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ARTICLES

Veganism and Children: Physical and Social Well-Being

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Abstract
I claim that there is pro tanto moral reason for parents to not raise their child on a vegan diet because a vegan diet bears a risk of harm to both the physical and the social well-being of children. After giving the empirical evidence from nutrition science and sociology that supports this claim, I turn to the question of how vegan parents should take this moral reason into account. Since many different moral frameworks have been used to argue for veganism, this is a complex question. I suggest that, on some of these moral frameworks, the moral reason that some parents have for not raising their child on a vegan diet on account of this risk is plausibly as strong as the reason they have for raising their child on a vegan diet. In other words, the moral reason I outline is weighty enough to justify some vegan parents in plausibly finding it permissible to not raise their child on a vegan diet.

Keywords Veganism · Children's rights · Animal ethics · Applied ethics · Nutrition

Introduction

I argue that there is pro tanto moral reason for parents to not raise their child on a vegan diet, drawing on the risk of harm to the child's physical and social well-being that a vegan diet poses. Here is the structure of my argument:

(1) Raising a child on a vegan diet bears a risk of harm to their well-being.

[(1a) Raising a child on a vegan diet bears a risk of harm to their physical well-being.]
[(1b) Raising a child on a vegan diet bears a risk of harm to their social well-being.]

(2) Parents have pro tanto moral reason to not make their child bear a risk of harm to their well-being.

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Thus, (3) parents have pro tanto moral reason to not raise their child on a vegan diet (from 1, 2).

Depending on the other pro tanto moral reasons that parents take themselves to have regarding their child's diet, (3) is claim that different parents could use to draw different upshots. Parents who think there are no pro tanto moral reasons for raising their child on a vegan diet could draw the conclusion that raising their child on a vegan diet is morally impermissible. Anecdotally, using (1a) and (1b) to reach such a conclusion is something that many non-vegan parents seem to do, as indicated by the concerns touched on sympathetically in *The Guardian* (Seal 2018) and less sympathetically in *The Daily Mail* (Nicholas 2019).

The more interesting question is how people who think that there are pro tanto moral reasons for raising a child on a vegan diet, most obviously ethical vegans who are parents, should take (3) into account. This more interesting question is also more complex, because ethical vegans may be committed to different moral frameworks that seem to provide moral reasons for being vegan that are of differing weights and which perhaps come into effect under differing conditions. For instance, very impressionistically, on the deontological framework of Tom Regan it seems that raising a pig in what one might describe as humane conditions and then slaughtering it in order to eat it is a serious wrong, a rights-violation that could only be justified in highly unusual circumstances (Regan 1983, 316–337). By contrast, on a virtue ethical framework such as Carlo Alvaro's this course of action is perhaps a less serious wrong, a failure to be as temperate and compassionate as one could be (Alvaro 2017, 771–778), and something that could perhaps be justified in a wider range of scenarios.

Weighing up the moral reason that people have for raising their child as vegan on each of the moral frameworks that are extant in the literature against (3) would be a gargantuan task, as would the strategy of trying to determine which of these moral frameworks is true and weighing the moral reasons it generates against (3). Instead, I will provide a form of argument that illustrates how on the apparently most forbidding moral framework, Tom Regan's, (3) is plausibly as strong as the moral reason parents have for raising a child as a vegan, and suggest that this form of argument plausibly generalizes to the other moral frameworks commonly used to argue for veganism. That is, I argue for the cautious thesis that:

(4) This pro tanto moral reason is plausibly as strong as the pro tanto moral reason some vegan parents have, on their preferred moral framework, to raise their child on a vegan die.

Thus, (5) these parents may plausibly find it morally permissible to raise their child on a non-vegan diet (from 3, 4).

I advance (1a) and (1b) by outlining the relevant empirical evidence and making some remarks that clarify how this empirical evidence suggests a risk of harm to the child's well-being. I then claim that (2) is fairly uncontroversial and suggest that although parents have pro tanto moral reason to not raise their child on a vegan diet due to (1a) and (1b), they themselves do not have a similarly grounded pro tanto

moral reason with respect to their own diet. Next, I argue for (4) by providing what I dub the *Argument from Underdetermination*, and show that even assuming Tom Regan's deontological framework the reason some parents have for raising a child as a vegan is plausibly outweighed by (3). I briefly provide a separate argument for (4) that I dub the *Argument from Simple Principles*. In the conclusion I remark on the nature of the conclusion, (5), and note some avenues for further research on the ethics of children's diets.

Raising a Child on a Vegan Diet Bears a Risk of Harm to Their Well-Being

Raising a Child on a Vegan Diet Bears a Risk of Harm to Their Physical Well-Being

I will argue for (1a) by reviewing the extant scientific evidence that bears on the effect of vegan diets on children's nutrition. The most sustained discussion of the implications of vegetarianism and veganism for human nutrition by ethicists was an exchange in the early 1990s between Kathryn George and Evelyn Pluhar (George 1990, 1992, 1994; Pluhar 1992, 1993, 1994). George doubted the adequacy of such diets for children and the pregnant due to concerns about the bioavailability of the micronutrients contained in supplements and the toxicity of supplements. I argue for (1a) on different grounds than George.

(1a) may seem to be a non-starter in light of the claim, made by the American Dietetic Association and the Academy of Nutrition and Dietetics, that *well planned* vegan diets are *in principle* appropriate for all stages of the life cycle (Craig and Mangels 2009; Melina et al. 2016), and indeed of a high nutritional quality (Castañé and Antón 2017). However, when we shift from talking about the in principle appropriateness of well planned vegan diets to talking about the actual dietary practices of vegans, which is the relevant standard for assessing the risk of harm to physical well-being for real children, we see that (1a) is a proposition we should accept.

The Potential Dangers

Vegan diets that are poorly planned are widely acknowledged to be liable to deficiencies of vitamins A, B12, D, iodine, calcium, iron, and various fatty acids such as eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA) (Amit 2010), as well as creatine and taurine (Cofnas 2018). The health consequences for children of deficiencies in these nutrients are very diverse and depend on the severity of the deficiency. For instance, the consequences of B12 deficiency run the gamut from "mild symptoms, such as lethargy or forgetfulness" (Pawlak et al. 2013) to "irreversible cognitive damage…and death" (Fewtrell et al. 2017, 127). Iodine deficiency during pregnancy and the first years of life is linked to a range of neurological disorders (Bath and Rayman 2018). Deficiency of EPA and DHA—of which there are no vegan food sources—is linked to various behavioral and developmental disorders such as "attention-deficit hyperactivity disorder (ADHD), dyslexia, dyspraxia and autism spectrum disorders" (Schuchardt et al. 2010, 149). Though there remains

much about childhood micronutritional deficiencies and their health consequences that we do not know, in general "the consequences of micronutrient deficiency are potentially greater in children than adults" (Kaganov et al. 2015, 3526). Micronutritient deficiency is not the only potential danger of a poorly panned vegan diet. Given the lower bioavailability of many plant proteins, vegan children require a higher overall protein intake—in the order of "30% to 35% for infants up to two years of age, 20% to 30% for two- to six-year-olds and 15% to 20% for those older than six years of age" (Kirby and Danner 2009, 1093). Given the incomplete amino-acid profiles of many plant proteins, a proper mix of protein sources must also be achieved (Kirby and Danner 2009, 1093). Additionally, the lower energy density and excessive bulk of plant foods may present "challenges in feeding smaller children" (Amit 2010, 303).

Practical Cautioning

Given the potential dangers of a vegan diet for children, nutritional scientists note that such diets must be well planned by a knowledgeable adult (Mangels and Messina 2001, 667; Van Winckel et al. 2011, 1429; Mangels and Driggers 2012, 18). Others note the need, in pregnancy and infancy, for "regular medical and expert dietetic supervision" (Fewtrell et al. 2017, 127), (also Amit 2010, 304; Pawlak 2017, 1261). The position paper of the European Society for Paediatric Gastroenterology, Hepatology, and Nutrition notes that "Although *theoretically* a vegan diet can meet nutrient requirements when mother and infant follow medical and dietary advice regarding supplementation, the risks of failing to follow advice are severe" (Fewtrell et al. 2017, my italics). Most cautionary is the position paper of the German Nutrition Society: "Since rejecting any animal foods increases the risk of nutrient deficiencies and thus of health disorders, *a vegan diet is not recommended by the DGE during pregnancy or lactation, or for children or adolescents of any age*" (Richter et al. 2016, 99, my italics).

Actual Practice

There is a lack of information about the extent to which vegan parents appropriately plan their children's diets. Further, there is very little research on the micronutrient status of vegan children. That paucity of evidence prevents making claims about vegan children's micronutritional status is noted in reviews of the iron (Pawlak and Bell 2017, 98) and the zinc (Gibson et al. 2013, 466) statuses of the nearby case of vegetarian children. Even regarding vegetarian children's diets there is a lack of information: a recent paper reports that "no contemporary systematic review on vegetarian type diets in infancy, childhood, and adolescents has been published" and that paper itself, in attempting to give such a systematic review, could not "draw firm conclusions on health benefits or risks" of vegetarian diets for these groups, let alone vegan diets (Schürmann et al. 2017, 1797).

The best proximate evidence available bearing on (1a) are studies concerning the micronutritional status of adult vegans, though these too are limited. A British study found lower levels of EPA and DHA in a cohort of 232 vegan men (Rosell et al.

Table 1 Prevalence of inadequate intakes of certain micronutrients from food sources alone by diet group. Reproduced from Sobiecki et al. (2016, 471)

	Omnivores (%)	Pescatarians (%)	Vegetarians (%)	Vegans (%)
Protein	1.2	1.8	6.0	8.1
Vitamin E	56.1	46.4	47.1	26.8
B12	0.1	0.5	17.2	89
Calcium	2.6	2.2	2.7	13.5
Iron*	0.8	0.8	19.2	12.9
Zinc*	1.6	2.9	29.5	55.8
Selenium	14.4	19.5	60.4	48.9
Iodine	4.0	8.9	28.7	92.5

*Bioavailability adjusted

2005, 333). An American study of 165 vegans found that 64% of the cohort had an undesirably low omega-3 index (Sarter et al. 2015). A Finnish study of 22 vegans found compromised vitamin D and iodine status despite use of dietary supplements (Elorinne et al. 2016, 8). An American study found that the median urinary iodine concentration of 62 Boston-area vegans (predominantly college-educated white women) was less than half that of the general U.S. adult population, and 50% of the cohort reported no multivitamin use (Leung et al. 2011, 1305). Representative of the widespread findings of B12 deficiency in adult vegetarians and vegans (Pawlak et al. 2014), a German study of 29 vegans found that 52% had a low vitamin B12 concentration (Herrmann et al. 2003). A larger study based on questionnaire answers of reported food consumption (rather than on specimen-testing) that included 803 British vegans found high levels of inadequate nutrient intakes from food sources alone among vegan women as compared with omnivore, pescatarian, and vegetarian women (Sobiecki et al. 2016)—select findings from this study are displayed below in Table 1.

The same study found that many of the vegan women did not get micronutrients from non-food sources, such as supplements. Only 49.9% of the vegan women took any supplement containing B12 and only 37.3% took a multivitamin (Sobiecki et al. 2016). On the other hand, another questionnaire based study of 5694 vegans estimated their intakes of key micronutrients to mostly be above the minimum requirements (Rizzo et al. 2013). Other research is more mixed: for instance a questionnaire based study of 231 vegans found that they consumed “sufficient amounts of calcium and phosphorus but not vitamin D” (Blanco and Enrione 2012).

It is worth noting some further limitations on the little research that does exist on the micronutritional status of vegans. A literature review article on vegan diets in pregnancy notes that problems such as small sample sizes, heterogenous outcomes of trials, differences in the design of trials, and differing stipulations of adequate micronutrient levels, prevented a pooling of the data (Piccoli et al. 2015, 627). Occasional reliance on self-identified dietary status is another limitation, with one report finding that “two-thirds of those who identified themselves as vegetarians reported consuming meat, fish, or poultry” on some occasions (Haddad and Tanzman 2003),

and another study finding that "vegetarian men reported lower consumption of sausages, burgers, meat pies, meat, poultry, liver and white fish than omnivores, but were just as likely to have consumed some oily fish and shellfish" (Hibbeln et al. 2018, 15). Other limitations are that the average length of adherence to a vegan diet—for instance a Swiss study of 53 vegans found the mean length of adherence to be 3 years (Schüpbach et al. 2017, 286), and the prevalence of studies that are cross-sectional as opposed to longitudinal (Schürmann et al. 2017, 1799).

Explaining Actual Practice

Research into the psycho-social explanations of the higher levels of micronutrient deficiency that are reported in vegan adults is absent. Such research would be helpful in trying to ascertain how remediable these micronutrient deficiencies are. No doubt there are many factors at play. One factor might be a straightforward lack of knowledge. However, the risk of B12 deficiency among vegetarians and vegans has been known to nutritional scientists for 50 or 60 years (Armstrong et al. 1974; Banerjee and Chatterjea 1960). Likewise, the websites of organizations like PETA and the Vegan Society emphasize the importance of B12 and other micronutrients (PETA 2018; The Vegan Society 2018). Further, vegetarians and vegans tend on average to be young and educated (Richter et al. 2016) and report often being quizzed on the nutritional feasibility of their diet by family, friends, and strangers (Lerette 2014, 33, 35, 37). It is therefore unlikely that the primary factor is a straightforward lack of knowledge, which it seems could be easily remedied with public information campaigns.

Another factor might be motivational. Both omnivores and vegans must take steps to avoid a diet of delicious but nutritionally worthless snacks, fried potatoes, and sugary drinks—foods of the "Standard American Diet." But putting this gustatory issue aside, it seems that veganism is more burdensome than omnivorism with respect to planning a sufficient supply of micronutrients. Given that meat and fish are complete proteins and generally very rich in micronutrients (Manuela et al. 2013; Nohr and Biesalski 2007; Tacon and Metian 2013), as is cow's milk (Pereira 2014), it seems that omnivores have less cause to remember which foods have which micronutrients and to make sure to eat enough of them, whereas vegans do, e.g. that soybeans are rich in iron, but that cabbage is not, that kale is rich in calcium but that Brussels sprouts are not, that cranberries and sea vegetables are among the few iodine rich vegan foods. Likewise, it seems that omnivores do not have quite the same need to cultivate a habit of taking B12 and other supplements, whereas vegans do. This is not to assert that omnivores do not suffer from micronutrient deficiencies. Indeed, micronutrient deficiencies are ubiquitous in developing countries, and are a problem in developed countries where they are strongly linked to disparities in diet associated with class-based differences such as income and educational level (Novaković et al. 2014). Rather, it seems that, *ceteris paribus*, omnivorism is less burdensome than veganism with regards to ensuring micronutrition. If someone were planning a diet and had only the desiderata of health, minimal cognitive load, and minimal planning, their diet would not end up being vegan. It would therefore

not be a surprise if some vegans neglected to properly plan their diets even when they are aware of the potential for micronutrient deficiency.

Lastly, Roman Pawlak notes that "recommending taking B12 supplements may meet opposition among vegetarians because misconceptions regarding this nutrient are prevalent. Many individuals still hold on to the old myth that deficiency of this vitamin is rare" (Pawlak et al. 2015, 21). As a piece of speculation based on personal anecdote as to why this might be the case, I suggest that this could be an instance of the extremely widespread and powerful bias toward belief in a just-world (Lerner 1980). To the ethical vegan, morality seems to require abstinence from animal products. It must therefore be the case that abstinence from animal products is healthy. It cannot be that moral considerations would favor our doing something potentially harmful to ourselves—morality and prudence must point in the same direction. This is a very human but unsupportable sort of inference, a confused twist on "ought implies can." It is illustrated vividly by the attempt of some vegans to feed their cats vegan diets (Rothgerber 2013; Solon 2018), a practice that seems extremely risky given the limited research on feline vegan nutrition (Knight and Leitsberger 2016).

Given the reported higher levels of micronutritional deficiencies in vegan adults and the possible explanations for these deficiencies, it is reasonable to believe that at least some children being raised on vegan diets also suffer from higher levels of micronutritional deficiencies and that these deficiencies pose some risk of harm to their physical well-being.

Raising a Child on a Vegan Diet Bears a Risk of Harm to Their Social Well-Being

Clearly, there is nothing necessarily harmful to a child's social well-being about a vegan diet. I will outline some risks of harm that contingently attach to raising a child on a vegan diet in contemporary society.

The key point is that "vegetarian" and "vegan" are not only descriptors of dietary patterns. Rather, they are also social identities that people attribute to themselves and have attributed to them by others (Jabs et al. 2000, 387; Rosenfeld and Burrow 2017). By eating a vegan diet, in particular on those occasions where their peers are eating animal products (a playdate, school lunches, etc.), children are likely to be identified as vegans by their peers and to identify themselves as such. To raise one's child on a vegan diet is therefore to raise "a vegan," and to saddle them with whatever baggage, positive or negative, that comes with this identity in their social milieu. I turn to outlining several sorts of harm to social well-being that often attach to being "a vegan."

Unwanted Social Interactions

Many vegan readers may be familiar with the non-malicious but nevertheless negative social interactions that vegans experience in a predominantly omnivorous society. Adam Reid describes the "mental whiplash" that results from endless questioning, probing, and receipt of unsolicited comments or criticisms, from family, friends, and strangers (Lerette 2014; Lindquist 2013; Reid 2017).

Such unwanted attention from their peers is potentially more difficult for children to navigate than it is for adults.

Negative Social Interactions

There is also the possibility of a child facing overt hostility or bullying from their peers for being a vegan. Being a victim of bullying can carry a wide range of serious negative consequences, many of which last into adulthood: poorer school performance, anxiety, depression, fewer friendships, lower income (Wolke and Lereya 2015, 883). Research about the extent of the bullying of vegan children in contemporary society is absent. Peta2 has a webpage discussing how to handle bullying and discrimination (Trahan 2015), as do other advocacy groups like Vegan Outreach (Green 2012). The best available proximate evidence, scant as it is, concerns adults. A recent dissertation reported semi-structured interviews with 11 adults. To varying degrees, 10 experienced negative reactions from friends and family upon their vegan status being discovered, such as being teased or called names (Lerette 2014). A study of 233 US-based vegans found that 66.5% reported some negative social treatment at least once, with 24.5% reporting decreased contact with a friend(s), and 7.3% a total cessation of contact with a friend(s) after their veganism being discovered (MacInnis and Hodson 2017, 736). Fitting with these reports, a study of 278 US-based omnivores found that "both vegetarians and vegans were evaluated equivalently to immigrants, asexuals, and atheists, and significantly more negatively than Blacks… vegans were evaluated more negatively than homosexuals. Strikingly, only drug addicts were evaluated more negatively than vegetarians and vegans" (MacInnis and Hodson 2017, 726).

These reports tally with popular depictions of vegans in the media. A study found that, of the articles published in the British press in 2007 that mentioned veganism, 22 were coded as positive and 295 were coded as negative, with veganism being a subject of ridicule, characterized as impossible to sustain, overly ascetic, or faddish, and vegans portrayed as hostile extremists or as emotionally oversensitive (Cole and Morgan 2011). Likewise, vegans are often perceived as effeminate (Ruby and Heine 2011; Thomas 2016).

Such hostility is perhaps explained as an instance of identity-based intergroup conflict (MacInnis and Hodson 2017, 722), as a reaction to the symbolic threat that vegans pose to dietary norms (MacInnis and Hodson 2017, 722), as a response to the sense of superiority that many perceive in vegan "do-gooders" (Minson and Monin 2012), or as an omnivore strategy for alleviating guilt about consuming meat (Rothgerber 2014, 39). On any of these theories, the task of ameliorating or the avoiding negative social treatment one's child might encounter seems difficult.

It seems reasonable to believe from this evidence that in many social settings the vegan child is *ceteris paribus* more likely to face bullying or other negative social interactions than the non-vegan child.

Disrupted or Averted Social Interactions

In omnivorous societies many cultural festivities (Christmas, Passover, Eid al-Adha, Halloween, birthdays) involve the consumption of food containing animal products. Similarly, wider kin and friendship circles tend to socialize at events centering on food consumption. A vegan child is by no means excluded from such events, but their participation does have to be facilitated in various ways, and often cannot be completely facilitated. The bowling alley where a friend's birthday party is being held may only be serving decidedly animal-based burgers and pizzas, or grandmother may forget to buy vegan "chocolate coins" for Christmas morning. Similarly, a tofurky seems destined to be a somewhat inferior substitute for a turkey in terms of its cultural and aesthetic cache (Ciocchetti 2012). The vegan child cannot freely and fully participate in many aspects of their cultural heritage or in various social activities.

Salient to this, a study found that of the vegan adults surveyed 33% felt some anxiety about revealing their veganism, 9.9% reported decreased contact, and 3% cessation of contact, with a family member(s) after revealing their veganism (MacInnis and Hodson 2017, 736), (see also Jabs et al. 2000, 384). It is easy to imagine the antipathy or irritation engendered by having to accommodate the "weird" dietary preferences of one's family, friends, or acquaintances. As one interviewee put it: "It's hard to be a guest at someone's house because you feel like you're putting them out. And it's hard for them because they don't know what to do" (Lindquist 2013, 14). Children and their parents, anticipating the awkwardness of various social engagements, may attend less of them, or may prefer to socialize with other vegans or vegan-friendly people, thus narrowing or altering their social circles. Anecdotally, many vegan blogs address these difficult aspects of vegan child-rearing, with one parent writing of birthday parties "I don't want them to always have to be the 'special kids' who bring their own snack" (Branchesi 2016) and another suggesting as a remedy "Make vegan friends… Don't ditch your omnivore friends (duh), but seek out the other vegan kiddos!" (Reeder 2018).

Self-Conception

Adult vegans develop ways of navigating their social status in every day circumstances. When invited to eat at a restaurant or at a friend's house they may take steps to avoid potential difficulties. They may decide to declare their status or prefer to keep it hidden. How they behave may depend on whether others are aware of their status as a vegan—Jabs et al. noted that one vegan respondent would "only eat non-vegetarian food when people were unaware of her dietary practices…[to]… not disrupt the social situation" (Jabs et al. 2000, 388). Another reported "If I don't know what the ingredients are, in a cookie or something, I won't ask. I'll just eat it." (Jabs et al. 2000, 385). What strategies vegan children might have to adopt to navigate their social status, and what effect having to develop such strategies has on their social well-being, is unclear. Further, as noted, children on vegan diets ought to be given supplements of B12 and other micronutrients and have their diets carefully planned. One might wonder whether these practices, which resemble medicalization,

affect children's self-conception. These differences coalesce with the more general consciousness of vegans that their behavior is counter-normative. This sense of being out of step with the norms of society at large is likely a significant source of negative feelings. As one interviewee explained "People that are in your life that you love in your life, that you love and respect are telling you there's something wrong with your mental process. I don't care how strong you are, you're gonna break under that" (Lerette 2014, 44). Similarly, children raised as ethical vegans may view their peers as being engaged in serious wrongdoing, a view which may be disorientating or confusing.

How this Evidence Supports (1a) and (1b)

I now clarify how the empirical evidence just presented supports (1a) and (1b), framing the discussion as a response to three objections.

The Evidence Presented is not Strong Enough to Establish (1a) or (1b)

One objection is that, since I have had to rely primarily on proximate evidence about the nutritional status and social status of vegan adults, one could reasonably doubt that (1a) or (1b) are true. I accept that the possibility remains open that although some vegan adults fail to ensure their own micronutrition, parental instincts or some further factor comes into play and vegan children are almost always raised on micronutritionally adequate diets. Similarly, it remains possible that though vegan adults face the risk of certain social difficulties, vegan children do not on account of some further factor. However, given the evidence I have presented I think that (1a) and (1b) are the more reasonable object of belief until a compelling account of what this further factor might be is presented. Moreover, the dearth of good evidence about the nutritional and social status of vegan children is part of what makes it reasonable to believe (1a) and (1b) if we understand risk in the epistemological sense to be relevant to a parent's moral reasoning.

(1a) and (1b) Are Only Contingently True, or not True for Everyone

I accept that (1a) and (1b) are only contingently true or are not true for everyone. In the future, fortification of staple crops with key micronutrients via genetic engineering may become more common (Hefferon 2015), or governments may take more aggressive steps to fortify commonly consumed plant-based foodstuffs with a wider range of micronutrients, or vegan foodways may develop in a direction that better addresses micronutritional concerns. Again, if the mockumentary *Carnage* is to be believed (Amstell 2017) then by the year 2067 non-vegans may find their social well-being at risk. Even at present some parents may be situated such as to largely avoid the relevant risks—perhaps vegan children in a prosperous Los Angeles suburb face no negative social treatment. Nevertheless, I take it that (1a) and (1b) obtain for many or most parents presently, and that taking into account those moral considerations that are generated by the contingencies of one's historical or individual situation is an important part

of moral reasoning. Those who prefer to can narrow the propositions of my argument in the relevant way: (1*) “Raising *some* children on a vegan diet bears a risk of harm to their well-being,” (3*) “*Some* parents have pro tanto moral reason to not raise their child on a vegan diet.”

The Evidence Adduced for (1a) and (1b) is not Salient to Me, Because I Can Take Steps to Minimize or Eliminate the Risk of Harm to the Child’s Physical or Social Well-Being

The objection here is that although (1a) and (1b) may be true for other people, they need not be true for oneself because one is able to eliminate the relevant risks by taking appropriate courses of action.

In response, I would suggest that unless one has grounds for treating oneself as a special case, for treating oneself as outside the class of “vegan parents who might fail,” (1a) and (1b) apply to oneself. Plausibly, few parents have good grounds for treating themselves as a special case.

Further, there is good reason to be skeptical of one’s sense that one is a special case. From an agential, first-person, point of view it is easy to imagine that one is a special case. One forms the intention to carefully plan and implement a nutritionally adequate vegan diet for one’s child, and it seems to be completely within one’s powers to carry out the intention. Just as it seems to be within one’s power to exercise regularly from this day forward, it seems to be within one’s power to prevent evening meals from turning into a slew of micronutrient-poor carbohydrate-heavy pasta dishes. The fact that other similarly situated people have failed seems irrelevant. But from a predictive, third-person, point of view one ought to realize that one has no grounds for supposing that one is better informed, committed, or organized than that portion of parents who may be failing to provide nutritionally adequate vegan diets for their children. One has no grounds for supposing that these parents do not also form firm intentions, or that they do not know the risks. For oneself as for others, raising a child on a vegan diet requires ascertaining considerable scientific knowledge about nutrition, considerable local knowledge about what one’s child is eating in the home and elsewhere, and considerable planning and will-power to ensure that one’s child is eating enough of the right things, as well as taking the right supplements. Long-term goals, goals that call for complex patterns of behavior, and goals that call upon practical wisdom seem vulnerable to what we might call agential optical illusions or failures in behavioral forecasting. The same seems true regarding avoiding harms to the child’s social well-being, believing that one will smoothly navigate the social problems that catch others out. In child-rearing as in marriage (“Surely *we* won’t divorce! We’ll *actually* try!”, “We’ll remember Sandy’s iodine, unlike those feckless college-educated Bostonian women!”), one should not treat oneself as a special case unless one has very compelling grounds for doing so (Kronqvist 2011; Moller 2003).

Parents have Pro Tanto Moral Reason to not Make Their Child Bear a Risk of Harm to Their Well-Being

I take it that (2) is uncontroversial. It is a claim that is commonsensical, as well as one that can be drawn quite readily from the predominant theories of parental responsibility: promoting the child's best interests (Buchanan and Brock 1990) or preserving their right to an open future (Feinberg 1980).

One clarification is that (2) is not a claim that rules out any action that would make the child bear a risk of harm to their well-being, but it does weigh against such an action—a countervailing reason is required to justify taking such an action. An argument from health regarding vegetarianism for children is discussed by Anna Sherratt. She formulates the normative claim of the argument as such: "A parent should not pursue any course of action that poses an avoidable risk to the health of her child" (Sherratt 2007). She rightly subjects this claim to a medley of counterexamples, such as letting the child ride a bicycle. (2) is immune to such counterexamples—whilst one has pro tanto moral reason to not let one's child ride a bicycle out of concern for their health, one usually has much weightier pro tanto moral reasons to let them do so, such as concern for the development of their autonomy, their *joie de vivre,* etc.

An apparent complication in relation to (1b) is that the risk of harm to the child seems due to the wrongdoing of third-parties. One might claim that non-vegans ought to become vegans, or that society ought to adapt itself to maximize the inclusion of vegans, that vegan children ought not to be bullied, and so forth. These claims strike me as reasonable, but do not address how parents should act under non-ideal conditions. Many harms to social well-being involve the wrongdoing of someone or other: ill-will, culpable ignorance, or inattention, from individuals or institutions. For parents to act as if the harms that result from these factors were none of their concern would permit unrecognizably odd parenting practices.

I also note that there are normative asymmetries between the harms one imposes on oneself and those one imposes on another, the upshot being that in most cases adults cannot cite the sort of harms outlined in (1) as moral reasons for them not to be vegan. Typically, we allow that there are many moral reasons conforming to which may require that one accept a harm or risk of harm to one's own well-being, but that conforming to these same moral reasons may not require that one impose a harm or risk of harm to another's well-being. For instance, you and I may both have moral reason to prevent the thief from robbing the store and yet conformity to this moral reason does not require me to press-gang you into confronting the thief. Similarly, at many margins the prospect of imposing harms on oneself for the sake of a moral reason only generates a countervailing prudential reason, whereas the prospect of imposing harms on others for the sake of moral reasons seems to almost always generate countervailing moral reasons. These asymmetries plausibly both apply to our topic, such that the risks to physical and social well-being that a vegan diet may bear to the ordinary adult who imposes them on himself or herself do not given rise to countervailing moral reasons.

With the discussion of (1) and (2) completed, I take it that we have established (3) "parents have pro tanto moral reason to not raise their child on a vegan diet."

Moral Frameworks for Veganism and (4)

I turn now to arguing for (4): "This pro tanto moral reason is plausibly as strong as the pro tanto moral reason some vegan parents have, given their preferred moral framework, to raise their child on a vegan diet." I note that this claim is relatively modest. It does not claim that *all* vegan parents *should* find that (3) is as strong as the moral reason that their preferred moral framework provides for raising their child on a vegan diet. Nor does it claim that (3) is *stronger* than this reason. Nor does it claim that (3) is *obviously* as strong than this reason or that (3) being as strong as this reason is the *only reasonable position* to take on this question—only that (3) is *plausibly* as strong. I argue for (4) with two separate arguments, the *Argument from Underdetermination* and *the Argument from Simple Principles*.

I emphasize again that regarding (4) I am not taking a stand on which moral framework that provides moral reason for being vegan is true, if any. I am not arguing about what moral reason these parents have "objectively" given the true moral framework, nor discussing simply what moral reason these parents in fact take themselves to have from their own "subjective" point of view, but the intermediate question of what moral reasons they should take themselves to have given their preferred moral framework for understanding the moral reasons for veganism.

The Argument from Underdetermination

There are numerous moral frameworks that have been used to argue for veganism. Non-exhaustively, one can find such frameworks that are: utilitarian (Singer 1989), virtue-ethical (Alvaro 2017), care-based (Engster 2006), relationship-based (Diamond 1978), rights-based (Regan 1983), justice-based (Rowlands 2002), or even aesthetic (Holdier 2016). The argument from moral underdetermination proceeds from two claims.

(i) for one of these moral frameworks to yield moral reason that the person committed to it act in a particular way, the person must employ it in concert with various other philosophical and empirical claims.

(i) is a twist on the Duhem-Quine problem from the philosophy of science applied to moral reasoning (Stanford 2017). Clearly, some of these philosophical or empirical claims are obviously or trivially true or tend to be granted by most people (e.g. "Solipsism is false"), but others are not. Rather:

(ii) in many cases a person's other philosophical and empirical claims are such that they help yield moral reason that they act in a particular way that is consonant with (4).

The moral reasons yielded might be consonant with (4) simply because they turn out to be weaker than (3), or because the moral framework in question fails to generate any moral reasons for raising one's child on a vegan diet given some further philosophical claim—this latter result is what I will suggest happens in the case of Regan's moral framework.

As an example to illustrate both (i) and (ii), consider Peter Singer's utilitarian framework. Weighty moral reason to be vegan or to raise one's child as a vegan does not follow directly from Singer's utilitarian framework—auxiliary philosophical and empirical claims are necessary to reach such conclusions. For instance, for it to provide significant moral reason against the hunting of wild animals one would have to take a view on the claim that since animals do not desire in the requisite way to not die then their deaths are not misfortunes for them (Cigman 1981) or frustrations of their preferences. Similarly, for Singer's framework to yield moral reason to be vegan or raise one's child as a vegan one would have to take a view on several contentious empirical claims. For instance, some have argued that the disutility involved in plant agriculture is in many cases greater than the disutility involved in animal agriculture [due to use of insecticides, mice killed by combine-harvesters, etc. (Davis 2003; Fischer and Lamey 2018)]. Others have argued that an individual abstaining from animal products is not causally efficacious as a means of decreasing animal suffering (Davies 2016). Other have argued that such a framework should take into account the gustatory pleasure that human's derive from animal products (Lomasky 2013). Others might claim that highly humane farming methods actually maximize utility, given that the sorts of animals in question would perhaps no longer exist at all but for our use of them. Singer's utilitarian framework has been criticized by other vegan philosophers for failing to rule out many practices that they take to be intuitively wrong, precisely because when it is applied in concert with these empirical claims it seems to yield a constellation of moral reasons that do not favor adherence to a completely vegan lifestyle (Regan 1980, 308–11). For my present purposes these criticisms are a helpful way of establishing that (i) and (ii) apply to Singer's framework—by itself, Singer's framework underdetermines veganism as the only permissible or the most moral diet.

Some parents who are committed to Singer's utilitarian framework for the justification of their veganism should find that, when employed in concert with their other philosophical commitments and empirical beliefs, the framework yields that result that for them veganism is the only permissible or the most moral diet. Yet—and this is the upshot—these same parents, continuing to be committed to Singer's utilitarian framework, should recognize that things are different in their child's case due to the addition of the pro tanto moral reasons comprised under (3), such that a vegan diet for their child would not be the only permissible or the most moral diet.

The argument from moral underdetermination seems to *prima facie* generalize quite well to the other moral frameworks listed above, though I cannot show that it does in detail here. Singer's utilitarianism is a framework about which it is relatively easy to see how it can be responsive to various empirical beliefs and sum various pro tanto moral reasons and so yield different moral reasons for differently situated people, or between the case of one's own diet and the diet of one's child. The *prima facie* hardest case for the argument from moral underdetermination seems to

be Regan's deontological framework, so I focus a little longer on showing that (i) and (ii) apply to this case. I do so by arguing that, employed in concert with widely shared understandings of parental authority and animal guardianship, Regan's deontological framework plausibly does not provide strong moral reason to raise one's child as a vegan.

Regan's Deontological Framework

Regan's view is that subjects-of-a-life (meaning roughly all beings with desires, goals, and a sense of the future) have a *prima facie* right not to be harmed (Regan 1983, 243). Within the class of subjects-of-a-life, Regan distinguishes moral agents and moral patients. Only moral agents, such as an ordinary adult human being, can violate rights. Moral patients, such as a cat or a snake, cannot violate the right of a subject-of-a-life not to be harmed, because they cannot guide their own behavior by formulating, deliberating over, and acting on moral principles (Regan 1983, 152). Morally speaking, the behavior of moral patients is like a natural process against which no subject-of-a-life could aptly complain of a rights-violations. Regan suggests that we have a duty to assist victims of injustice (Regan 1983, 249), but not the mere victims of misfortune—this is why moral agents need not adopt a policy of preventing moral patients, such as wild animals, from killing one another.

Regan notes that "human infants, young children… are paradigm cases of human moral patients" (Regan 1983, 152) and that "companion animals are in some ways like permanent children" (Bailey 2011). Therefore, whilst human children can surely have virtuous or vicious temperaments in the way that dogs or chimpanzees can, it seems that Regan is committed to saying that because children are moral patients they cannot violate the right of an animal not to be harmed. So, in a *Lord of the Flies* type situation a child would not violate the right of a pig not to be harmed if the child killed the pig (even if other food sources were available for the child). If this is the case then it seems, a fortiori, that it is not wrong for a child in such a situation to eat animal products.

An interlocutor might observe that even if this is true of children in a *Lord of the Flies* situation, children typically live under parental authority. Parental authority can be roughly characterized as a parent having a defeasible right to determine (within certain limits) what will be forbidden, permissible, and obligatory for the child. The interlocutor might claim that once a child is under a parent's authority the parent ought to forbid the child from killing animals, and likewise forbid them from eating animal products. The interlocutor might argue that the authority of the parent over the child is a special case of a moral agent being responsible for the behavior of a moral patient, meaning that the parent has a special duty to prevent their child from killing animals, differing from the normal cases in which moral agents do not have a duty to prevent moral patients from killing one another.

I agree with the interlocutor's characterization of parental authority, which I take to be mainstream (Archard 2004, 77–84). However, I deny that this view of parental authority, in concert with Regan's views on animal rights, yields the result that parents have a special duty to prevent their child from killing animals. Rather, as an instance of points (i) and (ii), Regan's moral framework does not by itself yield the

result that parents have reason to raise their child on a vegan diet, as becomes clear once we turn to thinking about how parental authority ought to be exercised.

Parents may forbid, permit, and obligate their child to behave in certain ways. Our first question is whether a parent would do anything wrong by not forbidding their child from killing an animal. Whatever our own intuitions about this question, it seems that on Regan's view, if *ex hypothesi* children cannot violate the right of an animal not to be harmed, then there is no reason based in respect for the animal's rights for the parent to forbid the child from killing it. It seems that respect for rights cannot impose a requirement that someone act to prevent behavior that does not violate rights.[1] This becomes clearer when we consider the analogy between the parent–child relationship and the guardian-pet relationship. Domestic pets live under the authority of guardians in a way that resembles the authority of parents over children. One obvious difference is that guardians cannot give commands to the reasoning faculties of pets in the way that parents often can to children. Nevertheless, guardians have a defeasible right to determine (within certain limits) what the pet will be prevented ("forbidden"), allowed ("permitted"), or made ("obligated") to do. Here, I take it as intuitive that the guardian of a cat does not violate the rights of mice not to be harmed by not preventing their cat from going outside and hunting mice. Therefore, by analogy, a parent would do nothing wrong by not preventing their child from killing an animal. We might draw an even wider analogy between the parent–child relation and the relation between the institutions of a (post-)agrarian society and much of its "wild" fauna. Plausibly, foresters, farmers, and various other stewards of the land have certain sorts of authority over the environment and its animal inhabitants, but do not seem to have any rights-based reason to prevent various animals from killing one another. In all such cases, a moral patient is not prevented from posing an innocent threat to another moral patient, a mere misfortune for the latter—the addition of the fact that the former moral patient lives under the parental authority or guardianship of a moral agent does not seem to change this.

The second question is whether a parent would do anything wrong by giving their child permission to kill an animal. It would seem strange to say that it is wrong for a parent to permit a child to do something that it is not wrong for the child to do—so if *ex hypothesi* it is not wrong for a child to kill an animal then it is not wrong for a parent to permit them to do this. If the child had done so prior to receiving their parent's permission, no wrong would have been done. The question then becomes whether the parent has themselves violated the animal's right not to be harmed by granting the child this permission. In a causal sense it seems to be the case that a

[1] Readers may be objecting that, if this is the case, then a parent also has no rights-based reason not to forbid their child from killing another human being and so forth. This is an objection that originates in Regan's claim that we only have a duty to help prevent rights-violations and only a duty to assist victims of injustice, rather than there being a duty of justice to help protect life, property, and so forth. This a claim he formulates to avoid the implication that we must prevent animals from killing one another. As a non-Reganite, I am not attempting to defend Regan's claim from counterexamples. The counterintuitive results that might be alleged against this application of Regan's framework are problems that originate in Regan's framework and are already noted and contested, though seemingly not resolved, in the literature (Jamieson 1990; Ebert and Machan 2012; Milburn 2015).

parental permission to kill can lead to an animal's death. Similarly, a parental permission to kill might be intended to lead to an animal's death. But neither of these are themselves tantamount to a violation of the animal's right not to be harmed. To see that this is so, consider another analogy. Assume that a child's being mildly spanked by their parent does not violate their right not to be harmed, but that being spanked by anyone else would. Now, suppose that the state permits parents to mildly spank their children, which has the causal effect, and is intended to have the effect, of parents mildly spanking their children more frequently. It would seem inapt to say that the state itself has violated children's rights not to be harmed by giving parents this permission, as if states were somehow themselves mildly spanking the children. In both cases, to give permission to someone under one's authority that they be allowed to do what it is otherwise not wrong for them to do seems permissible. Again, by analogy, the guardian of a cat does nothing wrong by allowing it to hunt mice.

The third question seems to be whether a parent would do anything wrong by making it obligatory for their child to kill an animal. One might conceivably give the same answer as before, that it cannot be wrong for a parent to make a child do something that it is not wrong for the child to do. However, it seems that here the parent is aptly described as the killer of the animal as much or more than the child is. Here, a moral agent has not merely neglected to prevent an animal's being killed but in effect killed it via manipulation of their child's immature faculties. So, this would be a case of violating the animal's right not to be harmed. By analogy, this seems like the case of hunting with hounds, where hounds are not merely left to their own devices but corralled toward killing other animals—an activity which is much more morally controversial than keeping a cat even though a domestic cat typically kills many more mice and birds than a hound kills foxes (Loss et al. 2013).

However, for Regan the right of subjects-of-a-life not to be harmed is a *prima facie* right, meaning it can be overridden by other considerations, meaning that it is not always wrong for a moral agent to intentionally violate it. Regan mentions our "special moral relation to friends and family" (Regan 1983, 316) as creating special duties that allow us to, to some degree, "make a stranger worse-off" (Regan 1983, 317) to protect a loved one from a lesser harm. Though Regan notes that this special duty cannot hold where the harms faced are extremely disproportionate, it is worth noting that since he holds a deprivationist account of the badness of death, and given the less rich mental life of animals (Regan 1983, 324), it could be argued that intentionally violating an animal's right not to be harmed for the sake of (3) is sometime permissible. Similarly, Regan formulates a liberty principle on which "any innocent individual has the right to act to avoid being made worse-off even if doing so harms other innocents" (Regan 1983, 331). Though Regan rejects the empirical claim that meat is necessary for human nutrition, he does note that "if we were certain to ruin our health by being vegetarians, or run a serious risk of doing so… [we might]… appeal to the liberty principle as a basis for eating meat" (Regan 1983, 337). In the case of the child we have not only the risk of harm to physical well-being to consider, but also the risk of harm to social well-being. It seems then that, even on Regan's framework, there is a plausible case to be made for the permissibility of parents buying the remains of subjects-of-a-life on their child's behalf

and feeding them to the child where doing so avoids making the child worse off. This sounds very odd, but again by analogy it seems permissible for guardians to do so on behalf of their cat, or for workers at an animal rescue center to do so on behalf of their obligate carnivore wards. So, these considerations plausibly suggest the permissibility of parent's allowing their children to decide what to eat at school or on social occasions such as birthday parties and feeding their child some animal products for the good of their health.

I note that the moral patient/moral agent distinction is plausibly scalar, since children slowly develop from the one to the other. As a child develops, it becomes more and more plausible to say that on Regan's view their killing or eating of animals is a rights-violation. But, likewise, it is widely held that the authority of parents diminishes in tandem with the child's development (Archard 2004, 77–84). This means that, for instance, it is plausibly not up to a parent to decide whether their 15-year-old eats meat or not. So far as the child is a moral patient the parent need not forbid, so far as the child is a moral agent the parent ought not forbid.

In sum, even on the seemingly most restrictive moral framework that has been used to argue for veganism it seems there is a case to be made for (4) once we take into account how this framework works in concert with philosophical claims about parental authority. It turns out that, plausibly, parents have little or no reason on Regan's view to make sure that their moral patient children do not harm animals. From (3) and (4) we get (5) "these parents may plausibly find it morally permissible to raise their child on a non-vegan diet.

The Argument from Simple Principles

Many vegans are non-philosophers. This means that in many cases they have no elaborate philosophical framework, such as Regan's, from which they derive moral reasons for being vegan. Rather, they might be committed to simple moral principles, and some of these moral principles could be quite amenable to (4). For instance, after quizzing from a vexatious friend, a vegan non-philosopher might commonsensically distinguish the intuitively impermissible case of eating veal and the intuitively permissible case of baiting an infestation of cockroaches by offering rough principles of this sort:

R1 "Do not harm or kill animals, except when necessary".
R2 "Do not harm or kill animals, unless refraining from doing so causes you or yours a significant harm".
R3 "Do not harm or kill animals for the sake of trivial pleasures, such as the gustatory".
R4 "Do not harm or kill animals, unless they pose some harm to you".

Though it is difficult to adduce sociological evidence, I think that many vegan non-philosophers in fact do rest their veganism on principles or rules-of-thumb like R1-4. Further, many such principles, such as R1-3, do not seem to generate moral reasons against feeding one's child animal products on account of (3), since (3)

outlines something "necessary" and a "significant harm" and at any rate is not concerned with "trivial pleasures." If this is right, then a very large proportion of vegan parents should find that (4) is true of themselves.

Vegan philosophers would no doubt demand some precisification of these principles or offer some counterexamples or integrate them into some larger moral framework. Were vegan non-philosophers to engage in a process of philosophizing they might find that principles like R1–4 were inadequate. They might find that to justify the intuitive impermissibility of eating veal they must revise their intuitions about baiting cockroaches. But this is just to say that through the process of philosophizing such people would change the configuration of moral reasons that they are committed to—ex ante, they held principles that were quite amenable to (4).

Conclusion

In this paper I have not argued for any specific dietary regimen for children, or taken a stand on which, if any, moral framework for approaching the question of veganism is correct. I have argued that parents have a significant pro tanto moral reason not to raise their child on a vegan diet due to the risk of harm that such a diet poses to the child's physical and social well-being, and I have also argued that going by the moral frameworks that many vegan parents are committed to they may plausibly conclude that it is morally permissible to raise their child on a non-vegan diet. What this non-vegan diet might look like is bound to vary tremendously depending on the parent's moral framework. Plausibly, taking (3) into account does not mean that one may feed one's child a diet rich in veal. Impressionistically, taking the concerns of (1a) into account might mean feeding the child meat or fish a few times a week, and taking the concerns of (1b) into account might mean letting them choose what to eat at school or when visiting a friend's house.

I note that the discussion I have offered here is by no means a complete discussion of children's dietary ethics—there are further factors to consider that may undermine or further support the conclusion, (5), that these parents may plausibly find it morally permissible to raise their child on a non-vegan diet. Perhaps raising a child on a vegan diet has the benefit of making them more likely to follow a vegan diet when they are an adult. Perhaps the concerns outlined under (1a) and (1b) are offset by the empirical claim that veganism leads to lower all-cause mortality in adults (Le and Sabaté 2014), a claim that is contested in the literature (Appleby and Key 2016). Perhaps although departure from veganism is justified in principle, in practice veganism for one's children may remain the best policy if the practicalities of avoiding animal products produced through extreme cruelty outweigh the difficulties and risks of planning a vegan diet carefully. On the other hand, there are other factors that may make (5) more plausible. Perhaps vegan and omnivore co-parents have strong reason to compromise with one another over their child's diet. Perhaps there is something in the nature of the child's relationship with their grandparents, cousins, friends, hosts, and other social relations, which provides a reason not grounded in the child's social well-being per se to let them eat animal products at certain social events.

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