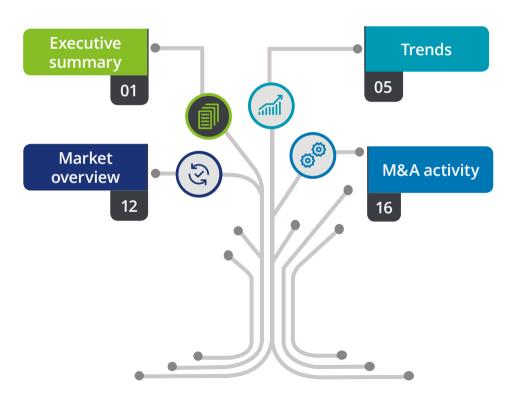
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Plant-based alternatives

Driving industry M&A

Contents



Executive summary

The global meat and dairy sector is currently going through an unprecedented level of competition and disruption, driven by the growth of viable plant-based alternatives across many categories. Gone are the days when plant-based alternative products were for the niche consumer and warranted limited shelf space. Companies across the spectrum are now investing heavily in acquiring and creating new products and brands which will appeal to the surging consumer demand for plant-based products.

Increasing awareness year on year of "Veganuary" and the fact that major multiple retailers have rapidly expanded their shelf space and own label new product development for plant-based products underline the growth in the sector. Many restaurants, casual dining venues, and fast food chains now have dedicated "meat free" sections to their menu, as the popularity of a vegan or indeed flexitarian diet continues to increase.

While there has been significant coverage recently of plant-based growth in particular, it should be noted that "plant-based" products have always existed and were already a significant element in the food & beverage industry. Further, to an extent "plant-based alternative" products are not new either. For example, plant-based margarine has been in use for many decades as a substitute for butter.

This paper focuses specifically on the rise of plant-based alternatives to meat and dairy products – although, given the nuances of consumer behaviour in purchasing and dietary decision-making, the boundaries between "plant-based" and "plant-based alternative" products are not always clearly defined - or indeed necessarily relevant to many consumers.



There are various types of plant-based alternative products on the market undergoing significant levels of new product development. Key plant-based protein sources include products such as: soy, pea, pulses, seitan, and tempeh.

Consumer Trends

The growth in the plant-based sector has largely been driven by the mainstream emergence of the 'flexitarian' consumer (people who still consume meat and dairy but seek to reduce the levels they consume), as well as increased numbers of vegetarians and vegans, as consumers respond to a combination of ethical, environmental and health concerns.

Industry Trends

The global food and beverage industry has experienced relatively stable conditions for some time, with minimal change around key product categories sold through the various retail and food service channels. Recent industry changes illustrate the growth in plant-based alternatives that has brought disruption.

There are a significant number of startup and disruptor companies in many geographies that are launching new and exciting products into the market to meet the increasing consumer base and demand for innovative products and flavours.

While this trend has been developing for some time, media coverage has picked up significantly in 2019 in line with the increase in new product development and demand for the products.

Existing food and beverage companies are moving to protect and enhance their positions in the market, both through internally driven product development and innovation and inorganic growth through the acquisition of the new disruptor brands and products.

The key to growth in this market is further product innovation in meat substitutes, as a key barrier to consumption by the many meat and dairy consumers is the lack of similarity in taste and texture to traditional meat and dairy products.



Despite the significant improvements made in the taste and variety of plant-based alternatives, this still remains a barrier to regular consumption by core meat eaters.

There has been significant investment and innovation in meat-free alternatives that attempt to replicate the taste and texture of meat. For example, there are versions of meat-free burgers that replicate the bleeding from traditional mince, and a large range of meat alternatives to suit a variety of taste buds.

The combination of the growing number of consumers looking to eat plant-based alternatives, and the significant investment in new product innovation, is having a spiralling effect, driving the large growth in the overall market. This trend is expected to continue to accelerate

The UK is one of the markets leading the way in plant-based products. It is the largest market in Europe for consumption of plant-based alternatives, accounting for around 40 per cent of the European meat substitutes market.

Growth is expected to continue as the market is still in a relatively early stage of its life cycle. However, geographies outside the UK with lower levels of consumption currently are expected to grow faster due to their less progressed market lifecycle.

M&A Trends

The industry trends highlighted above create significant risk but also opportunity for established food and beverage companies with traditional meat and dairy product business models. If a progressive strategy is followed then adoption of plant-based products could increase their market share and profitability significantly. If a company remains static, however, there is a risk of being left behind as a result of the potential decline in established categories.



There has been sizeable and increasing M&A activity in recent years in the plant-based alternatives sector, driven by:

- established food and drink companies and financial investors gaining access into the fast growing plant-based alternatives market
- companies looking to consolidate and expand existing positions to achieve economies of scale and / or reach new geographies
- start-up companies requiring investment from individuals, financial or corporate investors in order to accelerate their growth potential.

For existing food and drink companies in particular, there are a number of important strategic decisions to be made in the context of their investment strategy for plant-based alternatives:

• is investment best allocated in the company's current core offering or should they venture into the plant-based market (potentially seen as a next-generation product)?

- does the company have the relevant skillset to be successful in this market?
- should the company grow organically through new product development or inorganically through M&A?
- does a company's existing brand have the credibility and capability to stretch into the plant-based sector?
- should the company target a more established market such as the UK or less established markets that could potentially offer more white space?

We expect M&A deals in the industry will continue to feature significant amounts of activity relating to, and driven by, plant-based alternatives, as the market continues to grow, there are greater levels of new product development, and consumers increasingly see plant-based alternatives as the norm.



Trends



The ethical and health-conscious consumer

A major factor in the growth of the plantbased industry, especially in the UK, is the increased ethical focus of the consumer. This is partly led by the millennial generation and the emergence of the 'flexitarian' consumer.

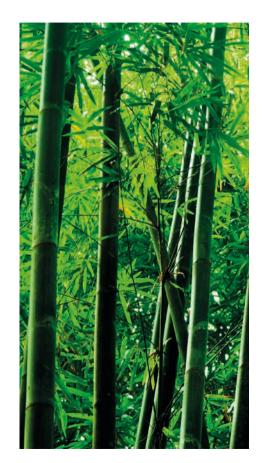
The 'flexitarian' consumer is an individual who still consumes meat and dairy but wishes to reduce the quantity on ethical, environmental and/or health grounds. The flexitarian's alternative consumption could take the form of specific substitutes or meat/dairy free meal choices.

In the past, plant-based diets were mostly consumed by the relatively small market of vegetarians and vegans.

In recent years the number of vegetarians and vegans has increased – for example, the Vegan Society estimated that the number of vegans in the UK increased by a factor of 2.6 times in the ten years to 2016. However, the significant growth in the plant-based market is driven by the flexitarian consumer.

There are various factors driving the switch towards plant-based products, including:

- significant media coverage of the impact of meat and dairy product production on global warming and resource consumption in relation to greenhouse gases
- animal welfare rights groups have gained significant traction and the ways in which animals are treated in the production of products has caused a switch in consumer preferences
- numerous reports on the potential links between high consumption of processed or red meat and cancer.



Notwithstanding the above health and environmental drivers, it is worth noting the growing awareness that certain plant-based products also have potential negative impacts, such as: high levels of water use (almond milk); use of genetically modified crops (soy); and high salt content (meat-based alternatives). Negative media coverage could potentially have an impact on the future growth of certain products.

Many plant-based alternative producers are seeking to address barriers preventing traditional meat-eating consumers from choosing plant-based alternatives: the perceived lack of exciting flavours, and the dissimilarity to the taste and texture of meat. In order to continue to grow the market and appeal to the core meat-eater market, plant-based products must better appeal to these consumers.

For example, 26 per cent of non/infrequent eaters of vegetarian/meat-free foods surveyed would be encouraged to try meat-free foods that taste like meat. In addition, 23 per cent would be encouraged if there were more exciting flavours, and 18 per cent if the alternatives have the same texture as meat.

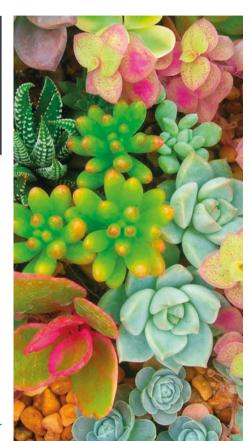
Widening range of ingredients and flavours

As the market for plant-based alternatives grows, a wider range of ingredients are being used to broaden the product range.

These ingredients are often identified because of their ability to provide the consumer with high levels of protein and nutritional value.

In the dairy alternatives market, there has been a significant increase in the variety of ingredients used to produce milk alternatives, including, for example, soy, oat, coconut, almond, rice, and hemp etc.

¹ Mintel Meat-Free Foods – UK, September 2018 Report



The wider variety of ingredients allows the consumer more choice and more exciting flavours, as well as ensuring that their dietary requirements are met. This also means that some ingredients will become more popular and others less. Ingredients such as tempeh, pea, almond and seitan are increasingly in demand, whereas soy products are to some degree challenged because of concerns about genetic modification.

As part of any investment decision in the plant-based sector, careful consideration of the particular plant-based protein source will be important.

New product development

The rising demand for innovative products has driven a significant increase in new product development across chilled, ambient and the frozen segments.

This innovation gives the consumer a wider choice of products and brands, and allows plant-based products to gain increased shelf space and recognition.

According to a recent Mintel press release, the UK is now the global leader for vegan food launches. In 2018 approximately 16 per cent of new food launches were vegan.

Supermarkets supporting branded and own label growth

Supermarkets have responded to the growth in the market and are significantly increasing the shelf space given to plant-based products.

While branded products tend to be the dominant players in the UK dairy-free alternatives market, with large corporates and disruptor brands dominating shelf space, the supermarkets have also entered the meat and dairy-free market, by releasing own brand varieties of plant-based products, with the UK market (particularly in the chilled segment) weighted towards own label. Examples include:

 Tesco have developed the Wicked Kitchen range of meat-free products in collaboration with pioneering chef, Derek Sarno



 Sainsbury's have produced their ownlabel "free-from" cheese alternatives to meet the growing demand for dairy-free foods.

Established industry players revising their strategy

The existing industry players, and in particular the multinational branded food and drinks companies, have increasingly become aware of the small disruptor brands innovating in the plant-based market space, and are moving both to protect their market share and to capitalise on the growing market.

One example of this is Unilever's acquisition of The Vegetarian Butcher in December 2018 for an undisclosed amount.

Established meat-based protein manufacturers as well as dairy producers have also expanded into the plant-based meat and dairy-free space.

For example Danone acquired leading plant-based dairy alternative producer Alpro in the purchase of The Whitewave Foods Company in 2017, for a value in excess of £9bn. This deal was Danone's largest acquisition since 2007, and offers a fast way to gain significant market share in the growing market.

Direct to consumer models

Direct to consumer (D2C) models have become increasingly important in the food and beverage sector, allowing processors to gain valuable insights into consumers' behaviour and a more tailored approach to marketing and differentiation. When executed well, this model also allows higher margins to be obtained.

This growth in the D2C business model has been facilitated by the increase in online shopping and the increase in social media use, which allows businesses, including startups, to reach a wide market from a relatively low cost base, while avoiding the need to route product through traditional wholesale and retail operators.



Furthermore the increase in D2C has been driven by the fact that consumers are demanding a better experience, and more tailored and personable service.

D2C allows the companies to build a direct relationship with the consumer that would not be available through grocery channels.

Examples of D2C models being used in the plant-based alternatives sector include:

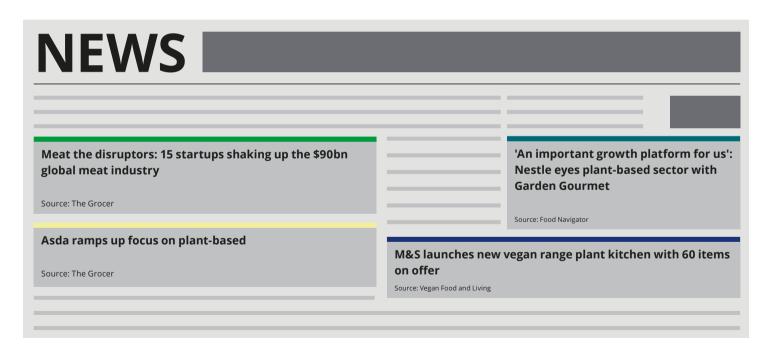
- Allplants, a UK meal-kit delivery service of healthy, plant-based, frozen and ready to eat meals, which raised £7.5m in a Series A venture capital funding in September 2018
- Daily Harvest, a US plant-based vegan frozen fast food company, backed by Serena Williams and Shaun White, which provides a build-your-box service which delivers your order to your doorstep

 Amy's Kitchen, a US-based manufacturer of vegan and vegetarian foods, launched "Amy's Drive Thru" which is the first plantbased fast food restaurant.

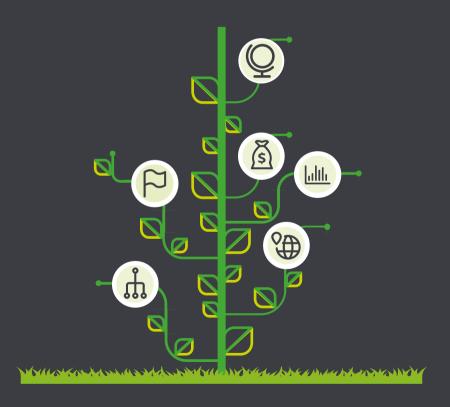


Media coverage

The media has followed the plant-based industry closely and has helped to fuel its growth. Examples of recent media reports on the industry include:



Market overview



Global market

Despite the rise in the availability of plantbased alternative products, the industry is still in a relatively early stage of its lifecycle and therefore offers significant room for further growth. The industry's global reach is expected to be enhanced by new product development and rising consumer demand.

European dominance

The European plant-based alternatives market leads the way in terms of market size, with the European meat substitutes market accounting for around 40 per cent of the global market. The market is forecast to grow to €2.4bn by 2025 from €1.5bn in 2018². The European market, of which the UK is the largest sub-market, is the leader currently by value. This reflects the wealth of the average European customer, particularly in Western Europe, as cost is often a key barrier to buying plant-based alternatives due to the premium price attached to many products.

Market expansion

The surge in the market for plant-based alternatives is expected to continue across all geographies, with the North American meat substitutes market expected to grow by a larger percentage than Europe, with strong growth also anticipated in APAC and LAMEA regions, albeit from a smaller base than in Europe. The North American meat substitutes market is expected to grow to €1.8bn by 2025, an 80 per cent increase from 2018. The APAC and LAMEA markets are forecast to grow strongly to a market size of €1.5bn and €0.8bn respectively by 2025².

This growing market provides opportunities for established players and disruptor companies to innovate and gain market share. Established players also need to be aware of the risk of losing market share if they neglect this growing market.

² Allied Market Research – Meat Substitute Market – July 2018

Significant investment

There has been significant investment aiming to meet consumer demand. The market has received investment from a number of high profile individuals, as well as financial investors and companies, including, for example:

- Tyson Foods Inc. £41m investment in Beyond Meat Inc. in December 2017, for an undisclosed stake. Beyond Meat is a US-based plant-based meat alternatives producer
- Bill Gates & Li Ka-Shing invested in Impossible Foods, a US-based start-up creating a "bleeding" plant-based burger. The company raised \$75m in the most recent funding round
- Richard Branson & Tyson Foods Inc. invested in Memphis meat, a US-based company which produces "clean meat" by culturing animal tissue from cells

- Serena Williams and Shaun White invested in Daily Harvest, a US-based frozen plantbased foods company
- Google co-founder, Sergey Brin, provided \$330k to fund the world's first lab-grown hamburger produced by Dutch start-up, Mosa Meat

These investors have tended to invest in plant-based start-ups as they have recognised the shifting trend in the market and the need to produce more sustainable food. The public prominence of a number of the individuals has created additional media coverage for plant-based alternative industries.

M&A Trends

Our analysis points to a number of trends driving recent M&A activity in the plantbased market



A key trend is for both private, financial investors and existing food and beverage companies to enter or expand in the fast growing plant-based alternatives market that offers potentially higher returns than from other food categories.

Another trend is the consolidation of companies within the plant-based foods sector, as buyers seek to drive synergies from expanded portfolios and expansion into aligned products or new territories.

In particular, the activity around plantbased speciality ingredients is expected to continue, given wider sector trends in speciality ingredients.

Furthermore, as the industry is at a relatively early phase in its development there are a number of start-ups and relatively small businesses which have sought expansion capital.

Another traditional rationale for M&A which is also present in the market is the aim to expand into new geographies. Acquiring a company within a new region allows the buying company to acquire an already established brand in that region. This is often seen as a lower risk strategy than attempting to launch a product which may not be successful in the new market

Another area of the market where we expect to see M&A activity is within the established meat players, as increased competition from plant-based alternatives drives consolidation.



Recent M&A activity



Recent plant-based transactions (1/2)

Completion Date	Target	Target description	Buyer	Deal value (£m)	Rationale
Sep-19	One Up Pure Energy Inc.	Manufacturer of plant-based ready- to-eat snacks	Absolem Health Corp	-	Allows Absolem to invest the high growth plant-based market
Aug-19	Strong Roots	Producer of frozen plant-based healthy food products	Goode Partners LLC	c.14	Investment in a fast growing business in the disrupting plant-based sub-sector
Aug-19	Sojaprotein a.d	Producer of soybean products in Europe	Victoria Group a.d	5	Purchase of a further 1.29% of shares in the company, to up Victoria Group's total shareholding to 90.38%
Jul-19	Katsouris Brothers Ltd	Producer of Mediterranean food products	Cranswick Plc	51	Strengthens existing continental products business and broadens their offering in a number of fast growing, plant-based, non-meat product categories
Jul-19	Ekko Gourmet AB	Producer of organic and vegan food products	Midsona AB	52	Strengthens Midona's position in the frozen vegan products category
Jun-19	SoFine Foods BV	Producer of ready-to-eat meat substitutes	Estavayer Lait SA	-	Allows Groupe ELSA Mifroma to capture larger market opportunities and scale more efficiently
Jun-19	Green Leaf Company SAS	Manufactures and distributes plant-based (hemp) food, dietary supplements, and cosmetics	Emmac Life Sciences Limited	-	Enhances EMMAC's regional presence in France
Jun-19	Jones Food Company Ltd	Produces plant-based food and products	Ocado Group Plc	-	Allows Ocado to capture a leadership position in the vertical farming industry.
May-19	Beyond Meat Inc.	Produces plant-based meat alternatives	Initial Public Offering	c.1,100	Initial Public Offering to raise capital in order to fund further expansion of the company
Apr-19	Onist Food Limited	Manufactures vegan food products	VBites Foods Limited	-	Aligns with VBites Foods portfolio and growth strategy
Mar-19	AMIDORI Food Company GmbH & Co. KG	Manufacturer of vegetable-based meat substitutes	Pfeifer & Langen GmbH & Co. KG	-	Expands Pfeifer & Langen's operations into a strategic new food segment

Recent plant-based transactions (2/2)

Completion Date	Target	Target description	Buyer	Deal value (£m)	Rationale
Mar-19	Verso Food OY	Produces plant-based packaged food from Finnish fava beans	-	-	Aligns with Kavli Norge's growth strategy to invest in rapidly-growing food categories
Dec-18	The Vegetarian Butcher	Manufacturer of meat substitute products	Unilever NV	-	In line with strategy of expanding its portfolio of vegetarian foods
Nov-18	Alginates Business of Dupont Nutrition & Health	Production of functional additives from plant-based raw materials	J. Rettenmaier & Sone Gmbh + Co Kg	-	The divestiture was a requirement set out by the EC. Alginates fit JRS's product portfolio.
Oct-18*	Dalco Food B.V	Manufactures meat substitutes	Hilton Food Group plc	-	Joint venture enables Hilton to expand its offering in the fast-growing vegetarian market.
Oct-18	Nutrafood S.r.l	Manufactures spreads, plant-based drinks and hypoallergenic products	Döhler Gmbh	-	Nut products supplement Döhler's existing portfolio of pulses, cereal bases
Sep-18	Abbot Kinney's BV	Manufactures plant based organic food like yoghurts and ice cream	Koninklijke Wessanen		Complements Wessanen's Dairy Alternative category
Sep-18	Terrafertil SA	Manufactures natural, organic and plant-based food products	Nestle S.A	-	Widens Nestlé's presence in a fast-growing category in key geographies
Sep-18	Plant-based ingredients facility of Texpall B.V	Plant-based ingredients facility of Texpall B.V which includes a plant- based proteins extrusion facility	Roquette Freres S.A	-	Acquisition is in-line with Roquette's strategy to become the leading supplier of textured pulse proteins
Jul-18	Upfield Foods	Manufactures plant-based nutrition bread spreads	KKR & Co	6,031.3	Significant private equity investment into Unilever plant-based spreads business
Mar-18	Ojah B.V	Manufactures meat substitutes high in protein	Kerry Group Plc	-	Complements Kerry's ProDiem plant-based protein product

Note: * Announced date

Source: Mergermarket, Company website

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