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Creating Carnists

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1. Introduction

Many vegetarians and vegans grew up regularly eating certain animals and animal products. Although some call this 'omnivorism' — or, at the extreme, 'carnivorism' — we eschew those labels since they connote species-level biological classifications and downplay both individuals' agency and the optional nature of humans' acquired dietary practices. Instead, we use 'carnism'.¹ (Also, for brevity, we use 'veg*ns', which we pronounce "vegetarians and/or vegans".)

The transition away from carnism, including the reasons for making it and the obstacles to doing so, receives significant popular and academic attention. However, the earlier period of life, when carnist habits initially develop, is rather neglected.² Normalization of carnism (even among some veg*ns) likely contributes to this neglect, blocking reflection on both the work required to inculcate carnism and our ability to refuse to do it. For one is not born, but rather becomes, a carnist. Here, we consider the morality of *creating* carnists. Witnessing the following inspired us to consider moral duties of caregivers in particular:

4th of July Picnic: A young child notices vegan tablemates feasting on mounds of fruits and vegetables. She alternately stares intently at their colorful plates and picks at her hot dog uninterestedly. Observing this, her parent tells her to eat her meat, or she won't get ice cream. Other adults begin chanting, "Eat your meat! Eat your meat!"

We consider this a well-intentioned attempt by loving adults to balance responsibilities relating to this child's care and upbringing.

However, after contemplating cases like this, we see no satisfactory way to avoid the unpopular conclusion that, with few exceptions, individual and institutional caregivers should not pressure children

2. Philosophers bucking this trend include George (1990), Pluhar (1992), Sherratt (2007), Hunt (2019), Alvaro (2019), Milburn (2021), and Butt (2021).

Joy (2009) introduced 'carnist' to describe an ideology. Ideology is not our primary concern. We use the term to refer to observable behavioral patterns, the people who enact them, and the social practices in which they are embedded. And we set aside discussion of non-dietary uses of animals.

into carnism. Indeed, we go further: caregivers have a moral duty to raise children on a maximally plant-based diet (henceforth, a 'duty of plant-based caregiving').³

We understand this duty as generally applicable, but defeasible. We think it clearly functions as a decision-making tie-breaker: in the many cases where all else is equal, feeding kids cow burgers rather than plant burgers would be wrong. (Things are even clearer when plantbased options are otherwise superior.) But caregivers' duty to provide kids enough food clearly overrides the duty of plant-based caregiving if the duties conflict. Moreover, reasonable people can disagree about the defeasibility threshold. We think the duty of plant-based caregiving often clearly overrides disinclinations to learn new recipes or publicly support serving plant-based meals in schools. But it might not override all cultural considerations. Perhaps the value of, say, children trying carnist dishes that their grandmas traditionally prepare specifically for funerals would prevail.

Arguments for plant-based caregiving would be relatively simple if there were a general moral duty of veganism. Notably, however, our arguments here do not presuppose any such duty (though we personally believe there is one). Instead, to engage carnist caregivers and show how strong the case for a duty of plant-based caregiving is, we center children's interests. In our view, consuming animal products belongs in a familiar category of activities: those that caregivers should discourage kids from doing even if they are morally permissible for adults. For kids are much better off avoiding such consumption. Carnism therefore somewhat resembles operating heavy machinery, making major financial decisions, consuming tobacco or alcohol, and other activities that kids have strong reasons not to engage in yet, if ever. Of course, caregivers often cannot prevent motivated kids from doing such things. Nonetheless, all caregivers (at home, at school, and elsewhere) have a role to play in helping kids avoid what may significantly undermine their core interests, even if caregivers can do nothing but discourage and refuse to enable kids who find such activities appealing.

Some ethical veg*ns might overlook children's interests to avoid downplaying obligations to other humans and, especially, nonhumans. We think there *are* direct moral duties to nonhumans (and, of course, to the many present and future humans impacted by carnism) and that plant-based upbringings typically benefit children partly by preserving and developing their sensitivity to those obligations.⁴ But our arguments do not depend on those claims. Nonetheless, even granting its defenders this favorable dialectical position, we show that carnist caregiving is (with some exceptions) morally objectionable.

Throughout, we focus on the contemporary U.S., though some of our remarks apply to socially, economically, and politically similar contexts elsewhere. Likewise, although we focus on caregiving for children, some of our remarks may have implications for how we should care for adults, especially in settings like nursing homes and hospitals.

2. Children's Interests

Children have many interests that caregivers are obligated to protect and advance. We consider kids' interests in moral development (§2.1), autonomy development (§2.2), and physical health (§2.3), arguing that caregiver obligations grounded in these interests, together with empirical facts about carnism, plausibly entail a duty of plant-based caregiving.

Such caregiving involves, at a minimum, providing to the children in one's care both a maximally plant-based diet *and* contextually appropriate education about the range of reasons why some people eat plant-based diets and others do not. But there are various good ways to provide plant-based care, depending on one's role, available

^{3.} Thus, we go considerably beyond Sherratt's (2007) conclusion that raising vegetarian kids is morally permissible. Closer to ours is Butt's (2021, 981) conclusion that parents' duties to advance kids' moral development establish "a morally significant reason not to feed meat to their children". Yet while Butt focuses on kids' moral integrity, we explore a range of kids' interests.

^{4.} For the view that "[b]eing able to live with concern for and in relation to animals, plants, and the world of nature" is an important human capability, see Nussbaum (2011, 34).

resources, preferences, and other contextual factors. All caregivers (including parents, guardians, family members, teachers, school staff, babysitters, doctors, and coaches) have responsibilities to the children under their care, which vary with context. But instead of offering an unwieldy rulebook for plant-based caregiving across such differences, we offer morally significant reasons to adopt it as a guiding principle of caregiving.

Each of the next three subsections introduces empirical studies that identify risks to kids' interests posed by carnist caregiving. No single study provides conclusive reason for plant-based caregiving. Indeed, given childhood development's profound complexity and the need for more research, perhaps none of our three subsections individually provides sufficient support either. But in our judgment, the many existing studies (across different domains by experts using different methods) identify risks that cumulatively support a duty of plant-based caregiving.

We assume that caregiving can be good enough without being ideal; caregivers need not (try to) minimize all risks to kids' interests. However, these recent empirical findings suggest that the dietary practices that adequately protect kids' interests differ from what many of us were raised to suppose; and although vegetarian and reduced animal product ('reducetarian') caregiving may improve on standard American dietary caregiving in many respects, and may even equal plant-based caregiving in some ways, only the latter is adequate across all three dimensions canvassed here.

2.1. Moral Development

Caregivers ought to help the children in their care develop or sustain sensitivity to morally relevant reasons for thinking, feeling, and acting. However, carnist caregiving significantly risks undermining such moral development.

Carnists typically believe humans are superior to nonhumans in ways that justify meat-eating (but not cannibalism). Yet studies suggest that such beliefs indirectly facilitate mistreatment of human outgroups. As Will Kymlicka summarizes some such research, "the more sharply people distinguish between humans and animals, the more likely they are to dehumanize other humans, including women and immigrants" (2018a, 536).⁵ Indeed, studies suggest that carnism both correlates with and causes moral flaws that kids have an interest in avoiding.

The relevant studies are numerous, and grounded in a robust tradition of social psychology. In 1954, Gordon Allport characterized "prejudice as a generalized attitude", famously noting that "one of the facts of which we are most certain is that people who reject one outgroup will tend to reject other out-groups" (Allport 1954, 68). Contemporary social psychologists have repeatedly confirmed this (Akrami et al. 2011; Bergh et al. 2012; Duckitt & Sibley 2007). Some explain generalized prejudice as a product or component of one's "social dominance orientation", a disposition to prefer and endorse group-based hierarchies (Pratto et al. 1994, 742). One important recent study suggests that people who hold speciesist beliefs tend to score high on (human-human) social dominance orientation measures (Dhont et al. 2014; see also Dhont et al. 2016). Another suggests that authoritarian personality traits - defined as endorsing dominance and aggression towards subordinates, submission to authority, and adherence to tradition - are most common in carnists, then vegetarians, then vegans (Veser et al. 2015). Even laypeople, according to a third study, "seem intuitively aware of the connection between speciesism and 'traditional' forms of prejudice" and tend to perceive that prejudices towards human outgroups and towards animals involve similar psychological mechanisms (Everett et al. 2019, 785).

Consider attitudes towards women. One study suggests that believing humans are distinct from and superior to other animals correlates with both "benevolent" and hostile sexist attitudes (Roylance et al. 2016). Specifically, having sexist attitudes correlates with affirming that "Humans can think but animals cannot", "People are superior to

On carnism's harms to humans—especially humans marginalized by racism, ableism, and sexism—see Kymlicka & Donaldson (2014), Kim (2015), Taylor (2017), Kymlicka (2018b), Ko (2019), and works cited therein.

animals", "The needs of people should always come before the needs of animals", and "It's crazy to think of an animal as a member of your family". Another study suggests, as Carol Adams has long argued, that carnist beliefs, much more than vegan beliefs, are correlated with general sexist attitudes and endorsement of traditional gender roles (Allcorn & Ogletree 2018; Adams 1990; 1991; 2010; see also Wyckoff 2014).

Next, consider attitudes towards immigrants and racialized outgroups. Four studies are particularly noteworthy, since they involve mediation modelling or experimental manipulation, not just correlational analyses. In one, researchers found correlations between subjects' (1) beliefs about human and non-human animals' dissimilarities, (2) dehumanization of outgroup immigrants, and (3) anti-immigrant prejudice. Subjects who denied claims like "Some non-human animals can think, too" tended to deny that immigrants have what are considered distinctively human traits and emotions like conscientiousness and hope; those denying the latter in turn tended to endorse prejudiced attitudes like "Immigrants are getting too demanding in their push for equal rights". Notably, subjects' animalistic dehumanization of outgroup immigrants fully mediated the correlations between attitudes about human-animal dissimilarity and anti-immigrant prejudice (Costello & Hodson 2010, Study 1). Similarly, a study of White Canadian children found that their beliefs in human-animal dissimilarity "predicted greater [anti-Black] dehumanization, which subsequently led to heightened [anti-Black] prejudice" (Costello & Hodson 2014, 190, Study 2). And again:

[T]he effect of children's human-animal divide on racial prejudice was fully mediated through dehumanizing representations (specifically, seeing Blacks as lower in uniquely human characteristics). Thus, dehumanization explains the link between children's perceptions of human superiority over animals and anti-Black evaluations. (Costello & Hodson 2014, 192) More significantly still, manipulation studies indicate that belief in human–animal dissimilarity *causes* dehumanizing and prejudicial attitudes towards human outgroups. For instance, reading scientific editorials about animals' similarities to humans reduced subjects' animalistic dehumanization of human outgroups (Costello & Hodson 2010, Study 2). Subjects who read about animals' capacities to make choices, engage in causal reasoning, and understand abstract concepts subsequently demonstrated less dehumanization of, less prejudice towards, and greater empathy for outgroup immigrants. Indeed:

[P]sychologically closing the human–animal divide (via exposure to scientific editorials highlighting animals' similarities to humans) attenuated dehumanization, which in turn predicted more favourable attitudes towards immigrants. In other words, outgroup dehumanization was significantly reduced by stressing the similarity of animals to humans, supporting the proposed causal relation [i.e., speciesist belief causes subjects to regard human outgroups as pejoratively animal-like, which in turn causes anti-outgroup bias]. (Costello & Hodson 2014, 178)

Another Canadian study likewise showed that prompting subjects to consider animals' similarity to humans (by writing essays, not reading) increased their moral concern for members of five commonly marginalized groups (specifically, people who are Black, Asian, Muslim, Aboriginal, or immigrants) (Bastian, Costello, et al. 2012, Study 3). Tellingly, subjects asked to consider humans' similarity to animals (rather than the other way around) showed no increased moral concern.

Since many people become veg*ns precisely because they recognize animals' human-like sentience, intelligence, subjectivity, etc., rationally articulate plant-based caregiving would explain such reasoning to kids. Those explanations, coupled with consistent provision of plant-based foods, seem likely to help kids seriously consider animals' similarities to humans and to that extent increase their moral concern for human outgroups.⁶ And there is evidence that children begin to sharply distinguish humans and other animals in speciesist ways in adolescence, plausibly only after years of engaging in speciesist social practices like typical, regular consumption of animals (Cole & Stewart 2014; Wilks et al. 2020).

Nevertheless, early socialization's effects on attitudes to human outgroups and social dominance orientation in adulthood are not fully understood, especially regarding speciesist socialization. So we claim only that carnist consumption habits significantly risk instilling or reinforcing speciesist beliefs, thereby increasing children's social dominance orientation and their likelihood of prejudging, dehumanizing, and wronging outgroup humans. That risk does not by itself conclusively establish a duty of plant-based caregiving, but it supports a case for one, since plant-based caregiving does not appear to pose any comparable risk. Therefore, caregivers' duty to promote children's moral development helps justify a duty of plant-based caregiving, even if carnism is permissible for adults.

One might object, however, that this argument proves either too much or too little. For if it also establishes that carnism is generally wrong for adults (because it tends to increase prejudice), then that undermines our assumption that carnism is generally permissible. Yet if that assumption is not undermined, because the moral risks are not serious enough to make carnism wrong in general, then caregivers are morally free to expose kids to these trivial risks.

We offer two replies. First, if these risks render carnism generally impermissible, that would indeed undermine our paper's working assumption. But it would also (perhaps decisively) bolster the case against carnist caregiving. Second, caregivers' moral responsibilities to dependent children are often more stringent than their responsibilities to themselves or others. Besides whatever other moral reasons adults have to avoid them, caregivers *qua caregivers* have special moral reason to avoid involving kids in activities that risk impeding moral development. The following subsections invoke parallel assumptions: adults are morally permitted to take certain risks with their own autonomy and health, but not the autonomy and health of dependent children.

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2.2. Autonomy Development

Caregivers also have a moral duty to support children's autonomy development. This involves taking reasonable steps to help children develop capacities to think and act autonomously and to foster children's abilities to revise their values and goals when appropriate. (Here, what is reasonable depends on a child's age, (dis)ability status, etc.)

We are agnostic about various extant accounts of autonomy, but assume that the capacity to make one's own decisions involves abilities to understand one's range of options, deliberate cogently about justifying reasons, resist social pressure, and avoid stark irrationality and other forms of psychological incoherence or disunity.⁷ We assume that the following two activities are vital, though perhaps not strictly necessary, to helping develop children's autonomy:

(A1) Familiarizing children with various ways of living and reasons commonly given to justify them, and

(A2) Helping children avoid or confront their own irrationality or cognitive dissonance.

We discuss these activities in turn, arguing that in carnist societies like the contemporary U.S., plant-based caregiving likely promotes kids' autonomy development, whereas carnist caregiving likely impedes it. For such societies exhibit widespread anti-vegan bias, ignorance and

Indeed, Costello & Hodson (2014, 193) cite evidence that prejudice intervention for young children optimally involves stronger manipulations than mere media exposure.

^{7.} We echo Harry Brighouse and Adam Swift's characterization of autonomy as "the capacity to reflect on one's life-choices, to be aware that it is possible to live one's life in many different ways, to make a reasoned judgment about which way is right for one, and to act on that judgment" (Brighouse & Swift 2014, 15, see also 164–168). Regarding when socialization is autonomy-inhibiting, see Killmister (2013).

mistaken assumptions about various diets' costs and benefits, and incoherent attitudes regarding animals and diet. These are obstacles to autonomous belief and preference formation, especially when they result from manipulative carnist public relations campaigns and policies designed for others' benefit, as they often do. Perhaps counterintuitively, plant-based caregiving in such societies *expands* the options effectively available to children by helping them overcome these obstacles. Thus, promoting autonomy in carnist societies calls for plantbased caregiving.

First, consider how carnist societies restrict kids' exposure to various ways of living and facilitate distinctive patterns of irrationality and cognitive dissonance. In carnist societies, adopting plant-based eating habits is often difficult; people often struggle to make and especially to enact autonomous decisions about limiting their consumption of animal products (Aaltola 2015; Menzies & Sheeshka 2012). (We regularly encounter anecdotes of people "backsliding" from veg*nism to carnism; akratic "sliding" from carnism to veg*nism, not so much.) About a third of Americans report, accurately or not and for whatever reason, that they want to or are trying to reduce their meat consumption (Neff et al. 2018). Most Americans also report being concerned about the treatment of animals raised for food, and a third agree that "animals deserve the exact same rights as people to be free from harm and exploitation" (Riffkin 2015). These self-reports suggest that many recognize reasons for abandoning the standard American diet. Yet per capita U.S. meat consumption has risen since the 1970s (Daniel et al. 2011), and self-reported veg*ns have remained a stable 5-6% of Americans since 1999 (Reinhart 2018). Apparently, Americans either struggle to replace animal products with plant-based foods or misrepresent their intentions (possibly even to themselves) (Rothgerber 2020). The former is a familiar trope:

Doctor's Visit: After a 60-year-old has a heart attack, his doctor says, "You need to eat a vegetarian diet or at least

eat significantly less red meat." His reaction: "That's impossible" (or "No way").⁸

Why does forgoing animal products seem so difficult or unappealing to so many people? Not just because human beings naturally find animal products delicious! Carnist social practices impact taste-preference formation and create epistemic, practical, and financial obstacles to autonomous dietary choices. Consider, for example, USDA and industry group promotion of carnist nutritional myths (like that dairy and meat are essential food groups), overwhelmingly carnist food advertising (including emotionally manipulative targeting of children), ag-gag laws that criminalize undercover reporting on factory farms (Morceau 2015), predominantly carnist food infrastructure, and U.S. federal subsidies of animal products and animal feed that positively dwarf those for fruits and vegetables grown for human consumption (FAO et al. 2021; Simon 2013, 80). Thus, to many people, the substance of plant-based diets is unknown.9 A diet falsely believed to consist of French fries and iceberg lettuce hardly seems satisfying or appetizing. Relatedly, many are concerned (often mistakenly) that plant-based diets would be prohibitively expensive (Mulik & Haynes-Maslow 2017), inconvenient, or nutritionally incomplete (Corrin & Papadopoulos 2017). More generally, many people seem unable (likely because of their upbringing) to imagine how farming, mining, medical research, urban planning, and transportation would function if animals were not treated as mere resources (Cooke 2017). These are all significant obstacles to autonomously choosing one's diet.

- 8. A leading cardiologist recounts numerous real cases like this, as well as their effects on medical research and practice: "Even if heart disease could be reversed, you have an untestable theory because no one can follow your diet,' said many foundations and government agencies that we asked to help fund our study at that time [1977]. Similarly many cardiologists told me, 'We can't get our patients to eat less meat or even to take their medications. You expect them to give up meat completely?'" (Ornish 1990, xxiv).
- 9. Thus, the understandable yet extraordinary phenomenon of philosophical works with vegan recipes (e.g., Singer 1975).

Furthermore, eating a plant-based diet can lead to teasing or social ostracism, both of which often obstruct autonomous action (Cole & Morgan 2011; Earle et al. 2019). Many veg*n-curious kids face implicit or explicit social and family pressure to curtail or drop this interest (Asher & Cherry 2015; Hirschler 2011; Merriman 2010). Caregivers sometimes commit testimonial injustice by discounting what would-be veg*n kids say about important matters like animal suffering and environmental destruction. Some even gaslight kids—for example, by brushing off questions about how animals become "meat". Adults face similar obstacles from peers. These social processes reduce familiarity with veg*n ways of living and the commonly accepted justifications of them, plausibly decrease the chances that people enact choices that express their values, and raise reasonable doubts about whether people adopt or maintain carnist values autonomously.

Besides restricting familiarity with various ways of living, carnist societies make quitting carnism harder by facilitating distinctive patterns of irrationality and cognitive dissonance. Several studies suggest that carnists in such societies tend to have trouble thinking rationally about eating animals. For example, they tend to experience cognitive compartmentalization or dissonance when considering whether "food animals" have minds. Primed to think about the suffering and slaughter customary in animal agriculture, they tend to ascribe diminished mental capacities to animals. That tendency increases when expecting to eat meat soon (Bastian, Loughnan, et al. 2012; Bastian & Loughnan 2017). This irrationally resolves the so-called "meat paradox" (i.e., the common tendency to both endorse meat consumption and regard how animals are routinely treated in meat production as emotionally disturbing and morally offensive). Creatures' moral standing plausibly depends on their mindedness. Where animal mindedness (or lack thereof) is not independently known, we cannot infer it from our dietary preferences or values-otherwise animal psychologists could do research from the lunch counter!¹⁰

10. As pointed out in Huemer (2018, 89–90).

To be clear, we are not assessing the truth or moral propriety of carnists' beliefs about animal mindedness. We are highlighting two common psychological impediments to dietary autonomy in carnist societies. One is the cognitive dissonance sometimes involved in regarding animal suffering as both morally acceptable and emotionally disturbing. Another is the prevalence of motivated or otherwise poor reasoning about these topics. Problematic forms of reasoning that carnist societies seem to facilitate include strategic ignorance (i.e., ignoring information to avoid unpleasantly conflicting attitudes) (Onwezen & van der Weele 2016), do-gooder derogation (i.e., ridicule of morally motivated agents) (MacInnis & Hodson 2017; Minson & Monin 2012), dissociation (i.e., pretending animal products lack animal origins) (Kunst & Hohle 2016), moral disengagement (e.g., downplaying negative consequences of one's actions or displacing personal responsibility) (Graça et al. 2014), and rationalization (i.e., endorsing feeble, specious, or ad hoc justifications of eating meat) (Piazza et al. 2015), among others." Subsequent actions are not fully autonomous if they reflect or express incoherent or otherwise psychically disunified attitudes, or result from flawed reasoning processes.

In short, political, social, and cognitive barriers block many people from acting on their (often acknowledged) reasons for consuming fewer animal products. This recalcitrance is worrisome not only for personal health reasons (as in Doctor's Visit), but also because the climate crisis makes the ability to autonomously adjust our dietary practices a matter of planetary, world historical significance (Willett et al. 2019). As we now argue, we should develop different eating habits in kids to obviate the *struggle* to quit carnism. (Similar reasoning supports prioritizing smoking-prevention over smoking-cessation efforts.)

While carnist societies problematically restrict kids' exposure to veg*n ways of living and facilitate distinctive patterns of irrationality and cognitive dissonance, plant-based caregiving promotes autonomy development. First, regarding (A1) and given the carnist social

^{11.} Rothgerber (2020) reviews recent literature superbly. See also May & Kumar (2023).

background just described, plant-based upbringings probably increase children's familiarity with (good!) options about what to eat, how to regard animals, and how these choices might be justified. In carnistdominated societies, even reducetarian caregiving makes it difficult for children to regard entirely plant-based diets as live options, let alone as attractive. For example, people raised to regularly eat animals will likely find it hard to believe that "livestock" might deserve moral consideration. Few such people become veg*ns as adults. In carnist societies, plant-based caregiving helps adequately familiarize children with various ways of eating such that they are *likely* to reason cogently about animal interests, and the possible (personal) health and (public) environmental benefits of plant-based diets, as they mature.¹²

By providing plant-based meals and education, caregivers help kids see veganism, vegetarianism, and reducetarianism as live options. They demonstrate that plant-based diets can be affordable, tasty, easy, and healthy. Instead of prejudicing kids against the possibility that animals have interests, they provide an anti-biasing measure against prevalent carnist background conditions. Simultaneously, children raised on plant-based diets also learn from caregivers and others about carnist diets and the reasons commonly given for choosing them. So, over time, they will tend to be better prepared than carnist children to reason cogently about various diets. They will have seen it all, so to speak.

Indeed, people raised on plant-based diets may be better positioned to make autonomous dietary choices than even typical carnists who go vegan, for some who transition to veganism make their decision with little understanding of what it entails. Consequently, some feel overwhelmed by the task of imagining, making, or otherwise procuring appropriately varied plant-based meals and so revert to carnism (Menzies & Sheeshka 2012). This reveals an important asymmetry in autonomy between those raised on plant-based diets who

12. Perhaps "unusual eating" that stresses respect for animals could also suffice; see Fischer (2020). In defense of reducetarianism, see May & Kumar (2022).

later become carnists and those who follow the opposite trajectory. In carnist societies, the former are more likely to know what they are choosing.

Rationally articulate plant-based caregiving also helps kids recognize which reasons for eating animal products are cogent. We suspect that kids who receive such care will be less vulnerable to feeble carnist rationalizations (e.g., that the evolution of human canines *morally* justifies eating meat). Such caregiving, we suspect, also helps prepare kids to recognize whatever reasons for eating animal products there might be.

Whereas (A1) is a matter of increasing kids' familiarity with varied dietary practices and related reasoning, (A2) requires decreasing exposure to practices that threaten to obstruct cogent reasoning. For instance, many people associate eating animals with everyday comforts of home, beloved holidays, or formative relationships: Dad's burgers, Mom's grilled cheese, and Grandma's chicken soup.¹³ These associations form early and solidify through repetition. Over time, such attachments can obstruct or deform reasoning about animals and diet in the ways considered above. These attachments, especially when coupled with the obstacles discussed previously, can effectively reduce children's dietary options later. By contrast, veg*ns' abstention from meat creates coherence between their actions and attitudes, so they have fewer or no cognitive barriers to dietary autonomy arising from the "meat paradox". Moreover, researchers have not (to our knowledge) identified any interventions that inhibit such cognitive infirmities in carnists. So plant-based caregiving seems to be the only known way of adequately protecting kids from these barriers to autonomy. Granted, plant-based upbringings also produce emotional attachments. But these attachments - say, to a spicy bean salad beloved at potlucks - can easily be maintained if children adopt carnism as adults. This is another asymmetry in autonomy, based not in children's

On how pro-veg*n arguments sometimes neglect relationships' and cultural practices' value, see Emmerman (2019). For sensitive discussion of his grandmother's carnist cooking, see Foer (2009).

knowledge of available options in carnist societies, but in children's emotional attachments and the feasibility of integrating plant-based foods into carnist diets.

The prevalence of the autonomy-threatening phenomena we have discussed suggests that carnist caregiving in carnist societies like the U.S. undermines children's capacities to autonomously adopt, evaluate, and revise dietary beliefs and practices. Plant-based caregiving helps children avoid common false beliefs and various forms of distorted thinking, which are best understood as ideological. Thus, plant-based caregiving involves (A₂). It also ensures familiarity with various ways of eating and otherwise relating to nonhumans (and reasons commonly presented as justifying them), thus involving (A₁). Therefore, plausibly, in such societies, developing children's autonomy calls for plant-based caregiving.

2.3. Physical Health

Caregivers are also morally obligated to support children's physical health. If, as we assume, caregivers typically should take reasonable, available precautions that significantly reduce risk of serious harm to kids' health, then significant relative health risks of carnism add to the cumulative case for a duty of plant-based caregiving. We document evidence of such risks here and echo common-sense arguments concerning reasons to buckle children's seatbelts, apply sunscreen on them, eliminate lead paint from their homes, and reduce speed limits near schools.

We begin with some preliminary remarks. First, contrary to popular fears, there is substantial empirical evidence that appropriately planned plant-based diets are healthy for people of all ages (Craig & Mangels 2009; Melina et al. 2016).¹⁴ (Such diets include at least seven daily servings of fruits and vegetables and one of pulses, plus meet standard guidelines for sugar and caloric intake — as actual vegan dietary patterns do, according to the EPIC-Oxford cohort study and the

14. For dissent, see Richter et al. (2016) and Leroy & Barnard (2020).

Continuing Survey of Food Intake by Individuals (Haddad & Tanzman 2003; Scarborough et al. 2014).) Thus, we will assume that plantbased caregiving is at least consistent with children's healthy physical development.

However, appropriately planning children's diets is not a trivial achievement, for either plant-based or carnist caregivers. Children's nutritional needs are complex and not fully understood, despite recent progress by researchers. Unfortunately, popular understanding of plant-based diets is especially inadequate; changing that will take time and effort. It may often be reasonable for caregivers to only gradually replace animal products with plant-based foods for kids.

Moreover, these efforts will likely be more effective when pursued collectively rather than piecemeal and individually. *All* caregivers and their supporters, especially in schools and other childcare institutions, can play a key role by learning (and teaching kids) about healthy plant-based diets. Programs like New York City schools' entirely plant-based "Vegan Fridays" should be expanded to help primary caregivers who are adopting plant-based caregiving. Parent-teacher associations and various parenting groups can also increase knowledge of why and how to provide kids healthy, culturally appropriate, and affordable plant-based foods.

Finally, whether health considerations support a duty of plantbased caregiving depends on various diets' comparative healthfulness. We use aggregate costs and benefits as a proxy for estimating dietary health risks to a specific child. In this respect, our argument resembles the case against exposing children to second-hand smoke. Moreover, we use data on diet-related mortality, not stores of individual micronutrients, since science about optimal micronutrient intake is less settled than science about various diets' mortality effects. If carnist diets, compared to plant-based ones, significantly imperil aggregate health, then health considerations help justify a duty of plant-based caregiving.

Studies show that plant-based diets would immensely benefit aggregate health. Appropriately planned plant-based diets are indisputably healthier than the "standard American diet", which is high in fatty animal products and sugar while low in fruits, vegetables, and whole grains (U.S. Department of Health and Human Services & U.S. Department of Agriculture 2015, Ch. 2 and Appx. 5). Recent analysis indicates that universal adoption of vegan diets by 2050 would prevent over one million deaths annually from diabetes, cancer, stroke, and coronary heart disease in "Western high income" countries alone (Springmann et al. 2016, 3). Insofar as habituating kids into the standard American diet makes them more susceptible to suffering and death from such maladies, it constitutes a significant risk of physical harm.

But there are healthier *carnist* alternatives to the standard American diet. Consider reducetarian diets comprising less than 300 grams (10.6 ounces) of red meat weekly and at least five daily servings of fruits and vegetables, which reduce by more than half the 2017 U.S. per person consumption of red meat (Ritchie et al. 2017). Still, worldwide adoption of such diets by 2050, compared to vegan diets, would likely cost 3 million deaths (and 50 million life-years) *annually* (Springmann et al. 2016, 2). For comparison, globally, in 2019, 7.69 million deaths (and 168 million years of life lost) were attributed to smoking tobacco (Reitsma et al. 2021, 2347–2348).

Even vegetarian diets, though much healthier than those described above, have significant health costs. Worldwide human consumption of vegetarian diets in 2050, compared to vegan diets, would likely cost 800,000 deaths (and 15 million life-years) annually (Springmann et al. 2016, 2). Health-based reasons to prefer fully plant-based over vegetarian caregiving thus have some force, though less than health-based reasons to avoid providing children with meat.

Are we exaggerating the health risks of feeding children carnist diets? After all, there is much to learn about childhood nutrition (Schürmann et al. 2017). Moreover, childhood is but one phase of life, and carnist children can choose to stop eating animal products as adults.

Certainly, our estimates about carnism's health risks might be overstatements. (But then again, they might be understatements.) And some carnist kids will become veg*n adults, despite the barriers discussed previously. Nevertheless, this objection is seriously flawed. Creating Carnists

Plant-based caregiving reduces certain health risks, such as those of overweight and obesity (and so type 2 diabetes) during childhood (Melina et al. 2016, 1975), and helps remove carnist barriers to dietary autonomy in adulthood (see §2.2). It may also reduce health risks during adulthood, *even if children grow up to become carnists*, for certain health-related opportunities exist only in childhood. Indeed:

[E]arly intervention, i.e., prenatal and the first years of a child's life, may be the optimal window for promoting the development of healthy eating behaviours in children. ...[I]f children are to learn to prefer and select healthy foods, they need early, positive, repeated experiences with those foods. (Birch et al. 2007, 5)

Moreover, childhood nutrition likely has direct causal connections to negative health outcomes in adulthood (Lucas 1998; McGill et al. 2008). Responsible caregivers would never allow without comment (let alone encourage) kids to engage in other repetitive behaviors with significant long-term physical risks — e.g., bulimia, cutting, or habit-ually crossing busy streets without looking — thinking that kids can simply choose to stop doing them as adults. We think the considerations sketched here make it reasonable to regard carnism similarly, bolstering the cumulative case for a duty of plant-based caregiving.

3. Objections and Replies

We have marshalled recent empirical evidence relating to moral development, autonomy development, and physical health to make a cumulative case for a duty of plant-based caregiving. Now we consider objections.

3.1. Demandingness, Blame, and Social Embeddedness of Caregivers

First, some might object that most caregivers do their best, given what they have reasonably come to believe in carnist societies, and thus should not be blamed for raising carnist children.

We agree. Our conclusion only concerns the *moral impermissibility* of carnist caregiving. We make no claims about its blameworthiness nor about who, if anyone, has standing to blame carnist caregivers. Carnist caregiving in the U.S. today might typically be excusable — ignorance, confusion, and misinformation concerning veganism; underestimation of the standard American diet's long-term effects; and ordinary motivational barriers (like weakness of will, desire to conform, and attentional overload) might be excuses (Abbate 2020). We argue not that carnist caregiving is inexcusable, but that people should practice plant-based caregiving instead.

A similar objection is that our society's overwhelming embrace of carnism makes plant-based caregiving unreasonably difficult, even for well-resourced individuals. Primary caregivers, relatives, babysitters, school staff, and others all rely on each other in caring for children, yet many will likely be carnists or at least working within carnist infrastructures (like school cafeterias). So aspiring plant-based caregivers face a coordination problem, and inertia favors carnists. As discussed in §2.2, this is not just because of individual tastes or subculture-specific values, but is also due to various large-scale factors, including national- and state-level laws and policies relating to agricultural subsidies, public assistance programs, and school lunches, as well as profitoriented corporate and bank policies that create food oppression, food apartheid, food deserts, food mirages, and other problems - which often obstruct individual-level autonomous action (Freeman 2013; Sullivan 2014; Walker et al. 2010). Thus, while most people exercise some dietary agency, what and how one eats is not simply a matter of selfrestraint and personal responsibility (Dean 2018). This might seem to justify (not just excuse) carnist caregiving: since 'ought' implies 'can', individuals cannot be required to practice plant-based caregiving until broader food justice issues are solved.

We agree that all-things-considered duties depend on what is reasonable to achieve in one's circumstances, construed broadly to include social and material realities as well as normative factors. When caregivers, lacking social support or other resources, cannot reasonably be expected to ensure that children's meals are entirely plant-based, then (we say) the duty to provide kids with enough food and other basic necessities may override the duty of plant-based caregiving. This conception of plant-based caregiving is not an ad hoc attempt to dodge objections, but rather draws from established tradition: The Vegan Society defines veganism as "a philosophy and way of living which seeks to exclude — as far as is possible *and practicable* — all forms of exploitation of, and cruelty to, animals ..." (2022, emphasis added).

That said, this duty's defeasibility has two further implications. First, there are moral costs when it is overridden. A duty to children is violated (though the violation is justified), creating a "moral remainder" or a duty to repair the wrong. This might necessitate remedial efforts to counteract the harms discussed in §2. Second, when the duty is overridden, caregivers are still obligated to maximize the provision of plant-based foods; serving kids more animal products than necessary (given overriding considerations) is impermissible.

Moreover, the objection presents a false dichotomy between addressing structural injustices and meeting individual-level moral demands.¹⁵ These aims can and should be pursued in tandem — especially in the highly social domain of caregiving. For instance, obligations to their own kids may require caregivers to support (or simply not obstruct) efforts to provide plant-based options at school cafeterias, community potlucks, family gatherings, etc. But such individual efforts also help reduce structural injustices and help all caregivers meet their obligations. Simultaneously, private organizations that combat structural injustices relating to health, education, community-building, and environmental protection might advance their missions by incorporating plant-based caregiving into their policies, practices, and objectives, thereby helping individual caregivers meet their obligations.

Governments also have a duty to help caregivers impart healthy dietary habits in kids – or at least not to interfere in the ways discussed in $\S_{2.2}$. Public schools should at least provide kids with some

^{15.} Brownstein et al. (2022) critiques such oppositional thinking with regard to social change generally.

education about plant-based meals, as well as the option to eat them. Governments must also stop representing animal products as nutritionally necessary, and better regulate marketing of animal products to kids like it regulates cigarette and alcohol advertising (Sing et al. 2022): no more commercial advertisements with clowns urging kids to eat hamburgers and receive toys, anthropomorphic cows encouraging them to eat chickens, or beloved heroes and idols recommending meaty, cheesy pizzas. No more telling kids that animal products are what "does a body good", what's "incredible" and "edible", and "what's for dinner".

In addition, individuals, media outlets, state agencies, and private organizations must cease their smear campaigns against veg*ns that alternately portray them as silly sentimentalists, anti-science diet faddists, or unhinged terrorists (Cole & Morgan 2011). Unfortunately, given existing anti-veg*n attitudes and opportunistic public figures who pander to them, we expect arguments like ours to inspire backlash from some devoted carnists. Backlash to social change is typical, but does not make the status quo acceptable. Declining to blame carnist caregivers and implementing the social supports described above might help defuse this backlash.

3.2. Social Burdens on Children

On that point, one might object that children who eat plant-based diets are likely to encounter some social exclusion. Anti-veg*n bullying aside, simply eating differently than one's peers can cause anxiety and embarrassment (as many children of immigrants attest). So one might think that plant-based caregiving should be avoided to protect kids from these social burdens.¹⁶

Childhood often involves feelings of isolation, embarrassment, and anxiety.¹⁷ And caregivers may sometimes have reason to avoid caregiv-

ing practices that make kids the targets of bullies. Plausibly, though, caregivers should typically help kids work through these experiences, perhaps to promote autonomy, but also long-term happiness. We support that strategy here.

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This is especially important when kids face social pressures to participate in harmful, risky, or otherwise problematic trends. Caregivers should not encourage kids to smoke or sexually objectify themselves in order to fit in, and similar reasoning applies to carnism. Plant-based caregivers should consider informational campaigns and other interventions to normalize plant-based meals and neutralize peer pressure (Birch 1980). But in extreme cases, where bullies would badly harm plant-based kids, caregivers may sadly face a more difficult choice.

Might feeding kids a socially unpopular diet undermine caregiverchild relationships? Unlikely. Good caregiver-child relationships require some (usually many) compromises. Good caregivers often make unwelcome demands of kids without thereby undermining their relationships. The generic advice to explain and consistently maintain clear boundaries and expectations applies here as elsewhere. Balancing the various, sometimes conflicting, demands of caregiving is challenging (Ruddick 1989, 17–23, 167–176). But caregivers do their best in many situations, and doing so regarding kids' diets is crucial to fulfilling caregiving duties.

3.3. Illiberal Caregiving

One might object that plant-based caregiving undermines caregiver neutrality on the disputed "comprehensive doctrine" of veganism, and thus is illiberal. For some political liberals argue that respect for children as future self-governing agents forbids caregivers from imposing their own beliefs about good and bad, right and wrong, or religious matters on children (e.g., Clayton 2012).

^{16.} Hunt (2019) presents similar concerns, to which Alvaro (2019) replies in detail.

^{17.} Despite some alarmism about young veg*ns' mental health, whether they exhibit more depression, anxiety, or eating disorders than carnists is disputed.

Moreover, the direction of causation, if any, between adolescent veg*nism and rates of such disorders is unclear. See Beezhold et al. (2010) and Norwood et al. (2018).

This objection, focused exclusively on autonomy, presupposes that our earlier arguments fail to establish that only plant-based caregiving adequately protects kids' interests in health and moral development. But prohibiting 8-year-olds from smoking is not illiberal. Nor is teaching them that marginalized people deserve respect. If we are right, the same applies to plant-based caregiving. So to avoid begging the question against us, objectors must first identify reasons to reject those earlier arguments.

Even if those arguments fail, however, plant-based caregiving need not enroll kids into a comprehensive doctrine or otherwise objectionably violate their autonomy. Indeed, concerns about indoctrination might more appropriately target carnist caregiving. Creating carnists often involves imparting the highly contentious belief that good lives require consuming animal products-imparted sometimes unthinkingly and without comment, sometimes through snide comments about veg*nism that preemptively block kids' interest in it, and sometimes (as in 4th of July Picnic) by actively pressuring, manipulating, or ridiculing would-be veg*n kids. Often, when kids reject carnism (even for one meal), caregivers resist for reasons that poorly track kids' interests: sunk costs, lack of information, fear of change, desire not to be inconvenienced, preference for conformity, or a desire to impose their own conception of the good onto kids. This arguably expresses disrespect for kids' developing autonomy and can poison caregiver-child relationships.

There are foods that plant-based caregivers will not offer to children, but no caregiver offers kids every possible food type. Surely serving a regional cuisine at every meal need not involve enrolling kids in comprehensive doctrine; it is morally innocuous and does not commit caregivers to any substantive claims about the good life. Ditto for plant-based food. Even most devoted carnists eat plant-based meals occasionally (spaghetti marinara or PB&J sandwiches, perhaps). So any serious autonomy-related objection to plant-based caregiving must target something besides the provision of plant-based foods. Plant-based caregiving also involves rationally articulate education about reasons commonly motivating veg*n dietary choices. We deny that this education involves indoctrination; providing information is not the same as requiring doctrinal avowal. But one might worry that it may instill in kids a lifelong aversion to animal products. Analogously, Jewish or Muslim upbringings are sometimes thought to instill lifelong disgust towards pig flesh, even in adults who are no longer religious. Plant-based caregiving, then, may seem to risk undermining autonomy development and closing children's futures. Thus, it might undermine what Clayton calls "confidence of eliciting [children's] retrospective consent" (2012, 361).

But inculcating such religious prohibitions often involves conveying intense, emotionally charged, or threatening messages to kids (e.g., "God disapproves!"). Again, eating plant-based meals does not commit one to any religious, moral, eudaimonistic, or metaphysical views. Caregivers who highlight morally relevant animal–human similarities do not thereby act in emotionally damaging ways or give kids other grounds to reasonably reject plant-based caregiving. A better comparison would be to restrictions on childhood alcohol consumption, which kids typically know are for their own good and lifted in adulthood (in secular contexts). Moreover, most American kids receive extensive education about the serious harms caused by drunk driving and alcohol abuse. Still, unlike religious dietary prohibitions, restrictions on childhood alcohol consumption and related morally serious educational initiatives seem not to engender in people lifelong disgust that conflicts with their considered judgments.

So plant-based caregiving respects children's developing autonomy, even on a strict retrospective-consent account of their rights and when caregivers articulate ethical veg*ns' motivating reasons to them. Nonetheless, assuming that carnism is morally permissible for adults, plant-based caregivers — especially those who are ethical veg*ns — should perhaps emphasize to kids that they need not *identify* as veg*ns or adhere to veg*n *moral doctrines*. Caregivers might also consistently and explicitly communicate that they practice plant-based

caregiving to protect the kids' interests — or perhaps to form relational bonds by cooking plant-based foods together (alongside, say, playing sports together).¹⁸

3.4. Parental Rights

Not everyone worries about caregivers imposing their values on kids, though. Indeed, some believe that carnist caregiving provides valuable aesthetic or cultural benefits to kids that outweigh its moral, autonomy, and health risks. Others might insist that, even if carnist caregiving significantly undermines kids' interests overall, parents still have the right to practice it. Both versions of this objection suggest that carnist caregiving is a permissible exercise of parental autonomy rights despite its risks.

We grant that permissible exercises of parental autonomy include some activities that undermine kids' interests. However, consider how extreme even the first version of this objection is. It presupposes that (1) carnist caregiving's cultural and/or aesthetic value exceeds that of plant-based caregiving and (2) this excess value matters more than the risks of engendering in children (as kids or later as adults) (a) vicious outgroup prejudice, (b) barriers to dietary autonomy, and (c) diet-related morbidities and mortalities. Even if (1) is defensible – though we doubt it, and many would-be defenders argue from a position of considerable ignorance about plant-based diets -(2) strikes us as implausible. Results (a)–(c) are, after all, very bad. Plus, most meals served by schools, fast food restaurants, and caregivers relying on processed convenience foods at home are not exactly cultural treasures. Many other carnist meals are also - compared to kids' moral, autonomy, and health interests - of only modest aesthetic and cultural value (even according to many who eat them). Besides, cultures are not static; with the explosive proliferation of non-dairy milks and cheeses, egg substitutes, and plant-based proteins, central products and practices of carnist culture are already increasingly becoming veganized. So, biting

the bullet regarding claim (2) likely justifies at most only occasional carnist consumption; nothing like what most American caregivers currently serve.

Yet even biting this bullet — prioritizing carnist aesthetic and cultural values over kids' moral, autonomy, and health interests — may not deliver the desired conclusion. For carnist caregiving may *wrong* kids, even if, on balance, it benefits them. Parents can wrong kids by, for example, giving them enormous wealth if by doing so they neglect kids' core moral, autonomy, and health interests. But sacrificing these core interests for carnism seems no less wrong. (Surely a silver spoon is more beneficial than a carnist childhood!) So defending carnist caregiving by accepting (2) also requires establishing that such core interests may permissibly be sacrificed for carnist values.

That said, we have granted that there will be reasonable disagreement about when the duty of plant-based caregiving is overridden. Discerning the exceptional cases where cultural or aesthetic value might override plant-based caregiving duties is one proper exercise of parental rights. Similarly, parents may share with children a glass of wine or a tobacco hookah on special occasions — though it is widely understood that their rights do not permit frequently giving kids alcohol or tobacco, let alone encouraging binge drinking or chain smoking.¹⁹ Some such understanding must be reached regarding carnist caregiving, perhaps (though we are skeptical) even allowing occasional hunting, fishing, or slaughtering animals raised at home, provided that caregivers take a very thoughtful approach. We reiterate, though, that a good alternative to imposing value judgments like (1) and especially (2) is preparing kids to make their own decisions — something that, we argued in §2.2 and §3.3, plant-based caregiving helps to achieve.

Still, turning to the second version of the objection, might primary caregivers have the right to pursue their carnist caregiving interests even if doing so makes kids much worse off? It seems to us, though we lack space to defend it, that interests in moral development, autonomy,

19. For related discussion, see Bach (2018).

On benefits of nutritional practices involving whole families, see Fox et al. (2004) and Sotos-Prieto et al. (2014). See also Kleingeld & Anderson (2014).

and health (and the rights to have those interests protected) are generally more crucial to well-being than interests in sharing particular aesthetic experiences and cultural practices with one's children (and the rights to do so). Even when equally crucial interests or rights conflict, we think kids' should often have priority over parents', given parents' greater power, knowledge, and other resources.²⁰ And when parents' rights do take priority, they are highly limited.

Admittedly, specifying in any general, principled way how much (risk of) harm caregivers have the right to impose on kids is difficult. That is another reason why we allow for reasonable disagreement about how strong the duty of plant-based caregiving is. Conscientiously deciding, within reasonable limits, how much risk to one's kids is justified is a second proper exercise of parental rights.

For the same reason, we have drawn parallels with numerous particular moral judgments that have become common sense in recent history: the impermissibility of smoking indoors with kids, of regularly serving them alcohol, of allowing them to ride in cars without seatbelts, of neglecting to protect them from sunburns and lead exposure, etc. We do not think these practices are defensible exercises of parental autonomy rights at this point. We have compiled substantial recent empirical evidence to support the view that carnist caregiving should be added to that list. We find the evidence for a duty of plant-based caregiving persuasive. (And have bracketed powerful arguments for a general duty of veganism, which would substantially strengthen the case.) If nothing else, this evidence shifts the burden of argumentation onto defenders of carnist caregiving. We call for further investigation into the matter.

4. Conclusion

Raising kids on a plant-based diet involves making a choice—one many find suspect or worse. But many people also seem to assume that raising carnist kids somehow does not involve choosing. As we have argued, not only does it indeed involve choosing (often unreflectively or heteronomously), but the choice often needlessly risks kids' core interests. Considerable empirical evidence suggests that only plant-based caregiving adequately supports children's moral development, autonomy development, and physical health. Such caregiving, at individual and institutional levels, involves both providing plantbased foods as much as context reasonably allows and explaining reasons for doing so. Adult caregivers entrusted to adequately support kids' development have a duty of plant-based caregiving, even if they have no moral duty to be vegan themselves.

We have also highlighted important roles schools and other organizations can play in helping all caregivers fulfill this duty. That such organizations should provide kids with more whole foods, especially fruits and vegetables, is already a widely shared, uncontroversial view among nutrition experts.²¹

While some individuals may find transitioning to plant-based caregiving burdensome, others (especially relatively privileged ones) are well positioned for it. Expectant parents (adoptive or biological) often eagerly anticipate developing new, identity-transforming relationships with their children. They are often already learning about nutrition and adjusting eating habits, re-organizing daily rhythms and budgets, and feeling highly motivated to pursue various ideals. They often resolve to quit smoking, exercise more, swear less, and so on. Pregnant people are also already advised to avoid consuming various substances, including many animal products. More generally, one big change can catalyze others; becoming a parent, moving, and changing careers are all good occasions to rethink and reform one's identity, goals, and habits (Blichfeldt & Gram 2013; Jabs et al. 1998).

Also relevant are parents' fiduciary duties to their children (Brighouse & Swift 2014, Ch. 4).

^{21.} Noting that 60% of children in the U.S. consumed too little fruit and 90% consumed too few vegetables in 2007–2010, the CDC suggests that state and local governments improve school nutrition standards and "provide training for child care and school staff on buying, preparing, and serving fruit and vegetables" (U.S. Center for Disease Control and Prevention 2014).

That is fortunate, because if we are right, then kids' interests give us strong reasons to become plant-based caregivers, if caregivers we will be.

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