

# 1           **Plant-based Food in the Hospitality Industry:** 2           **An Exploratory Case Study of Leading Fast Food** 3           **Outlets**

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5           *Plant-based food is one of the growing sectors within the food industry, and*  
6           *fast food companies may have an important role to play in driving the trial*  
7           *and consumption of plant-based foods. This exploratory paper reviews the*  
8           *growth of plant-based foods, explores how the leading fast food companies*  
9           *are incorporating plant-based foods into their menus, and offers some wider*  
10           *reflections on the fast food companies' approach to plant-based food. The*  
11           *findings reveal that the leading fast food companies within the UK were*  
12           *promoting their plant-based menu items at both the corporate and outlet*  
13           *level. That said, the fast food companies made no attempt to associate the*  
14           *introduction of plant-based menu items with a healthier diet, and the author*  
15           *suggested that substantially increasing their plant-based menus could provide a*  
16           *challenge to the fast food companies' traditional business models. More*  
17           *generally, the paper concluded that in the medium-term future, the fast food*  
18           *companies are likely to play a limited, rather than a leading, role in driving*  
19           *plant-based consumption across society, in contributing to a more*  
20           *sustainable future.*

## 21 22 23           **Introduction**

24  
25           Plant-based food is one of the growing sectors within the food industry.  
26           Deloitte (2019), for, example, argued, '*gone are the days when plant-based*  
27           *alternative products were for the niche consumer and warranted limited shelf*  
28           *space'*, that the '*global meat and dairy sector is currently going through an*  
29           *unprecedented level of competition and disruption, driven by the growth of*  
30           *viable plant-based alternatives across many categories'*, and that '*companies*  
31           *across the spectrum are now investing heavily in acquiring and creating new*  
32           *products and brands which will appeal to the surging consumer demand for*  
33           *plant-based products.'* A number of factors are responsible for the growth in  
34           the plant-based food market, including human health considerations, animal  
35           welfare issues and environmental concerns.

36           Bloomberg Intelligence (2021) argued that '*restaurants and other food*  
37           *service companies will play a critical role in driving long-term trial and*  
38           *consumption of plant-based products.'* More specifically, Deloitte (2019)  
39           reported '*many restaurants, casual dining venues, and fast food chains now*  
40           *have dedicated meat free sections to their menu, as the popularity of a vegan*  
41           *or indeed flexitarian diet continues to increase.'* With this in mind, this short  
42           exploratory paper reviews the growth of plant-based foods, explores how the  
43           leading fast food companies are incorporating plant-based foods into their  
44           menus and offers some wider reflections on the fast food companies' approach  
45           to plant-based food.

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## 1 **Plant-Based Food**

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3 The term plant-based was coined in 1980, by Colin Campbell, a medical  
4 research scientist, who was looking for *'a word that had the same dietary*  
5 *connotations of the word vegan, without the animal advocacy associations'*  
6 (Root the Future 2020). Plant-based foods are generally classified into fruits,  
7 vegetables, legumes, grains, nuts and seeds. However, defining plant-based  
8 food is not straightforward and, in some ways, consumers' understandings of  
9 the meaning of the term are evolving. The British Standards Institute (2020)  
10 suggested that *'many foods are labelled as 100% plant-based without a*  
11 *consensus on how that label should be used.'*

12 In looking to answer the question *'What does plant-based mean?'*, Clark  
13 (2022), writing under the banner of the Plant-Based Network, suggested *'it is*  
14 *having a focus on consuming foods that come from plants and other natural*  
15 *sources. It does not necessarily mean abstaining from meat or dairy entirely,*  
16 *but it does prioritize eating plants as the main source of nutrients and energy.*  
17 *It also encourages eating as little meat as possible, ideally no meat at all,*  
18 *although that is not mandatory.'* In an attempt *'to enable consumers to make*  
19 *informed choices'*, the British Institute (2020a) claimed to have established  
20 *'clear and simple criteria to define 100% plant-based food.'* Here the key  
21 components are that 100% plant-based foods *'contain no ingredients from*  
22 *animals'*, but that they can contain *'ingredients of neither plant nor animal*  
23 *origin, such as water or salt'*, and that the term applies *'solely to ingredients,*  
24 *and not to production and/or manufacturing processes'* (British Standards  
25 Institute 2020b).

26 The term plant-based is often used in association with the terms,  
27 vegetarian and vegan. While there is no single accepted definition of the term  
28 vegetarian, it is usually used to describe a person who does not eat meat,  
29 poultry, fish or shellfish, or any of the by-products of animal slaughter, while  
30 lacto-ovo-vegetarians include dairy products and eggs in their diet. A vegan  
31 does not eat any products of animal origin, so does not eat any dairy products,  
32 eggs or honey, as well as avoiding animal-derived materials such as gelatine or  
33 vitamin D3 supplements, if they are derived from an animal source such as  
34 sheep's wool. The term flexitarian has been used to describe people who still  
35 consume meat and dairy products but are looking to reduce their consumption  
36 levels.

37 At the same time, for Ostfeld (2017) *'a plant-based diet consists of all*  
38 *minimally processed fruits, vegetables, whole grains, legumes, nuts and seeds,*  
39 *herbs, and spices and excludes all animal products, including red meat,*  
40 *poultry, fish, eggs, and dairy products/'* Jaske et al. (2019) suggested that *'the*  
41 *concept of a plant-based diet can have various definitions in the scientific*  
42 *literature; from excluding all animal source foods to including only a greater*  
43 *intake of vegetables, fruit, fruit juices, cereals, and legumes, while also*  
44 *preserving the intake of fish, pork, and yoghurt.'* For the British Nutrition  
45 Foundation (2019) *'plant-based diets are dietary patterns that have a greater*  
46 *emphasis on foods derived from plants'*, while Harvard Health (2022)

1 suggested that *'plant-based or plant-forward eating patterns focus on foods*  
2 *primarily from plants'*, but that *'doesn't mean that you are vegetarian or vegan*  
3 *and never eat meat or dairy.....rather, you are proportionately choosing more*  
4 *of your foods from plant sources.'*

5 While recent years have witnessed an increase in the availability, and the  
6 popularity, of plant-based food, it is not a new phenomenon. Indeed, plant-  
7 based diets are traced back before recorded history, in that early humans ate an  
8 exclusively plant-based diet before they began to hunt, transport and prepare  
9 animals for consumption. Some commentators have linked respect for all  
10 animal life to many early cultures and religions. Clark (2021), for example,  
11 identified *'plant -based living'* as a characteristic of Jainism as practised in  
12 India some 2, 500 years ago and also linked it to Hinduism, Taoism and  
13 Buddhism during the same time period. In more modern times a number of  
14 vegetarian societies were formed in the UK in the nineteenth century and since  
15 then their underlying goal has been to promote abstaining from meat and from  
16 the by-products of animal slaughter.

17 While it is difficult to measure the total size of the market for plant-based  
18 food a number of estimates suggest that it is growing rapidly. Bloomberg  
19 Intelligence (2021), for example, reported that global sales of plant based dairy  
20 and meat alternatives reached \$29.4 billion in 2020, and that the market could  
21 increase to \$162 billion by 2030. Putting this figure into wider perspective, this  
22 will constitute only 5% of the total food market. The Good Food Institute  
23 (2022) reported that sales of plant-based products in the US, grew by over 25%  
24 in 2020-2021 to some \$7 billion, and that in 2020 plant-based food sales grew  
25 twice as fast as overall food sales. Within Europe, Statista (2021a) reported that  
26 during the period October 2019 to September 2020, sales of plant-based meat  
27 substitutes grew by 76% in Germany, 52% in Austria, 36% in the UK and 32%  
28 in Spain, though the corresponding figures for France and Italy were much  
29 lower at 9% and 1% respectively.

30 A number of forces are seen to important in driving this market growth.  
31 Human health and well-being and more specifically, the growing importance of  
32 the *'health conscious consumer'* Deloitte (2019), are seen as one of the major  
33 drivers. Here the growth of plant-based foods reflects growing concerns that  
34 the regular presence of red meat and processed meat in diets poses major health  
35 risks. Richi et al. (2015), for example, argued that evidence from the US and  
36 Europe, indicated that *'the long-term consumption of increasing amounts of*  
37 *red meat and particularly of processed meat is associated with an increased*  
38 *risk of total mortality, cardiovascular disease, colorectal cancer and type 2*  
39 *diabetes, in both men and women.'* More generally, plant-based diets are seen  
40 to assist in weight management and in promoting better overall health.

41 Growing concerns about animal welfare are also driving the growth of the  
42 plant-based food market. Essentially, the concept of animal welfare is  
43 concerned with how an animal is coping with the conditions in which it lives,  
44 and it is generally seen to include three elements, namely, an animals' normal  
45 biological functioning, its emotional state, and its ability to express normal  
46 behaviours. While animal welfare embraces a wide range of themes, including

1 care for domestic pets, the exploitation of animals for commercial purposes,  
 2 and animal experimentation in science and medical laboratories, it is the ways  
 3 animals are treated in modern intensive agricultural production systems, that is  
 4 the major issue driving growing consumer interest in plant-based foods. In  
 5 addressing modern agricultural practices, Clark et al. (2016), for example,  
 6 identified some of the damaging impacts of increased productivity on the  
 7 welfare of farm animals and highlighted public concerns about such impacts.  
 8 The Humane Society International (2022) claimed that *'more than 80 billion*  
 9 *land animals are killed for food globally every year - often enduring*  
 10 *unfulfilling lives of suffering - plus an untold number of aquatic animals.'*

11 A range of environmental concerns about meat and poultry production, are  
 12 also seen to be important driving the increasing popularity of plant-based food.  
 13 These concerns include the pollution of watercourses, deforestation, the loss of  
 14 biodiversity, soil degradation, and greenhouse gas emissions, and ultimately  
 15 many of these factors are seen to be contributing to climate change. Meat  
 16 production causes greenhouse gas emissions, for example, through the release  
 17 of methane as animals digest food, through the decay of animal manure,  
 18 through nitrogen-based fertiliser use, and through the deforestation to enable  
 19 cattle farming. Ritchie and Roser (2021), for example, reported that beef herds  
 20 are responsible for producing 99.48 kilograms of greenhouse gas emissions per  
 21 kilogram of food product, with the corresponding figures for lamb and mutton,  
 22 dairy herds, pig meat and poultry meat being 39.77, 33.3, 12.31, and 9.87  
 23 kilograms respectively. At the same time, the corresponding figures for  
 24 potatoes, bananas, peas, and rice are 0.46, 0.86, 0.98, and 4.45 kilograms  
 25 respectively.

26 Widening both the range of ingredients and the product range of plant-  
 27 based foods has also served to drive their market growth, and has offered  
 28 consumers more choice and new flavours. Soy, oat coconut, almond rice, and  
 29 hemp, for example, have been used to produce milk alternatives. At the same  
 30 time, Bloomberg Intelligence (2021) suggested that *'restaurants are an easy*  
 31 *venue to try a plant-based meat or dairy product and can influence shopping*  
 32 *for at-home consumption.'* More specifically, Bloomberg Intelligence (2021)  
 33 argued that *'large restaurant chains, including Starbucks, Burger King, Del*  
 34 *Taco and Taco Bell have played a critical role in advertising menu items and*  
 35 *driving customer interest and trial sales'*, and in exploring *'how the plant-*  
 36 *based trend found its roots in fast food'*, Volmer (2020) claimed that *'as fast*  
 37 *food brands capitalize on the growth of plant-based diets, they have the scale*  
 38 *to take a growing movement mainstream.'*

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#### 41 **Cameo Literature Review**

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43 The hospitality industry's impact on society, the economy and the physical  
 44 environment in which it operates continues to attract considerable attention  
 45 within the academic literature (e.g. Sloan et al. 2016; Jones, Hillier and  
 46 Comfort 2016; Parsa and Narapareddy 2021). While research in this genre has

1 addressed an extensive range of themes, work on plant-based food in the  
2 hospitality industry, and more specifically in the fast food sector, has been  
3 limited. With that in mind this cameo literature review outlines this limited  
4 work and also illustrates some of the literature on the impact of fast food on  
5 both human and animal welfare, and the role of plant-based food in the  
6 transition to a more sustainable future, which all seem to be relevant to the  
7 current study. As such this review provides an academic context and a set of  
8 reference for the paper.

9 Very little research has been published on plant-based food in the fast food  
10 sector of the hospitality industry, but two papers merit attention. Larson (2020),  
11 provided a case study of the Plant Power Fast Food company, '*a 100% plant-*  
12 *based brand*', founded in San Diego in 2016, which had seven restaurants and  
13 a mobile truck operation four years later. The company's vision statement  
14 emphasised that '*by demonstrating the viability of a plant-based, cruelty free,*  
15 *environmentally sustainable and healthier alternative in the fast-food*  
16 *restaurant format, we seek to expose millions of consumers to convenient and*  
17 *delicious plant-based meals*' (Larson 2020). Looking to the future, Larson  
18 (2020) argued that the company will continue to change the landscape of the  
19 fast food industry, but recognised that as the company continues to expand it  
20 will need to forge new relationships with different suppliers.

21 Attwood et al. (2019) recognised that a number of fast food companies had  
22 added plant-based options to their menus, but in arguing that there was still  
23 much that the fast food sector could do to ensure that customers shift from  
24 meat towards these new menu additions, they suggested five development  
25 strategies which could be accommodated within existing business models.  
26 These strategies included using evocative language on menus to emphasise the  
27 positive attributes of plant-based items; listing plant-based items in the main  
28 body of the menu rather than in a separate vegetarian section; increasing the  
29 variety of plant-based items on the menu; and encouraging staff to promote  
30 plant-based options by recommending them as tasty and satisfying choices,  
31 rather than focusing on their environmental or health benefits.

32 Looking more widely across the hospitality industry, a variety of research  
33 themes can be identified, though the work on plant-based food within the  
34 industry is fragmented and it lacks a coherent framework. Drawing their  
35 empirical information from Taiwan, Chang et al. (2021) looked to examine the  
36 relationship among motivations, satisfaction and loyalty with plant-based food  
37 dining at destinations, and to determine if, and how, the attraction of plant-  
38 based dining moderated customer satisfaction and loyalty. The authors found  
39 that a positive relationship between motivations and satisfaction/loyalty in  
40 plant-based food dining, and motivations were found to comprise physical,  
41 cultural, interpersonal and prestige domains, while satisfaction and loyalty had  
42 three dimensions, namely overall satisfaction, intention to revisit, and intention  
43 to recommend. At a practical level, the authors concluded that plant-based  
44 restaurant operators and managers should have a deeper understanding of the  
45 distinctive characteristics of their target market.

1 Guachalla (2021) looked to understand how people following a plant-  
2 based diet for environmental, ethical, and health reasons influenced tourists'  
3 destination images from cognitive, affective and conative dimensions. The  
4 findings suggested strict plant-based diets stimulated '*destination images of*  
5 *social belonging, images off-the-beaten-track, images of cosmopolitanism, and*  
6 *images of emotional solidarity rooted in these tourists' personal normative*  
7 *belief.*' The author also concluded that people following plant-based diets adapt  
8 their travel patterns and itineraries in their quest to find the businesses that  
9 catered for them. Sommit and Boonpaisarnsatit (2020) looked to identify the  
10 elements that contribute to the local-plant based gastronomy tourism  
11 experience in three area of Chiang Mai province in Thailand. The finding  
12 revealed that 21 local plants were contributing to the plant-based tourism  
13 experience, and suggested that young chefs and health conscious people were  
14 the major target tourists, and that good conservation of local plants and  
15 effective communication via social media were crucial to the successful  
16 development of the tourism experience.

17 Bertella (2020) explored the possible experience design strategies for  
18 plant-based restaurants targeting a customer segment that is not limited to  
19 vegetarians. His findings suggested that although several design strategies  
20 applied to generic restaurants are also relevant for plant-based restaurants, a  
21 number of additional considerations, including the quality of the food, the  
22 restaurant's atmosphere, and the attitude of all the staff who come into direct  
23 contact with customers are also vitally important. In recognising that  
24 vegetarians are a varied and heterogenous group, and that this means that  
25 hospitality workers must offer a wide variety of meals and combinations of  
26 plant origin, Smugovic et al. (2021) looked to gain a better insight into the  
27 awareness and attitudes of hospitality management towards plant-based foods.

28 The impact of fast food on human health has attracted research attention.  
29 Work on the '*healthiness of US fast food meals 2008-2017*' by Alexander et al.  
30 (2020), for example, revealed that significantly fewer fast food meals met the  
31 American Hospital Association's calorie criterion in 2015, 2016 and 2017,  
32 compared to 2008, and that there were no significant changes over time in the  
33 percentage of meals meeting the American Hospital Association's criteria for  
34 saturated fat, cholesterol or sodium. More specifically, research has been  
35 undertaken to address concerns that fast food is a significant cause of obesity in  
36 children and young people. In concluding a study of fast food consumption  
37 among young adolescents in low- and middle-income countries, Li et al.  
38 (2020), for example, emphasised the urgent need to prioritise the  
39 implementation of healthy diet programmes to improve adolescent health in  
40 these countries.

41 Animal welfare is an increasingly high-profile issue within many societies  
42 and widespread concerns have been expressed about the ways animals were  
43 treated in modern intensive agricultural production systems. Research on how  
44 fast food companies, particularly those companies where meat- and chicken-  
45 based products are dominant menu items, has begun to attract attention in the  
46 literature. Well over a decade ago, Adams (2008) suggested that while some

1 fast food chains had responded to pressure for changes in animal welfare,  
2 concerns still remained that steps taken to address supplier misconduct and  
3 noncompliance were limited. More recently, Jones and Comfort (2022), for  
4 example, have explored how some of the leading fast food companies have  
5 addressed animal welfare, and suggested that the companies' commitments to  
6 animal welfare were aspirational and at least one step removed from the  
7 production process, and that there were concerns about the auditing and  
8 external assurance processes, some of the fast food companies employed to  
9 promote high levels of animal welfare.

10 More generally, the environmental impact of fast food companies has  
11 attracted increasing research attention, and here the need to move to a more  
12 sustainable future has often been a focal point. Beverland (2014), for example,  
13 argued that *livestock production has an enormous impact on climate change*  
14 *emissions, resource use, habitat loss, and the availability of staples for*  
15 *consumers in developing countries*, while Alae-Carew (2022) suggested that  
16 *our current global food systems and patterns of consumption are*  
17 *unsustainable for human and planetary health.* Further, Alae-Carew et al.  
18 (2022), argued that *a global transformation towards sustainable food systems*  
19 *is crucial for delivering on climate change mitigation targets worldwide. In*  
20 *high- and middle-income settings, plant-based meat and dairy alternatives*  
21 *present potential substitutes for animal sourced foods, and a pathway to*  
22 *transition to more sustainable diets.*

## 23 24 25 **Frame of Reference and Method of Enquiry**

26  
27 Given the importance some commentators attributed to the importance of  
28 fast food companies in driving the popularity of plant-based foods, this paper  
29 looks to explore how the leading fast food chains in the UK promoted plant-  
30 based menu items on their websites and in store. Ten companies, namely,  
31 McDonalds, Subway, Kentucky Fried Chicken, Starbucks, Burger King, Pizza  
32 Hut, Dominos, Nando's, Costa Coffee, and Café Nero, which were the leading  
33 fast food companies amongst the UK's most popular dining brands (Statista  
34 2021b), were selected for study. The selected fast food companies specialise in  
35 a range of different menu items, and as such can be seen to reflect the potential  
36 variety of plant-based foods within the UK's fast food sector.

37 In looking to explore how the selected companies promoted plant-based  
38 menu items, the author adopted a simple twin tack approach, though in  
39 pursuing this approach the focus was on how the leading fast food companies  
40 promoted their plant-based menu items rather than on a comparative analysis  
41 of their promotion methods. Firstly, an internet search using the key phrase,  
42 plant-based menu items, and the name of each of the selected fast food  
43 companies, was conducted in January 2022 using Google as the search engine.  
44 Secondly, the author undertook a simple observational survey of if, and how,  
45 the selected fast food companies looked to promote plant-based menu items in  
46 their outlets. The survey was undertaken in each of the selected companies

1 within Cheltenham, a town with a population of some 115,00 people in the  
2 South West of England, during January 2022.

3 The author recognised that this approach has its limitations. There are  
4 issues, for example, about the extent to which the information on plant-based  
5 food posted on the Internet genuinely reflects corporate thinking, but the author  
6 believes this to be an appropriate approach in an exploratory review. At the  
7 same time, the outlet survey provides a snap shot, at a particular point in time  
8 and space, of how the selected companies were looking to promote their plant-  
9 based menu items. However, the author suggests that such a survey was easily  
10 executed and readily replicable, and that it captured an accurate picture of how  
11 information on the availability of plant-based menu items were, or were not,  
12 being presented to customers at the point of sale.

### 13 14 15 **Findings** 16

17 The findings revealed that majority of the selected fast food companies  
18 promoted their plant-based menu items but there were variations in the scale,  
19 and in some cases arguably in the authenticity, of their offer. However, rather  
20 than describing how each of the companies promoted their plant-based offer,  
21 three themes, namely, corporate mission, headline items, and menu listings,  
22 can be identified, though not all companies focused on each of these themes.

23 Some of the companies promoted plant-based foods as an important  
24 element in their mission. Starbucks (2022), for example, argued that *'building*  
25 *on Starbucks sustainability commitment, the company's goal is to expand plant-*  
26 *based choices as an environmentally friendly menu contributes to our goal to be*  
27 *a resource positive company.'* To that end Starbucks (2022) *'continues to*  
28 *introduce new drinks and food to menus globally while innovating with plant-*  
29 *based ingredients across key platforms like espresso, cold brew, refreshment,*  
30 *food and more.'* Further, the company claimed that *customer interest in the*  
31 *plant-based food market has continued to grow with a 9% increase between*  
32 *2019 and 2020 and reports of a substantial shift in customer demand*  
33 *worldwide'*, and that *'our aim is to provide our customers a variety of choices as*  
34 *part of their Starbucks experience and we look forward to hearing feedback from*  
35 *our partners (employees) and customers'*, and emphasised *'expanding Starbucks*  
36 *plant-based menu globally is one of the ways we are pursuing our goal to reduce*  
37 *our carbon footprint by 50%'* (Starbucks 2022).

38 Burger King (2021) reported *'at Burger King we believe in living, and,*  
39 *maybe more importantly eating Your Way'*, and *'that is why we want to be the*  
40 *global leaders in Plant-based alternatives in the quick-service industry'*, and  
41 *'our aim is to do this by offering vegan, vegetarian and plant-based alternative*  
42 *that do not compromise on flavour or price.'* In a similar vein, in promoting  
43 *'Beyond Fried Chicken'*, Kentucky Fried Chicken (Yum Brands 2022), reported  
44 *'the mission from day one was simple-make the world-famous Kentucky Fried*  
45 *Chicken from plants'*, and *'over two years later we can say mission*  
46 *accomplished.'*



1        Some of the selected companies, most notably McDonalds, headlined plant-  
2 based items on their corporate websites. McDonalds (2022) highlighted the  
3 *‘McPlant’*, which the company describes as *‘a vegan burger made with a juicy*  
4 *plant-based patty’*, which contains *‘vegan sandwich sauce, ketchup, mustard,*  
5 *onion, pickles, lettuce, tomato, and a vegan alternative to cheese in a sesame*  
6 *seed bun.’* The company claimed *‘pea protein is one of the main ingredients in*  
7 *the patty, along with other quality ingredients which are turned into a great*  
8 *tasting meat alternative’*, and that the *‘McPlant is cooked separately from*  
9 *other McDonald’s burgers and sandwiches, using dedicated equipment to*  
10 *ensure it doesn’t come into contact with meat products’* (McDonalds 2022).

11        Nando’s (2022) website suggested *‘if you’re looking for something plant-*  
12 *based, we’d recommend trying The Great Imitator, which tastes just like our*  
13 *famous PERi-PERi chicken, but it’s made completely from pea-protein.’*  
14 However, this suggestion comes with two warnings, namely *‘we just need to*  
15 *mention that although our kitchens aim to keep all plant-based products away*  
16 *from ingredients derived from animal origin, we cannot guarantee this’*, and that  
17 while *‘The Great Imitator is a plant-based recipe however the wrap and baste*  
18 *contain shellac’* (Nando’s 2022). Burger King (2021), described its *‘Vegan*  
19 *Royale’*, the *‘new variant of our iconic chicken burger’* as *‘the crowning glory of*  
20 *our plant-based menu.*

21        Plant-based menu items, were promoted by all the selected companies,  
22 though such items were normally in the minority on the menu and, once again, in  
23 some cases the plant-based description was qualified. The Subway (2021)  
24 website, for example, advertised its *‘Plant Patty’*, which was described as being  
25 *‘packed with red onion, red and green peppers, carrot, spinach, corn, white*  
26 *cabbage, peas, and green chillies’*, with the message *‘this patty’s for plant*  
27 *lovers.’* However, this advertisement was accompanied by the caution that *‘our*  
28 *plant-based ingredients may come into contact with non-plant-based*  
29 *ingredients’* (Subway 2021a). Subway also lists plant-based menu items  
30 included the *‘Tastes Like Chicken Tikka’*, and the *‘Meatless Meatball*  
31 *Marinara’* (Subway 2021b). Kentucky Fried Chicken (undated) suggested *‘if*  
32 *you’re looking for finger lickin’ flavour without the chicken, you’re in the right*  
33 *place. Coated in our famous 11 herbs and spices, our Original Recipe Vegan*  
34 *Burger will definitely satisfy your plant-based cravings.’*

35        Under the banner *‘Its free to go dairy free’*, Costa Coffee (2021) claimed  
36 *‘our tasty new plant-based alternatives - Soya, Almond, Coconut and Oat – are*  
37 *at no extra cost when you scan the Costa app in store.’* Costa Coffee (2022)  
38 also listed its *‘Veggie Breakfast Box’*, *‘Vegan Bac’n Breakfast Bap’*, and  
39 *‘Vegan Macaroni Cheese’*, amongst its food menu items. However, though the  
40 cream cheese in the latter item was described as being dairy free, the  
41 ingredients of the breakfast box included free range eggs. Pizza Hut (2022)  
42 suggested that *‘when it comes to vegan dining, it can often be hard to find*  
43 *delicious food that fits the bill for a plant-based diet’*, but claimed *‘this is*  
44 *where Pizza Hut Restaurants come into play. With a truly awesome Vegan*  
45 *menu, including Vegan Pizzas’ Sides and Deserts, we really are the place to be*  
46 *for yummy vegetarian food.’*

1       The observational survey revealed that some of the selected fast food  
2 companies advertised at least one of their plant-based menu items, prominently  
3 at their outlets, as illustrated below. A large canvas sign outside the McDonalds  
4 outlet, for example, showed an image of *McPlant*, described as *‘Our Iconic  
5 Taste, Plant Based’*, while each tray provided for customers eating in the  
6 restaurant, had a placeholder mat, which provided full details of all the  
7 ingredients of the McPlant. A poster holder advertising board on the pavement  
8 outside Caffè Nero advertised its *‘Plant Powered Breakfast’*, described as  
9 *‘protein rich plant-based sausages in a freshly toasted ciabatta’*, and its *‘Plant  
10 Powered Panini’*, described as a *‘spicy chicken style panini made from pea and  
11 soy protein.’* A poster in the front window of the Subway outlet, read *‘Plant  
12 Based Big Taste’*, to promote its TLC (Tastes Like Chicken) sub, while an  
13 illuminated sign above the counter read *‘Plant-Based Meal Big Deal.’* Posters  
14 in the window of the Kentucky Fried Chicken and the Domino’s outlets both  
15 advertised the companies’ vegan offers but made no mention of them being  
16 plant-based.

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### 19 **Concluding Reflections**

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21       The findings revealed that the leading fast food companies within the UK  
22 were promoting their plant-based items at both the corporate and outlet level.  
23 That said, a number of issues merit concluding reflection. The general  
24 emphasis of the companies’ promotions is on plant-based additions to their  
25 menus, but they made no attempt, for example, to associate the introduction of  
26 plant-based menu items with a healthier diet. On the one hand, this raises  
27 general issues about advantages and disadvantages of a plant-based diet, and  
28 while many advantages have been identified, including lower cholesterol and  
29 saturated fat intakes, and reductions in the incidence of chronic inflammatory  
30 diseases, there are also concerns about protein, and certain nutrient,  
31 deficiencies. On the other hand, recent research (Tso and Forde 2021) suggests  
32 that some plant-based items may be highly processed and have a high calorie  
33 and sodium count, so it may not necessarily be in the best interests of fast food  
34 companies to disclose detailed nutritional information about their plant-based  
35 menu items.

36       Notwithstanding such concerns, a move towards a substantial increase in  
37 their plant-based menu could provide a major challenge to the major fast food  
38 companies and to their traditional offers. The majority of the selected fast food  
39 companies have based their traditional business models around a focused menu  
40 that is either meat or chicken based, while the others have made extensive use  
41 of cheese or dairy products. However, if consumers look to reduce animal  
42 product intake and increasingly come to demand what they see as healthier  
43 plant-based menu choices, in fast food outlets, this could be seen to challenge  
44 the fast food companies’ animal products-based business models. As such, the  
45 leading fast food companies might be seen to have a vested interest in

1 maintaining the main focus of their menu offers around animal-based menu  
2 items, rather than expanding their plant-based items more fully.

3 More generally, the widespread adoption of plant-based diets is seen to be  
4 an important element in the transition to a more sustainable future. While the  
5 food people consume at, or from, fast food outlets, is normally only a relatively  
6 small proportion of their total food intake, Bloomberg Intelligence (2021)  
7 emphasised the important role the major fast food companies could play in  
8 driving the wider consumption of plant-based foods across society, and thus in  
9 contributing to the development of more sustainable food systems, in  
10 mainstreaming plant-based diets, and ultimately in helping to secure a more  
11 sustainable future. However, two issues might be seen to call such a scenario  
12 into question. Firstly, it remains to be seen if any wholesale extension of the  
13 major fast food companies' plant-based food range, can, and will, be  
14 accommodated within their existing business models. Secondly, the extent to  
15 which fast food companies are leading, or simply responding to, consumer  
16 concerns about the impacts of meat consumption on human health, animal  
17 welfare or more generally on the planet, is far from clear. The increasingly  
18 wide constituency of such concerns, might be seen to suggest that looking to  
19 the medium-term future, the fast food companies will have a limited, rather  
20 than a leading, role, in driving plant-based consumption across society.

21 While this short paper has a number of limitations, as outlined earlier, the  
22 author believes that it contributes to what is currently seen to be a gap in the  
23 hospitality literature, and that it can provide a platform for future research.  
24 More specifically, the role of plant-based food in the fast food sector offers a  
25 wide variety of potential research agendas. At the corporate level, for example,  
26 there may be opportunities to examine the major fast food companies' strategic  
27 thinking in determining the nature and the extent of their plant-based menus,  
28 how these companies develop, and market test, their plant-based items, and  
29 how they accommodate them into their existing business models. At the  
30 operational level, researchers may want to explore how employee training  
31 programmes are designed and developed to help staff to promote plant-based  
32 items to customers, and to evaluate the success of such programmes. At the  
33 customer level, market research could focus on if, and how, the fast food  
34 companies' advertising and promotional programmes influence buying  
35 behaviour, and if such programmes are successful in attracting new groups of  
36 consumers.

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1 **References**

- 2
- 3 Adams, R. J. (2008) Fast Food and Animal Rights: An Examination and Assessment  
4 of the Industry's Response to Social Pressure. *Business and Society Review* 113  
5 (3): 301-328
- 6 Alae-Carew, C., Green, R., Stewart, C., Cook, B., Dangour, A.D. and Scheelbeek, P.F.  
7 D. (2022) The role of plant-based alternative foods in sustainable and healthy  
8 food systems: Consumption trends in the UK. *Science of the Total Environment*  
9 807 (3) Retrieved from: [https://www.sciencedirect.com/science/article/pii/S0048](https://www.sciencedirect.com/science/article/pii/S0048969721061192)  
10 [969721061192](https://www.sciencedirect.com/science/article/pii/S0048969721061192) [Accessed 25 January 2022]
- 11 Alexander, E., Rutkow, L., Gudzone, K.A., Cohen, J.E. and McGinty, E. E. (2020)  
12 Trends in the healthiness of U.S. fast food meals, 2008-2017. *European Journal*  
13 *of Clinical Nutrition* 75: 775-781
- 14 Attwood, S., Holzer, J. and Vennard, D. (2019) *Will Anyone Eat a Plant-Based big*  
15 *Mac? Behavioural Science Says Yes*. Retrieved from: [https://www.wri.org/insi](https://www.wri.org/insights/will-anyone-eat-plant-based-big-mac-behavioral-science-says-yes)  
16 [ghts/will-anyone-eat-plant-based-big-mac-behavioral-science-says-yes](https://www.wri.org/insights/will-anyone-eat-plant-based-big-mac-behavioral-science-says-yes)  
17 [Accessed 28 January 2022]
- 18 Bertella, G. (2020) Food experience design for plant-based restaurants. *Case Studies*  
19 *of Food Experiences in Marketing, Retail, and Events*, 2020: 121-132. Retrieved  
20 from <https://www.sciencedirect.com/science/article/pii/B9780128177921000101>  
21 [Accessed 27 January 2022]
- 22 Beverland, M.B. (2014) Sustainable Eating; Mainstreaming Plant-Based Diets in  
23 developed Economies. *Journal of Macromarketing* 34 (3): 369-382
- 24 Bloomberg Intelligence (2021) *Plant-Based Food Poised for Explosive Growth*.  
25 Retrieved from: [https://assets.bbhub.io/professional/sites/10/1102795\\_PlantBa](https://assets.bbhub.io/professional/sites/10/1102795_PlantBasedFoods.pdf)  
26 [sedFoods.pdf](https://assets.bbhub.io/professional/sites/10/1102795_PlantBasedFoods.pdf) [Accessed 13 January 2022]
- 27 British Nutrition Foundation (2019) *Plant-based diets*. Retrieved from: [https://www.](https://www.nutrition.org.uk/putting-it-into-practice/plant-based-diets/plant-based-diets/)  
28 [nutrition.org.uk/putting-it-into-practice/plant-based-diets/plant-based-diets/](https://www.nutrition.org.uk/putting-it-into-practice/plant-based-diets/plant-based-diets/)  
29 [Accessed 16 January 2022]
- 30 British Standards Institute (2020a) *100% plant-based foods definition agreed for the*  
31 *first time*. Retrieved from: [https://www.bsigroup.com/en-GB/about-bsi/media-c](https://www.bsigroup.com/en-GB/about-bsi/media-centre/press-releases/2020/december/100-plant-based-foods-definition-agreed-for-the-first-time/#:~:text=11%20December%202020,practices%20in%20communication%20and%20labelling.)  
32 [entre/press-releases/2020/december/100-plant-based-foods-definition-agreed-](https://www.bsigroup.com/en-GB/about-bsi/media-centre/press-releases/2020/december/100-plant-based-foods-definition-agreed-for-the-first-time/#:~:text=11%20December%202020,practices%20in%20communication%20and%20labelling.)  
33 [for-the-first-time/#:~:text=11%20December%202020,practices%20in%20](https://www.bsigroup.com/en-GB/about-bsi/media-centre/press-releases/2020/december/100-plant-based-foods-definition-agreed-for-the-first-time/#:~:text=11%20December%202020,practices%20in%20communication%20and%20labelling.)  
34 [communication%20and%20labelling.](https://www.bsigroup.com/en-GB/about-bsi/media-centre/press-releases/2020/december/100-plant-based-foods-definition-agreed-for-the-first-time/#:~:text=11%20December%202020,practices%20in%20communication%20and%20labelling.) [Accessed 16 January 2022]
- 35 British Standards Institute (2020b) *100% plant-based foods. Characteristics and*  
36 *composition. Code of practice*. Retrieved from: [https://shop.bsigroup.com/pro](https://shop.bsigroup.com/products/100-plant-based-foods-characteristics-and-composition-code-of-practice/standard)  
37 [ducts/100-plant-based-foods-characteristics-and-composition-code-of-practice/](https://shop.bsigroup.com/products/100-plant-based-foods-characteristics-and-composition-code-of-practice/standard)  
38 [standard](https://shop.bsigroup.com/products/100-plant-based-foods-characteristics-and-composition-code-of-practice/standard) [Accessed 16 January 2022]
- 39 Burger King (2021) *Plant-Based Options*. Retrieved from: [https://www.burgerking.](https://www.burgerking.co.uk/plant-based-options)  
40 [co.uk/plant-based-options](https://www.burgerking.co.uk/plant-based-options) [Accessed 25 January 2022]
- 41 Chang, J., Morrison, A.M., Chen, Y-L., Chang, T-Y. and Chen, D. Z-Y. (2021) Does a  
42 healthy diet travel? Motivations, satisfaction and loyalty with plant-based food  
43 dining at destinations. *British Food Journal* 123 (12): 369-382
- 44 Clark, B., Stewart, G.B., Panzone, L.A., Kyriazakis, I. and Frewer, L. J. (2016), A  
45 systematic review of public attitudes, perceptions and behaviours towards  
46 production diseases associated with farm animals. *Journal of Agricultural and*  
47 *Environmental Ethics* 29: 55-47.
- 48 Clark, J. (2021) *The History of Plant-Based Diets and Plant-Based Diets*. Retrieved  
49 from: <https://plantbasednetwork.com/history-of-veganism-and-plant-based-diets/>  
50 [Accessed 16 January 2022]

- 1 Costa Coffee (2022a) *Our Coffees*. Retrieved from: <https://www.costa.co.uk/our-coffees>  
2 [Accessed 25 January 2022]
- 3 Costa Coffee (2022b) *Menu*. Retrieved from: <https://www.costa.co.uk/menu> [Accessed  
4 25 January 2022]
- 5 Deloitte (2019) *Plant Based Alternatives* Retrieved from: [file:///C:/Users/s5750985/  
6 Downloads/deloitte-uk-plant-based-alternatives%20\(1\).pdf](file:///C:/Users/s5750985/Downloads/deloitte-uk-plant-based-alternatives%20(1).pdf) (Accessed 14 January  
7 2022)
- 8 Good Food Institute (2022) *US retail market data for plant-based industry*. [https://gfi.  
9 org/marketresearch/](https://gfi.org/marketresearch/) [Accessed 16 January 2022]
- 10 Guachalla, A. (2021) Plant-based diets and destination image: a holistic approach, *Journal*  
11 *of Tourism and Cultural Change*, *Journal of Tourism and Cultural Change*.  
12 Retrieved from: [https://www.tandfonline.com/action/showCit\\_Formats?doi=10.108  
13 0%2F14766825.2021.1876717&area=0000000000000001](https://www.tandfonline.com/action/showCit_Formats?doi=10.1080/0%2F14766825.2021.1876717&area=0000000000000001) [Accessed 27 January  
14 2022]
- 15 Harvard Health (2021) *What is a plant-based diet and why you should try it*. Retrieved  
16 from: [https://www.health.harvard.edu/blog/what-is-a-plant-based-diet-and-why-  
17 should-you-try-it-2018092614760](https://www.health.harvard.edu/blog/what-is-a-plant-based-diet-and-why-should-you-try-it-2018092614760) [Accessed 15 January 2022]
- 18 Humane Society International (2022) *Eat Kind for animals, people and the planet*.  
19 Retrieved from: [https://action.hsi.org/page/42461/petition/1?ea.tracking.id=we  
20 Bsite](https://action.hsi.org/page/42461/petition/1?ea.tracking.id=weBSITE) [Accessed 16 January 2022]
- 21 Jaske, B. Jaske, B., Pajek, M. and Pajek, J. (2019) Uric Acid and Plant-Based  
22 Nutrition. *Nutrients*. Retrieved from: [https://www.mdpi.com/2072-6643/11/8/17  
23 36](https://www.mdpi.com/2072-6643/11/8/1736) [Accessed 16 January 2022]
- 24 Jones, P. Hillier, D. and Comfort, D. (2016) Sustainability in the hospitality industry:  
25 Some personal reflections on corporate challenges and research agendas.  
26 *International Journal of Contemporary Hospitality Management* 28 (1): 36-67
- 27 Jones, P. and Comfort, D. (2022) A Review of fast food companies' approaches to  
28 animal welfare. *Journal of Tourism and Hospitality Insights* 5 (1): 32-44
- 29 Kentucky Fried Chicken (undated) *Vegans Do Yourself A Favour*. Retrieved from:  
30 [https://www.kfc.co.uk/vegan?gclid=CjwKCAiA3L6PBhBvEiwAINIJ9Mq7xtmz0  
31 pFiskwBcHzte767OwL-tXd5wYxULN\\_h84DcWXA7hGZklRoC6Va  
32 QAvD\\_BwE&gclsrc=aw.ds](https://www.kfc.co.uk/vegan?gclid=CjwKCAiA3L6PBhBvEiwAINIJ9Mq7xtmz0pFiskwBcHzte767OwL-tXd5wYxULN_h84DcWXA7hGZklRoC6VaQAvD_BwE&gclsrc=aw.ds) [Accessed 25 January 2022]
- 33 Larson, S. M. (2020) Plant Power Fast Food (San Diego, California). *Journal of*  
34 *Values-Based Leadership*. 2, (1) Retrieved from: [https://scholar.valpo.edu/cgi/  
35 viewcontent.cgi?article=1333&context=jvbl](https://scholar.valpo.edu/cgi/viewcontent.cgi?article=1333&context=jvbl) [Accessed 28 January 2022]
- 36 Li, L et al. Sun, N., Zhang, L., Xu, G., Liu, J., Hu, J. Zhang, Z., Lou, J., Deng, H., Shen, Z.  
37 and Han, L. (2020) Fast food consumption among young adolescents aged 12–15  
38 years in 54 low- and middle-income countries. *Global Health Action* 13 (1),  
39 Retrieved from: <https://doi.org/10.1080/16549716.2020.1795438> [Accessed 21  
40 January 2022]
- 41 McDonalds (2022) *McPlant*. Retrieved from: [https://www.mcdonalds.com/gb/en-gb/  
42 latest-updates/mcplant.html?gclid=Cj0KCQiAubmPBhCyARIsAJWNpiOMxM3  
43 JhSj4GraTp-HuP3Ek36Ho25si\\_A2qbvigYj-YyzTMa4zIH3gaAuteEALw\\_wcB&  
44 gclsrc=aw.ds](https://www.mcdonalds.com/gb/en-gb/latest-updates/mcplant.html?gclid=Cj0KCQiAubmPBhCyARIsAJWNpiOMxM3JhSj4GraTp-HuP3Ek36Ho25si_A2qbvigYj-YyzTMa4zIH3gaAuteEALw_wcB&gclsrc=aw.ds) [Accessed 24 January 2022]
- 45 Nando's (2022) *Is There Anything On Your Menu Suitable for Vegans*. Retrieved from:  
46 <https://help.nandos.co.uk/en-gb/articles/36001622> [Accessed 25 January 2022]
- 47 Ostfeld, R.J. (2017) Definition of a plant-based diet and overview of his issue.  
48 *Journal of Geriatric Cardiology* 14 (5) 315
- 49 Parsa, H.G. and Narapareddy, V. (2021) *Sustainability, Social Responsibility and*  
50 *Innovation sin the Hospitality Industry*. Apple Academic Press, New Jersey.  
51

- 1 Pizza Hut (2022) *VEGAN FAQs*. Retrieved from: [https://www.pizzahut.co.uk/restau](https://www.pizzahut.co.uk/restaurants/about/faqs/vegan-faqs/)  
 2 [rants/about/faqs/vegan-faqs/](https://www.pizzahut.co.uk/restaurants/about/faqs/vegan-faqs/) [Accessed 25 January 2022]
- 3 Richi, E. B., Baumer, B., Conrad, B., Darioli, R., Schmid, A. and Keller, U. (2015)  
 4 Health Risks Associated with Meat Consumption: A Review of Epidemiological  
 5 Studies. *International Journal of Vitamin Nutrient Research* 85 (1-2): 70-78
- 6 Ritchie, H. and Roser, M (2021) *Environmental Impacts of Food Production*. Retrieved  
 7 from: <https://ourworldindata.org/environmental-impacts-of-food> [Accessed 16  
 8 January 2022]
- 9 Root the Future (2020) *What is the true definition of Plant-Based and why does it matter?*  
 10 Retrieved from: <https://rootthefuture.com/definition-of-plant-based/> [Accessed 14  
 11 January 2022]
- 12 Sloan, P. Legrand, W. and Chen, J.S. (2010) *Sustainability in the Hospitality Industry*.  
 13 Routledge, Oxford.
- 14 Šmugović, S., Pivarski, B.K., Grubor, B. and Knežević, N. (2021) Vegetarian Diet -  
 15 Perceptions and Attitudes of Hospitality Management. *Zbornik radova*  
 16 *Departmana za geografiju, turizam I hotelijerstvo* 50 (1): 70-77
- 17 Sommit, K. and Boonpaisarnsatit, N. (2020) Experiential Tourism Development om  
 18 Lanna Local Plant-Based Gastronomy. *ABAC Journal* 40 (4): 23 38
- 19 Starbucks (2022) *Plant based menu innovation at Starbucks*. Retrieved from: [https://](https://stories.starbucks.com/stories/2020/plant-based-menu-innovation-at-starbucks/)  
 20 [stories.starbucks.com/stories/2020/plant-based-menu-innovation-at-starbucks/](https://stories.starbucks.com/stories/2020/plant-based-menu-innovation-at-starbucks/)  
 21 [Accessed 24 January 2022]
- 22 Statista (2021a) *YA sales growth of plant-based meat substitutes in selected European*  
 23 *countries from October 2019 to September 2020*. Retrieved from: [https://www.sta](https://www.statista.com/statistics/1258158/sales-growth-of-plant-based-meat-products-in-selected-european-countries/)  
 24 [tista.com/statistics/1258158/sales-growth-of-plant-based-meat-products-in-selec](https://www.statista.com/statistics/1258158/sales-growth-of-plant-based-meat-products-in-selected-european-countries/)  
 25 [ted-european-countries/](https://www.statista.com/statistics/1258158/sales-growth-of-plant-based-meat-products-in-selected-european-countries/) [Assessed 16 January 2022]
- 26 Statista (2021b) *Most popular dining brands in the United Kingdom as of September*  
 27 *2021*. Retrieved from: [https://www.statista.com/statistics/950444/most-popular-](https://www.statista.com/statistics/950444/most-popular-restaurant-brands-in-the-united-kingdom-uk/)  
 28 [restaurant-brands-in-the-united-kingdom-uk/](https://www.statista.com/statistics/950444/most-popular-restaurant-brands-in-the-united-kingdom-uk/) [Accessed 22 January 2022]
- 29 Subway (2021a) *Plant Patty*. Retrieved from: [https://www.subway.com/en-](https://www.subway.com/en-GB/MenuNutrition/Menu/Product?ProductId=7148&MenuCategoryId=436)  
 30 [GB/MenuNutrition/Menu/Product?ProductId=7148&MenuCategoryId=436](https://www.subway.com/en-GB/MenuNutrition/Menu/Product?ProductId=7148&MenuCategoryId=436)  
 31 [Accessed 25 January 2022]
- 32 Subway (2021b) *All Subs*. Retrieved from: [https://www.subway.com/en-](https://www.subway.com/en-GB/MenuNutrition/Menu/Sandwiches)  
 33 [GB/MenuNutrition/Menu/Sandwiches](https://www.subway.com/en-GB/MenuNutrition/Menu/Sandwiches) [Accessed 25 January 2022]
- 34 Tso, R. and Forde, C.G. (2021) Unintended Consequences: Nutritional Impact and  
 35 Potential Pitfalls of switching from Animal- to Plant-Based Foods. *Nutrients* 13  
 36 (8). Retrieved from: [https://www.mdpi.com/2072-6643/13/8/2527/htm](https://www.mdpi.com/2072-6643/13/8/2527/html)  
 37 [l](https://www.mdpi.com/2072-6643/13/8/2527/html) [Accessed 25 January 2022]
- 38 Volmer, J. (2020) *How the plant-based trend found its roots in fast food*. Retrieved  
 39 from: [https://www.campaignlive.com/article/plant-based-trend-found-its-roots-](https://www.campaignlive.com/article/plant-based-trend-found-its-roots-fast-food/1702146)  
 40 [fast-food/1702146](https://www.campaignlive.com/article/plant-based-trend-found-its-roots-fast-food/1702146) [Accessed 17 January 2022]
- 41 Yum Brands (2022) *KFC and Beyond Meat Debut Much Anticipated Beyond Chicken*  
 42 *Nationwide Beginning January*. Retrieved from: [https://www.yum.com/](https://www.yum.com/wps/portal/yumbrands/Yumbrands/kfc-newsroom/detail/Vertical+Content_3-CW/KFC-Beyond-Fried-Chicken)  
 43 [wps/portal/yumbrands/Yumbrands/kfc-newsroom/detail/Vertical+Content\\_3-](https://www.yum.com/wps/portal/yumbrands/Yumbrands/kfc-newsroom/detail/Vertical+Content_3-CW/KFC-Beyond-Fried-Chicken)  
 44 [CW/KFC-Beyond-Fried-Chicken](https://www.yum.com/wps/portal/yumbrands/Yumbrands/kfc-newsroom/detail/Vertical+Content_3-CW/KFC-Beyond-Fried-Chicken) [Accessed 24 January 2022]
- 45 Unintended Consequences: Nutritional Impact and Potential Pitfalls of Switching from  
 46 Animal- to Plant-Based Foodsettings
- 47 Vassallo, A.J., Kelly, B., Zhang, L., Wang, Z., Young, S. and Freeman, B. (2018)  
 48 ‘Junk Marketing on Instagram’, *JIMR Public Health Surveillance*, Vol. 4, No. 2,  
 49 <https://doi.org/10.2196/publichealth.9594> Yum Brands (2022) ‘KFC and Beyond Meat  
 50 Debut Much-Anticipated Beyond Chicken Nationwide Beginning January 2022),  
 51 <https://www.yum.com/wps/portal/yumbrands/Yumbrands/kfc->

- 1 [newsroom/detail/Vertical+Content\\_3-CW/KFC-Beyond-Fried-Chicken](#)
- 2 (Accessed 24 January 2022)
- 3 Yum Brands (2022) 'KFC and Beyond Meat Debut Much Anticipated Beyond
- 4 Chicken Nationwide Beginning January' [https://www.yum.com/wps/portal/](https://www.yum.com/wps/portal/yumbrands/Yumbrands/kfc-newsroom/detail/Vertical+Content_3-CW/KFC-Beyond-Fried-Chicken)
- 5 [yumbrands/Yumbrands/kfc-newsroom/detail/Vertical+Content\\_3-CW/KFC-](#)
- 6 [Beyond-Fried-Chicken](#) (Accessed 24 January 2022)