vigilance happens through an ‘education of attention’ (Gibson 1979; Ingold 2000) developed over time and in different social settings, and constitutes a somatic mode of attention (Csordas 1993) which shapes social interactions and aims to mitigate against any potential perceived social costs for not being able to eat everything. Arguing that “[s]omatic modes of attention are culturally elaborated ways of attending to and with one’s body in surroundings that include the embodied presence of others” (Csordas 1993:138), Csordas suggests that we must attend not just *to* the body but *with* the body, as well as to other bodies, given that we don’t exist in isolation from others. As will become clear in the following pages, people with food allergies and their families develop skills of vigilance to manage physical and social risks (and any fear and anxiety engendered by reactions) as a consequence of embodied memories and a highly affective imagination of what they feel might happen (physically and socially) if their careful attendance to their surroundings were to slip.

As the Kleinman’s (1994) have argued, illness—how it is lived, remembered, and relived—is embodied and cultural. In analyzing how people with food allergies in Japan live ‘in the world’ and manage the physical and social risks of food allergies within social contexts that are always intersubjective, I have found it useful to think with the ways that embodied memory and affective imagination engender the development and practice of specific skillsets to minimize the risk of a reaction within material and social environments. Embodied memory is here understood as “the imprints of the past on the sensuous body” (Kidron 2011:453). Embodied memories are sensuous, affective, and emotional, they are both in the body and of

the body, and they shape how bodies live in, and move through, the world. Experiences of severe allergic reactions—which affect different bodily systems simultaneously, e.g., the skin, the lungs, the circulatory system—are highly sensorial and often frightening for both those having the reaction and those observing it. As illustrated in the opening vignette, Hana and her mother’s previous experiences of allergic reactions have left an imprint: their bodies remember and this remembering shapes their embodied responses to allergens in the environment.⁷ Individuals consequently develop and practice skills of vigilance (against allergens, and real and perceived social stigma), and situational awareness (an attunement to the material and social environment), to mitigate physical and social risk. These skills are, however, built on embodied memories of what has been experienced prior (e.g., severe allergic reactions and difficult social experiences with food) and are entangled with—and emerge through—an affective imagination of what they feel *could* happen in the future. Sneath et al. (2009) have argued that we need to understand imagination as a process and a capacity. Moreover, while imagination can project us into possible future events, it is not separate from the present (Ingold 2016). Imagining possible food allergy reactions emerges from past and present bodily engagement in the world: of both one’s own body, but also of others such as parents who have experienced their own embodied memories from the allergic reactions of their child and have their own capacity to imagine future potentialities. It’s an “anticipatory experience” (Stephan and Flaherty 2019) built on an affective projection of the possible or potential based on past and present somatic experience which becomes entangled in various ways with knowledge about allergies and cognitive memories of past experiences. These experiences, and the memories they produce are individual, but they are also shared and collective (Connerton 1989), involving those present during allergic reactions, as can be seen by both Hana and her mother’s embodied responses to the ice cream that came towards them. I use the term ‘affective imagination’ to highlight how feelings—of fear and anxiety—of what might happen in the context of managing food allergies shapes responses to situations that involve food and their lived experiences of ‘being in the world.’

In what follows, I present material from extensive participant-observation research with a non-profit organization in Tokyo that provides support for people with allergic disease (including asthma, eczema, seasonal allergies, and food allergies). I have attended their events, case study meetings (*jirei kentō kai*), post-event get togethers (*nomikai*), and their yearly summer camp since 2015 as part of a larger comparative research project on the experiences of food allergies in Japan and the UK. The ethnography featured in this paper draws from events and interactions at the summer camp, and with people who have attended the summer camp. I focus only on those who have previously experienced anaphylaxis, whether they were a parent who has witnessed and dealt with such reactions or individuals who have experienced it themselves. Such people tend to have stronger embodied memories and have developed clearer embodied skillsets to manage food allergies as a result of their experiences, and they have spent more time thinking about

⁷ For works that engage with embodied memory in the context of illness and trauma see, for example, Becker (2004), Berghs (2007), Culbertson (1995), and Eli (2016), to name just a few.

allergens and managing allergen anxiety. The following section begins with a brief introduction to the camp for context and illustrates one of the ways the camp organizers seek to cultivate an ‘education of attention’ among the participants. Following this, I extend out beyond the camp environment into the everyday world to explore how an education of attention, embodied memory, and affective imagination are implicated in the ways that individuals manage both physical and social risks in other contexts. I do this first through schools, where social risks are often minimized by a strong institutional foregrounding of physical risk, and second through social gatherings where perceived social risks are often foregrounded over the physical. Through exploring these sites, we can trace how embodied memories, affective imagination, and an education of attention are cultivated, challenged, and negotiated across different sites of social life.

Summer Camp: Encouraging an ‘Education of Attention’

Children with food allergies (and other medical conditions) typically struggle to attend summer camps in Japan as a result of the real and perceived difficulties of accommodating their specific food needs. The NPO summer camp is a three-day August event which has run each year for the last 24 years for children with food allergies, asthma and eczema.⁸ There are typically more than 100 hundred people in attendance. Usually 20–25 parents attend with approximately 30 children, supported by 40–50 volunteers, many of whom also have food allergies, asthma, or eczema themselves. Children spend their days and nights doing activities outside with teen and adult volunteers and sleep in tents, whereas adults sleep in shared tatami rooms inside the main building.⁹ The parents attend seminars and workshops on a variety of topics and usually have a chance to give feedback to invited food manufacturers on labeling, taste, variety, and food allergy risk management practices.¹⁰ In the evening, there is an outside makeshift bar for the adults where people gather, buy alcohol or soft drinks, and sit in candlelight under the stars swapping experiences. Many conversations revolve around their trials and tribulations relating to school,

⁸ In 2020, due to the Covid-19 pandemic, the camp was conducted online via Zoom and consisted of a variety of different sessions for adults and children.

⁹ The organizers want to keep children and their parents separated as much as possible so that children can feel independent. Not all parents attend, but by far the most common pattern is for mothers to attend with their children. Each year, however, there are around four or five couples who come together, and sometimes a lone father will come with his child.

¹⁰ For context, in Japan, seven allergens must be labeled on pre-packaged food. These are as follows: shrimp, crab, wheat, buckwheat, egg, milk, and peanuts. In addition, the Consumer Affairs Agency of the Government of Japan (2019) recommends the labeling of twenty-one other allergens: almond, abalone, squid, salmon roe, orange, cashew nut, kiwi, beef, walnut, sesame, salmon, mackerel, soybean, chicken, banana, pork, matsutake mushroom, peach, yam, apple, and gelatin. It should be noted, however, that it’s possible to be allergic to any food, so the decision on what to include in the labeling laws is complex and doesn’t cover everybody or every allergen. Food labeling in Japan is generally considered to be sophisticated and trustworthy for the designated allergens (Akiyama, Imai, and Ebisawa 2011) and ‘may contain’ labeling is not permitted. In addition, manufacturers often add information such as ‘made on the same line as...’ or ‘made in the same factory as...’ to give consumers an understanding of the environment the food is made in and to allow for individual risk assessment.

family, and friends, and they swap information about doctors, hospitals, and medical clinics. For new participants, it's an opportunity to make friends with others who have food allergies or who ostensibly understand what it is like to be a food allergy parent. For old hands, it's a chance to catch up, renew bonds, gossip, and share their knowledge with others.

While the summer camp is a space in which people can share their varied experiences of food allergies, it is also a space where particular practices of attention are encouraged. I briefly turn now to one of the ways that such an 'education of attention' is encouraged through a summer camp food practice. As noted earlier, in Japan, eating the same food is an important cultural ideal that is understood to create and maintain social bonds (Cook 2019a). Knowing that people with food allergies often struggle with this, the camp is set up as a space where everyone can enjoy eating the same food together. Ostensibly, it is a place where children, teens, and parents can relax from the demands of food allergy vigilance that they experience elsewhere. Yet it is also a place where the skills of checking labels and ingredients, and being consistently vigilant, are taught and encouraged.

To create an environment where everyone can relax and eat the same food safely participants have to write any allergies on the camp application form. The camp organizers, in conversation with the main volunteer chef, then plan the menu. Menu information, including allergen lists, is sent to all the attendees before the camp with a request to check if everything is okay. The focus is on doing all food allergen preparation and checking before arrival so that parents and children can feel confident that they will be able to eat safely. Consequently, the subtext is that it is a space where participants can relax their concerns about eating out. Attendees can feel comfortable that food allergies are understood and catered for in a safe environment by people that themselves 'get it'. In the event that a mix-up were to occur, all the staff and volunteers are well trained in administering adrenaline auto-injectors, placing the person in the correct position (lying on the floor with lower legs and feet resting on a chair), and calling emergency services. Moreover, most of the parents in attendance—at least those with longer experience with food allergies—are also well versed in what to do and how to do it. There is consequently a layer of safety, trust, and ease with which participants can approach the food, something that is lacking for most in their usual environments outside the home and is therefore something of a respite.

At the same time as this relaxation, workshops for the adults often constitute an 'education of attention', for example, parents are asked to analyze and discuss the understandability of food labels and manufacturing processes, and they give feedback in workshops with food manufacturers and fast food companies such as McDonalds.¹¹ Encouraging attentive vigilance is a common theme for the adults' workshops. In addition, all participants (from the youngest child to the eldest adult)

¹¹ While food labeling laws are generally highly thought of by food allergic consumers in Japan, there are no laws regulating the food services industry. Some restaurants—especially family restaurants and fast food restaurants – have begun to have information about allergens on their menu, but it is not a law and is haphazardly implemented. This makes eating out challenging. In some places, staff have an awareness of food allergies and information regarding allergens is available. In others, you have to rely on information given by chefs or wait staff.

receive an education of attention at mealtimes which encourage ongoing practices of vigilance. This is done through the presentation of handmade ingredient lists placed next to every bowl of food that is being served, and through encouraging participants to pause, read, and photograph the ingredient lists.¹² The handmade ingredient signs are operating on two levels: at the level of individual (and parental) comfort, but also as a reminder that checking ingredients is something that should be ingrained as an everyday, every meal, every dish practice. The space of the summer camp is simultaneously a place to be trusted where vigilance and situational awareness are not so needed, as well as a space where situational awareness and vigilance is encouraged as a daily practice of living with food allergies. Practices of vigilance are therefore being continually reinforced through an education of attention via camp activities and the signage at mealtimes.

For many, such practices have become, or are on the way to becoming, an embodied skillset that they engage with both consciously and subconsciously. I turn briefly to a short example of this in practice at the camp. On the last day of the 2016 summer camp, volunteers made different *onigiri* (rice balls) for participants to take with them on their travels home at lunchtime. Each year three different types are prepared: pickled plum, salmon, and dried vegetable seasoning. Everyone also receives a pre-packaged pack of ‘top-seven allergen-free’ tomato meatballs and/or hamburger. For the vast majority of participants, these are safe foods; however, each year, there are two or three individuals (myself included) with fish allergies. When I approached the food area, one young volunteer—who had no food allergies—was making some fresh rice balls (*onigiri*) with salmon flakes on her hands. As I watched I realized that she had moved from making the salmon *onigiri* to making plain ones without pausing to wash her hands in between, effectively cross contaminating all the rice balls because it was difficult to know how careful she had been previously. I searched out Aki, a young woman with multiple allergies including fish, to let her know about it but she had seen the same thing and taken extra meatballs instead of a rice ball. She didn’t mention it to the staff at the time, despite being at a summer camp specifically aimed at providing a safe food experience. Through an education of attention built on her previous embodied memories, Aki had continued to be vigilant and situationally aware even in a space which was presumably ‘safe’. By contrast, the volunteer—who had received lectures about cross contamination in the volunteer meetings before the camp began—was not so situationally aware or attentive to how her preparation of the food was potentially dangerous for a small minority of the camp participants. In part, this is because the organizers stress that the camp is a place for people to eat together safely, so volunteers may assume that everything is already safe, but it is also because she hasn’t cultivated skills of vigilance through an education of attention from embodied memories of previous reactions. Although Aki didn’t mention the cross contamination to the organizers, preferring to keep silent so as not to trouble anyone after long days of running the camp, I brought it up at a meeting after the camp. The following year the organizers used the example in the pre-camp

¹² Many people then upload these photos to their social media sites.

volunteer meeting where they reiterated the dangers of cross contamination as well as the need for attentive care when preparing food in the kitchen.

While the camp is an important space for teaching and reinforcing ingredient checking, vigilance, and situational awareness of allergens in the environment—or, an ‘education of attention’—the organizers are aware that outside of the camp environment physical safety is not the only area where individuals with food allergies practice vigilance. Social situations require the management of social risks in contexts when refusing food can signify (or be imagined to potentially signify) a ‘difficult’ person (cf. Goffman 1963). I turn now to two main areas that are prominently discussed at the camp: school experiences and eating out at social events.

Mitigating Physical & Social Risk: Vigilance at School

The expectation of sharing and eating the same food makes social eating complicated, and this is clearly exemplified in the school lunch program for children. School lunch, which typically run from elementary to junior high school, is a highly integrative and normative experience in Japan. The food is brought to the classroom by students and served by students, everyone begins eating at the same time, and after everyone finishes, the dishes are removed and desks are cleaned. Set up originally in 1889 for children in poverty, school lunch has become an integral part of the education system (MEXT 2019).¹³ In 2010, the Ministry of Education stated seven goals for the program which included promoting healthy eating, correct understandings of nutrition, learning about regional and national food cultures, how food is produced, who produces it, and how it is distributed, as well as promoting cooperativeness and sociability in children (MEXT 2010). In 2019, the guidelines were revised for a second time to include more references to managing food allergies safely, as well as reiterating the importance of the school lunch program for gaining ‘desirable eating habits’ (*nozomashii shoku shūkan*) (MEXT 2019).

School lunch is therefore designed as part of the educational experience. To facilitate the inclusion of food allergic children, the ‘Guidelines for Food Allergies in School Lunch’ (*Gakkō kyūshoku ni okeru shokumotsu arerugii taiō shishin*) state that all teachers should have a proper understanding of food allergies and anaphylaxis and be able to manage risks and take emergency measures if needed. Every Board of Education (in each prefecture) has to have a food allergy policy, each school has to have a manual for their kitchen (if they have one),¹⁴ and policies have to be established for handling accidents. The overall framing is for better risk management to prevent accidental ingestion. While these guidelines are a good step, they basically make it the responsibility of each Board of Education to institute policies, and this has led to considerable diversity across the country in how food

¹³ For a comprehensive history of the school lunch program, see Fujihara (2019) in Japanese, and Kaneda and Yamamoto (2015) for a short postwar history in English.

¹⁴ Not all schools make the lunch on the premises. There are also school lunch centers (*kyūshoku senta-*) where the food is made and then distributed to the local schools each day.

allergies are handled in the context of school lunch.¹⁵ Parents at summer camp have a myriad of stories about their varied experiences with school lunch provisions, and the stress they feel at the beginning of each school year when the classroom and teacher changes. Significant differences exist not only in school lunch policy and practice, but in what actually happens in the classroom. Schools are focused primarily of physical safety, yet teachers' training on this varies, leading to different levels of comfort when handling food allergies. While parents are, of course, highly concerned about physical safety, they also worry about potential social repercussions. Although most food allergic children remain in the classroom eating with their classmates, some schools have asked children to sit in a separate room, as a mother at camp recounted:

My child has multiple allergies, so they told me that there was no choice but to take packed lunch. That was fine for me as I prefer to make her food. But at the beginning they made her sit in a separate classroom on her own to eat! Then when I complained they started to let her sit in the same classroom, but they made her wear a badge with her allergens listed on it.

The other parents were shocked—especially about the badge—and advised her to strongly push back at the school because of the social aspects of being made to be so different from the other students.¹⁶ One mother stated that it's hard enough for children when they can't eat the same food as others and that to segregate them and make them more visible was irresponsible of the teacher. Depending on the number of allergies a child has, many mothers prefer to substitute foods on the school lunch menu where possible to make it appear as if the child is eating the same food as others.¹⁷ Nakamura san, for example, said:

It's important for children to all eat together at school. I don't want my son to feel left out or for others to bully him for eating different things or separately. So at the end of every month I get the list of school lunches in the upcoming month. Then I figure out what he can't eat, order what I need to make those dishes and then make the same things but with the ingredients that he can eat. He then takes them to school and gives them to the teacher who gives it to him

¹⁵ Sapporo, where I am based for example, has several possibilities for food allergic children: bring your own lunch every day or, depending on the menu, remove the allergen yourself, or bring replacements for a particular dish (Sapporo City 2014). Osaka, meanwhile, has extensive resources and guidelines depending on area of the city, and they focus on an individualized approach to managing food allergies. Their aim is for all children to be able to eat school lunch (Osaka City 2018). As such each month they publish the menus with all ingredients and allergens listed on their website and parents can then check each ingredient and decide whether the child will eat it or remove that particular dish. Parents also have the option to provide a lunch box from home.

¹⁶ In the context of understandings of disability in Japan, Kayama (2017:191) has argued that, "Japanese understandings of disability can be characterized as sensitivity to differences that can either lead to accepting, empathetic responses toward individuals who have disabilities or marginalization." While food allergies are typically not conceived of as disabilities in Japan, they are usually framed as an illness and there is strong sensitivity to difference in the narratives of parents and allergic individuals, with concerns that if they don't handle food allergies well this difference will potentially lead to marginalization.

¹⁷ I haven't yet met a father that does this because it is primarily mothers who manage food for their allergic children.

at lunch. So it looks like he is eating the same as everyone else and he can feel the same.

In other cases, however, students have no choice but to take in a packed lunch, thereby being potentially the only person in class to be eating something different which can be alienating. One mother emotionally conveyed her son's school and food experiences during the summer camp as follows:

I make him a packed lunch (*bentō*) everyday, which he takes to school. It's hard on him. He is really scared to eat food, which I think is my fault because I'm really negative about new foods. His teacher this year seems good but it's a lot of responsibility to give her and I can't really trust that she'll be careful, especially after that child died after eating school lunch.¹⁸ I'm afraid he'll react badly, so now he is scared too. His reactions are quite bad so I make him a packed lunch. But then he eats separately from the rest of the class. He is very shy and quiet, and he doesn't have many friends. I feel so guilty. As you can see, I have had eczema and other allergies, so he got it from me. I think it's my fault.

This mother was working hard to try and help her son eat new foods without fear, but she was herself riddled with fear about his safety and feelings of guilt about the potential social repercussions on her son. Talking with her further the following day I asked what his reactions have been like and she replied:

His first reaction, when he was small, was quite severe (*hidoi*): he was covered in hives, his face swelled, and he was wheezing. I was really scared and called an ambulance, and he had to go into hospital for emergency treatment. Since then he has had a couple of other reactions, but I am really careful about food and check everything. That's why I make him take a packed lunch. It's hard to trust that schoolteachers can check everything.

Her embodied memories of his past reactions and affective imagination of what could happen to him was all encompassing and transmitted to her son, with unintended social consequences. She mitigated the physical risks by making a packed lunch every day, but she felt she was failing at helping her son to manage the social risks of eating different foods from the rest of his classmates. Experiences of allergic reactions leave their mark in different ways on different individuals to greater and lesser extents. Although children and their parents have different embodied experiences of allergic reactions from different positionalities, they share memories of it that influence their day-to-day present and their affective imaginations of what they feel could happen. Although parental efforts and school lunch practices such as substituting foods and taking packed lunches are designed to keep children safe physically, experiences of food go beyond the physical and are rooted in both embodied memories (of physical reactions as well as experiences of social embarrassment and, sometimes, ostracism) and affective imagination of

¹⁸ The child initially ate her school lunch safely, but when she went to get a second helping there was a mix up and she was given food with her allergen in it.

possible future reactions and social risk. Their responses and practices have social consequences that shape the kinds of interactions that take place.

Mitigating Social & Physical Risk: Vigilance in Social Settings

I turn now to the voices of some young volunteers—ranging in age from eighteen to twenty-four—who recounted their experiences of eating with classmates and feelings of alienation one evening when gathered at a camp volunteer meeting. Hiroki began:

I used to have to take a packed lunch and I really didn't want to stand out (*medatsu wa iya da*). People around me would be saying 'oh this is delicious' [about their school lunch], but I didn't understand what they meant.

Ayano—a young woman allergic to egg and dairy—concurred and expanded on this:

Yeah, I could imagine from the smell when people said that, but I have no idea about the flavor so I couldn't really understand either. You can't join in those conversations. You just sit quietly. And girls talk about ice-cream and cake and things like that, but I couldn't join in.

As they nodded in agreement with one another, Sachiko turned the conversation to how it affects being social, "It's harder with new relationships. With older friends, and people you went to school with, it's easier. They know about it. You've had those discussions. But it's hard (*shindoi*) with new people." Kei responded with a slight frown that it was hard even with people he knew:

I try not to tell anyone about it [his food allergies]. I don't want to have to tell about it, and then people say it's such a shame or pitiable (*kawai sō*) that I can't eat the food [that he's allergic to] and then I'm the center of attention, and I hate that. So, I just try not to say about it. I decided not to join the baseball club [at university] because you have to go out afterwards to eat and drink and I just don't want to have to talk about it. I didn't like it at school when I had to eat packed lunch. People used to point at what I was eating and ask what it was, or say it looked delicious etc., but I didn't want the attention.

Haruka nodded vigorously on hearing Kei's feelings and expanded on how her experiences of anaphylaxis had negatively affected her social relationships:

I had anaphylaxis a number of times. And, really, it was traumatic (*torauma ni natta*). I was really scared after, even sitting with people when they were eating. So I used to move my desk away from them at lunch. And then they thought I didn't like them. But I couldn't tell them why. So then I felt that I was pushed out of the group because I couldn't sit with them and couldn't tell them why. Also, when you take a packed lunch and have different food, other students think 'that's great!' (*ii ne!*) in an envious way... Now when people eat [near me] it's still scary for me, so I try not to go out with people to eat.

As is clear from the narratives above, these young people struggle with maintaining both safe food practices and smooth social relationships with others in the context of eating or when food is present. Their handling of these social situations is characterized by their practices of vigilance and situational awareness. Moreover, it is built on their embodied experiences and an affective imagination of what could happen. Hiroki and Ayano, for example, highlighted the way their classmates drew on sensorial, embodied experiences of smells and tastes that they couldn't relate to. An inability to imagine particular tastes led Ayano to be quiet when these conversations were happening so as not to draw attention to her allergies and inability to eat those foodstuffs. Sachiko, meanwhile, highlighted her difficulty in broaching the topic of allergies with new people, and Kei, heartily sick of feeling different to others, limited his social interactions and went out of his way to not join activities that he knew would include a social obligation to eat together. Haruka, meanwhile, was scared. Feelings of fear and anxiety are clear in narratives and embodied responses to allergens in Japan. While some of my interlocutors, like Haruka, discussed their experiences as a trauma (*torauma*) many also understood (hyper)vigilance about allergens and a need to control—and be aware of—food environments to be a necessary skill for safely managing food allergies.¹⁹ Therefore, although avoidance and (hyper)vigilance in the context of food can be understood as symptoms of PTSD, as some scholars in the US and UK are now beginning to do, these are also strategies for managing allergies and mitigating the risk of a severe reaction. Messinger (2013) has argued, in the context of his work on injured US veterans, that it's important to note that attention to detail, situational awareness, and vigilance are not necessarily the result of mental illness or PTSD, but can be the result of a consistent embodied training program that shape identities. Attention and hypervigilance can be understood as existing on a continuum, with attention being about the experience of “noticing something” whereas hypervigilance “is the constant search for something to attend to” (Messinger 2013:203). In the context of food allergies, attention to allergens (vigilance) becomes a way of life, and the line

¹⁹ An increasing body of work in the US and UK has identified a need for mental health services to allow people to learn to control their anxiety and fear so that it doesn't control and limit life (Herbert, Shemesh, and Bender 2016), and there has been a growing acknowledgement of the psychosocial effects of food allergies and anaphylaxis in recent scholarship (Akeson, Worth, and Sheikh 2007; Dunn Galvin and Hourihane 2016; Herbert and Dahlquist 2008), with some patients being diagnosed with anxiety disorders and posttraumatic stress disorder (PTSD) (Chung, Walsh, and Dennis 2011). Due to the history of psychiatry in Japan and the stigma generally associated with the use of psychological services, however, turning to counseling or psychologists is not widely discussed (see for example, Kitanaka 2012), and discourses of PTSD in the context of allergies remain marginal in Japan. To date I have only found one reference, in a nursing PhD thesis, to PTSD and food allergies in the Japanese context (Shitakawa 2013), though some exists in the context of illness (see for example, Akechi et al. 2004; Kawakami et al. 2014; Nagata et al. 2008). It should also be noted, however, that constant vigilance is something that the medical establishment stresses for allergic patients to safely avoid their allergens (Anvari et al. 2019). Maintaining vigilance without becoming hypervigilant can, however, be problematic for some after experiencing a severe reaction.

between vigilance and hypervigilance is consequently complex.²⁰ Severe food allergies can engender shifting practices of vigilance and hypervigilance that ultimately shape experiences, actions and identities. While vigilance is encouraged as a necessarily everyday practice and embodied reality, this can shift into hypervigilance after a particularly scary—or traumatic—experience of anaphylaxis, as Haruka’s narrative suggests. Her experience left her so scared that she couldn’t sit next to her classmates while they were eating, but at the same time she felt she couldn’t explain why either. Her embodied memories of anaphylaxis and her affective imagination of what could happen (based on those previous embodied experiences) have led her to not want to eat with anyone, thereby restricting her social life.

Aki, a young woman with multiple allergies, indicated how vigilance can be interpreted differently depending on the prior relationships she has, and how it shapes the way she communicates and manages her allergies when eating out:

I always check about my allergens. How I do it depends on the situation. If I’m with friends who know about my allergies, I will check the labels in front of them. Over the years they have learned how to read the labels too and they are careful. When we go out to eat, they always check if I can go there. Or we just go to McDonalds! My university club though is more difficult. I have many allergies and I don’t feel comfortable eating out with them. I have to ask the wait staff and then all the attention will be on me if I suddenly start asking. I don’t want them to think I’m difficult. Also, they often eat in places I can’t go to. I went once to this *izakaya* and a couple of my allergens were on the table and they were passing the plates round and I was really aware of where the plates were. So now I usually don’t go out with them because it’s too difficult and a bit stressful. Sometimes I feel sad about it, but that’s just the way it is. So, how I manage my allergies depends on who I’m with, where we are, and how comfortable I feel to say about it.

Not wanting to be seen as difficult, or overly careful (hypervigilant), Aki remains situationally aware and socially vigilant in different ways with different people. The complexity of being vigilant or hypervigilant is that it is read (and perceived to be read) intersubjectively. Aki’s example most clearly demonstrates this when she illustrates that the necessary vigilance she employs to reduce the risk of a reaction is understood by close friends, however, with new acquaintances her affective imagination of what could happen socially (“I don’t want them to think I’m difficult”) has shaped her underlying responses and led to her curtailing her interactions with them. She fears that people that don’t know her will not understand and think that her practices of checking and of not eating particular foods is over-cautious or hypervigilant and thus ‘difficult’. Haruka, meanwhile, who described her experience of anaphylaxis as traumatic, might see her management of allergies after anaphylaxis to be a necessary level of vigilance against the risk of having another

²⁰ As one of this article’s anonymous reviewer’s mentioned, this line between vigilance and hypervigilance—and the social meanings it engenders—in daily life has become pertinent during the Covid-19 pandemic where bodily cleanliness and vigilance against the absorption of virus particles (in droplets and as aerosols) is embodied in various ways to greater and lesser degrees.

severe reaction. Yet her fear, and hypervigilance around people who are eating, was understood by others as Haruka being unfriendly. She felt unable to tell them why she was behaving in that way because of her perception of the social risks of disclosure despite the fact that ultimately not disclosing led to misunderstandings and her feeling alienated from her classmates. Practices of vigilance—built on embodied memories and affective imagination of what might happen physically and socially—are engaged in to avoid physical reactions, but at the same time these can have repercussions on social engagement. Consequently, efforts to manage both the real risk of a reaction, the perceived (and sometimes real) risk of social difficulties, as well as their embodied experiences of distress (physical and social), leads many to curtail—or be carefully selective of—their social engagements. These young people all have different embodied experiences of, and responses to, allergies, yet they all consistently indicate the need to be socially and physically vigilant and situationally aware. These somatic modes of attention have emerged from embodied memories, experiences and future potentialities: a learned embodied interaction with a physical/material and social environment that contains risks that those without food allergies don't experience. Managing—or attempting to manage—the responses of those without food allergies is an integral part of these individuals' lived realities of 'being in the world'.

As the above conversations illustrate, practicing embodied skillsets to ensure that food is safe does not necessarily result in smooth social relationships through—and in the context of—food. Moreover, it doesn't always lead to the prioritization of physical concerns over social. While the preceding examples relate to school and university experiences, these experiences and dilemmas don't disappear with age, but extend into adulthood as well, even when at NPO events where everyone understands about food allergies, to which I turn to in my final example.

In February 2018, I joined the NPO organizers in a group of around thirty people for dinner and drinks after an Asian Anaphylaxis and Alliance Meeting.²¹ Most of the Japanese attendees had participated in the summer camp and a number of our party had food allergies, including peanut, tree-nut, fish, and egg allergies (among others). We had gone to a nearby Chinese restaurant that was a go-to place because of its proximity to the venue. As everyone sat chatting and looking at menus, bowls of peanuts were put in the middle of each table. Aki, featured in both sections above, has multiple allergies (including peanut, egg and fish). She had attended summer camp through childhood and was now a volunteer at the camp, and that evening was sat close by. She was quietly looking at the menu while periodically glancing at the bowl of peanuts in the middle of the table. The organizer leaned over and asked her if there was anything she thought she could eat, and she replied that she thought the Chinese dumplings and tomato salad were fine. Meanwhile, another young woman with a peanut and egg allergy—who also attended the summer camp as a volunteer—was looking at meat dishes on the menu. When the waiter came over the organizers began to order but neither women mentioned any allergies to him. One of

²¹ The Asian Alliance has been run by the NPO since 2017. It consists of representatives of patient organizations from Hong Kong, Thailand, Singapore, India and Australia who have met once a year in Tokyo since 2017 to share best practices and to work on issues specific to the Asia-Pacific region. More information can be found at: <https://www.fa-asian-alliance.org>.

our Australian guests, a medical doctor who had been closely following the ordering from the pictures of the menu without knowing the Japanese language, abruptly leaned forward and said to me, “Emma, they do know that the meat will be soaked in egg whites before cooking, right? That’s how they get the meat so soft.” I interrupted the ordering to mention it. The organizer—who was sat on the other side of Aki—looked shocked and then leaned up to check with the waiter, who confirmed that that was the case. We all took some more time to look at the menu and then the organizer resumed ordering at our table, checking as she did so about egg. The Australian cohort were a little surprised at how the ordering had progressed and that people were not more actively checking about ingredients in each dish. Despite being at two long tables full of people who are working in food allergy advocacy, none of the people who had food allergies quizzed the waiter on particular ingredients or allergens. Instead, they relied on what they thought they knew about Chinese dishes and what they thought would be safe for them based on prior experiences, while also being aware of where the peanuts were on the table. The organizer, meanwhile, felt that as people were adults it was up to them to decide on how to approach asking about allergens in food and she did not want to overstep or make anyone uncomfortable.

While the NPO and the summer camp put great emphasis on teaching situational awareness and allergen vigilance, this episode could be seen as a failure of that particular ‘education of attention’ and could have led—without the intervention of the guests—to two individuals having an allergic reaction. These allergic individuals were relying on pre-existing food knowledge and were being vigilant about—and attentive to—the social situation they found themselves in. Both women were in their early twenties and had grown up with the NPO staff periodically in their lives, however, they were at a formal after-event dinner with overseas guests that the NPO had invited for the Alliance meeting. On the one hand, they knew that if they had a reaction, everyone at the table was trained to help, but on the other, they seemed to not want to create any ordering complications while in the company of the guests.²² However, they were also making their decisions as a result of embodied memories of reactions and from skills they had developed throughout their lives: from their experiences at school, at universities, and club events, from their experiences and knowledge gained at the summer camp, as well as what they felt they already knew about ingredients in each dish, albeit mistakenly in this case. This short example illustrates the complex interaction between skills of situational awareness and vigilance practiced to maintain smooth social relations in the context of food allergies. This contrasts with the NPO’s practices of encouraging knowledge and vigilance about exactly what is in foods/dishes but corresponds to the

²² Not everyone, however, feels comfortable with such an approach. At the same event at the same restaurant the following year in April 2019, one young woman with peanut and other allergies declined to eat due to the possibilities of cross-contact. She sat at the end of the table and recounted to me that she preferred not to eat on this occasion, especially when she saw the bowls of peanuts on the table, because she felt that food allergy awareness was a bit low among the wait staff. However, she didn’t check with the wait staff or mention about her allergies. She ordered a drink and quietly demurred when she was offered food by those sitting near her, and she explained quietly, and only to those next to her, why she wasn’t eating.

organizer's sense that she should respect how adults want to handle their allergies. Situational awareness, vigilance, and an 'education of attention' thus go beyond allergens, ingredients, and physical safety and extend to social situations, making allergy management socially complex.

Conclusion

For people without food allergies (and for some with), vigilance and consistent situational awareness around food can seem an overreaction. However, the practices of vigilance that food allergies engender are not necessarily an ongoing symptom of trauma but are instead a learned and embodied skillset that produce practices of attention built from embodied memories, social experiences, and affective imagination of what might happen in the future. This is not to deny that many of these practices emerge from the fear of a deadly reaction and, for some, stem from events that were experienced as traumatic. What emerges from this—or from this possibility—however, are somatic modes of attention which have led to the emergence and practice of skills such as vigilance and situational awareness to maximize safety and risk reduction. Everyone has different levels of comfort—and engage with different levels of vigilance—in these practices, but these embodied skillsets also work to mitigate the fear that many feel from the possibility of a severe reaction.

For some, the potential physical consequences—anaphylaxis—are such that they put food at the center of attending to their material and social environments—checking and re-checking labels and ingredients, communicating with people around them to reduce the risk of a reaction. For example, some communicate directly with friends and families about their allergies and find that they actively participate in looking out for them by reading labels and being aware and vigilant on their behalf. Others, however, prioritize social environments and relationships. In such cases, food is placed—or attempted to be placed—in the background. This is done either by choosing to socialize at events that don't include food, by removing themselves from out of hours or extra-curricular socializing entirely, or by attempting to deflect attention from the food at the table that they cannot eat. At the heart of such responses is an 'education of attention' to the material and social environments they are in, mediated by their embodied memories and responses to anaphylaxis and to their affective understandings and imaginings of what *could* happen to them.

Most of the people I have worked with practice these skills at different times, in different ways, and with different people depending on a range of factors: the number of allergies they have, the time and place, the type of event or meeting, their physical health, gender, the season (e.g., hay fever season can exacerbate the severity of reactions), their mood, and whether they are with friends, acquaintances, family, or co-workers (cf. Cook 2017). The ability to choose which strategies to use at which point in time in particular social settings is a skillset that is cultivated and learned over time. These practices are not only about remaining physically safe by avoiding ingesting their food allergens but are also strategies to mitigate or avoid

the social side of food allergies such as managing others' reactions to the declaration of food allergies, which can be a socially fraught act. Through these varied practices, built on embodied memories and affective imagination, allergens consequently become ostensibly more than a protein or material. They become a substance that engenders 'an education of attention,' through practicing vigilance and situational awareness, in order to reduce physical and social risks to eat in safety.

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Compliance with Ethical Standards

Conflict of interest The author declares that they have no conflicts of interest.

Ethical Approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed Consent Informed consent was obtained from all individual participants included in the study.

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