

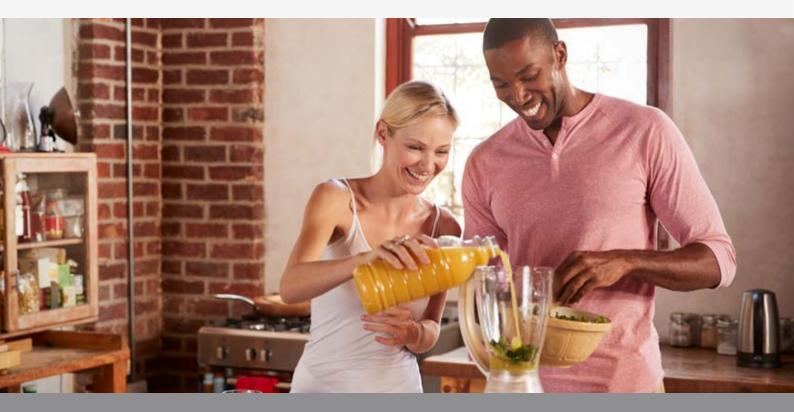
# Food and Beverage Industry Trends

How UK manufacturers can grow amidst ever-changing consumer demands



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# Foreword by Duncan Moir

When <u>14 million people</u> sat down to watch the first episode of the BBC's "Blue Planet II" in October 2017, no one—not even the show's narrator, David Attenborough—could have predicted the dramatic effect that the series would have on consumers worldwide, or the many initiatives that have since arisen to reduce pollution caused by single-use plastics.

The Blue Planet effect, as it has become known, is just one example of a consumer trend with significant consequences for the food and beverage industry.

The way that we cook, eat, and shop for food changes all the time. In recent years, consumers have increased focus on the environment, health and wellbeing, and lifestyle trends. This focus drives extensive change in food and beverage manufacturing. It creates a demand for a wide variety of new products, packaging and labelling changes, and recipe alterations. Some examples of these changes include the need to reduce salt, sugar, and allergens or reduce or eliminate meat and dairy.

Veganism, vegetarianism, and "flexitarian" diets—where someone eats meat-free for certain days or meals—are

growing in popularity. Consumers also want to know more about the source of the ingredients used and demand accurate and visible traceability information.

The rise in Internet shopping and the number of "food-to-go" outlets selling high-quality ready meals have led to an increased demand for fresh and ambient products with shorter shelf-lives. Meanwhile, the plethora of food programmes on television and online food influencers have stirred up consumers' interest in the exotic foods and ingredients they see promoted.

Continuing price pressure from the supermarkets compels manufacturers to make improvements in quality, yield, and productivity to reduce waste and maintain profit margins.

We've created this report to help food and beverage manufacturers spot and address some of the current trends in the market. However, identifying the trends is only part of the solution. We'll also discuss the challenges these trends may present and look at how modern ERP systems such as Epicor Tropos can help manufacturers to address these challenges and remain profitable.

# 10 Consumer Demand Trends Reshaping the UK Food and Beverage Industry

Consumers are making their preferences known with their voices and their wallets. While there are dozens of microtrends affecting food and drink manufacture in the UK, addressing some or all of the 10 larger trends listed below can help position your organization for sustained growth.

- Source local ingredients—Consumers want manufacturers to limit food transportation miles and greenhouse gases
- Care for the environment—Minimize waste in production processes and incorporate sustainable packaging
- Use gentler meat and dairy production practices—Promote cruelty-free foods, as animal welfare concerns are driving reduced meat and dairy consumption greenhouse gases
- Help shoppers minimize waste—Offer smaller portions, less packaging, and clearer food labels to help consumers reduce waste
- Provide traceability and transparency—
  Educate shoppers on the steps you take to assure safety and quality

- Adapt to social trends—Incorporate popular ingredients and offer "free-from" options
- Make special diets easy—Help consumers avoid allergens and embrace the latest healthy eating trends
- **Promote healthy options**—Choose natural, local, and diet-friendly ingredients for your products
- Incorporate global ingredients—Embrace new flavours gaining popularity around the world
- Simplify meal prep—Offer products that help consumers prepare a wholesome, tasty meal with little effort

Source: "Blue Planet II tops 2017 TV ratings," BBC News, 10 January 2018

### Introduction

As someone who works in the food and beverage industry, the challenges that you face are likely to be consistent over time—increasing sales, improving profitability, maximising yields, increasing margins, reducing costs, optimising the supply chain, and assuring quality and compliance.

However, your role and responsibilities are likely to be anything but predictable. You work in one of the world's fastest-changing markets.

This report looks at some of the key industry and consumer trends that have arisen in recent years, how they affect food and beverage manufacturers, what to expect in the near future, and how to stay ahead of the changes to thrive in this dynamic, evolving market.

### Feed the World-Environmental Trends

1/5 of consumers would actively choose brands if they made their sustainability credentials clearer.

Consumer concern about the environment is growing. Research<sup>1</sup> shows that British people's concern over climate change hit the highest level in almost a decade in the summer of 2018, and that a <u>fifth of consumers</u><sup>2</sup> would actively choose brands if they made their sustainability credentials clearer.

Food has an enormous impact on the environment. Friends of the Earth<sup>3</sup> say that 14.5 percent of global climate changing gases are due to meat and dairy production (more than all forms of transport).

According to World Wide Fund for Nature (WWF), of the <u>around 94 million hectares of forest</u><sup>4</sup> lost during the 1990s, almost 70 percent were converted to agricultural land. Agriculture alone could raise the Earth's average temperature <u>more than 1.5° C</u><sup>5</sup> above that in pre-industrial times if we don't change our eating habits—in particular, consuming less meat.

As the population increases, food security becomes more of an issue. People around the globe need reliable and affordable access to nutritious food. Retailers and manufacturers are responding to this increased awareness, resulting in the following environmentally focused food trends:

#### Sustainable foods

The "buy local" trend for locally sourced produce to reduce food miles has been around for some time. The trend for <a href="https://www.hyper-local.gods6">https://www.hyper-local.gods6</a>—those that are sourced within walking distance—takes this to the next level. Foraging is in, with <a href="restaurants">restaurants</a> boasting foraged produce<sup>7</sup> such as rock samphire or dulse seaweed, and foraging courses abound.

Another environmental concern is scarce ingredients. Between 1990 and 2008 palm oil production was responsible for <u>8 percent of the world's deforestation</u><sup>8</sup>.

- 1 "Fears over climate change hit highest level in a decade following heatwave, study says," Independent, 4 September 2018
- 2 "Report shows a third of consumers prefer sustainable brands," Unilever, 1 May 2017
- 3 "What to eat: Food and the environment," Friends of the Earth
- 4 "Losing their homes because of the growing needs of humans," World Wide Fund For Nature
- 5 "Without Changing Diets, Agriculture Alone Could Produce Enough Emissions to Surpass 1.5° C of Global Warming," World Resources Institute, 17 October 2018
- 6 "15 food trends for 2018," BBC Good Food
- 7 "6 Foodie Traveller Tips," Travelodge UK
- 8 "Banned Iceland Christmas advert: Why was the palm oil ad banned from TV and how to sign the petition," EveningStandard, 14 November 2018



The supermarket Iceland hit the headlines with a Christmas campaign in partnership with Greenpeace, which was banned on TV but widely watched on social media. Iceland promoted its palm-oil-free own-brand products, and the controversy has helped to publicise the issue of sustainability.

One response to concerns about food security is to source more protein from insects, which are highly sustainable and can help to reduce our carbon footprint. Sainsbury's already stocks crickets<sup>9</sup>. Research shows that nearly 10 percent of people in the UK have tried edible insects, of which 57 percent said they enjoyed them.

#### Importance of food packaging

Consumers reacted with shock and anger to the final episode of the BBC documentary "Blue Planet II." It depicted albatrosses unwittingly feeding their chicks plastic and dolphins potentially exposing their new-born calves to pollutants. Many took to Twitter to respond, including broadcaster Ben Fogle who tweeted "our supermarkets have the power to change the packaging we consume."

There have been initiatives to reduce the use of plastic for several years, including the single-use plastic bag charge introduced in 2015. However, many credit the series with bringing the issue into the mainstream. Research shows that <u>88 percent of viewers</u><sup>11</sup> have altered their behaviour as a result.

Other initiatives to reduce plastics and introduce zero-waste packaging are targeting single-use straws, water bottles, and takeaway coffee cups. The UK's first plastic-free supermarket aisles<sup>12</sup> opened in London in November 2018, offering more than 1,700 product lines in packaging such as paper bags made from cellulose.



Our supermarkets have the power to change the packaging we consume."

—Tweet by Ben Fogle

- 9 "Sainsbury's becomes first UK supermarket to sell edible bugs as crickets hit shelves," Independent, 17 November 2018
- 10 "Viewers react to David Attenborough's final Blue Planet II conservation rallying cry," RadioTime
- 11 "Food and drink report 2018–19," Waitrose & Partners
- 12 "Britain's first plastic-free supermarket zones open," The Telegraph, 7 November 2018

#### Plant-based diets and flexitarians

One of the fastest-growing trends is the rise in meat-free eating. One study shows that 33.5 percent of people<sup>12</sup> are cutting down on or cutting out meat. Another study shows that animal welfare was the <u>primary reason cited</u> by vegetarians and vegans<sup>13</sup> for their choice to embrace a plant-based diet.

Meat Free Monday is a not-for-profit campaign which was launched by Paul, Mary, and Stella McCartney in 2009<sup>14</sup> to raise awareness of the detrimental environmental impact of eating meat. Consumers who have embraced this are defined as flexitarians—those who choose certain days or meals to avoid meats.

There have been numerous other campaigns by celebrities to raise awareness of animal welfare issues for those who still choose to eat meat. For example, the #TurnYourNoseUp15 campaign features the likes of Dominic West and Jon Snow encouraging consumers to buy highwelfare pork, and Jamie Oliver16 has been given awards for campaigning work around welfare standards for chicken.

Consumers are becoming more interested in the provenance of the meat they are eating. M&S has run a <a href="https://nichen.com/high-profile\_campaign">high-profile\_campaign</a> promoting the traceability of all its beef back to individual animals thanks to its DNA testing programme. <a href="https://nichen.com/Research in 2018">Research in 2018</a> showed that 65 percent of meat shoppers say traceability is important to them.

#### Food waste

Research from 2015<sup>19</sup> showed that people in the UK waste over ten million tonnes of food every year, with nearly two million being from food manufacturing—valued at £1.4 billion. WRAP<sup>20</sup> says that manufacturers often don't know how much food they waste, or how much the food wastage costs. It advises manufacturers to improve systems and processes such as forecasting, ordering, product life, and promotions.

Households waste over seven million tonnes of food, around 2 million tonnes<sup>21</sup> of which is thrown away because families don't consume food in time. Many cite the food label as a factor. Part of the problem is that consumers don't always understand food labelling.

Another study found that whilst more than 70 percent of people knew that use by dates relate to food safety, less than half understood the meaning of best before dates, which relate primarily to quality. Retailers, food and beverage manufacturers, and other stakeholders have signed up to the Courtauld Commitment 2025 to make food more sustainable. This results in initiatives such as Tesco<sup>22</sup> scrapping best-before dates on fresh produce.

In 2015, Jamie Oliver and celebrity chef and farmer Jimmy Doherty made consumers aware of another food waste issue—"wonky" vegetables. Supermarkets reject tonnes of misshapen or blemished carrots, potatoes, apples, and other produce items. These items are either thrown away or sold off for animal feed.

Supermarkets such as Asda trialled bagging "ugly veg" separately. Its research showed that <u>65 percent of customers</u><sup>23</sup> were open to the idea of buying oddly shaped produce, while 75 percent would definitely buy it if it was cheaper.

Concerns about food waste, the publication of "Nose to Tail" by chef Fergus Henderson<sup>24</sup>, and the recession making meat less affordable have all combined to make cheaper "forgotten" cuts of meat—such as ox cheeks, lamb shoulder, and offal—fashionable again. Supermarkets have made such cuts widely available to buy and cook at home. They are also exploring ready-made meals.

<sup>13 &</sup>quot;Veganism: Why is it on the up?" BBC News, 18 June 2018

<sup>14</sup> Meat Free Monday

<sup>15 &</sup>quot;#TurnYourNoseUp Campaign Video Celebrities," Farms Not Factories

<sup>16 &</sup>quot;Jamie Oliver awarded highest RSPCA Honour for farm animal welfare work," Farming UK, 20 June 2017

<sup>17 &</sup>quot;M&S the stakes with unrivalled new British beef traceability campaign," Marks & Spencer, 25 April 2018

<sup>18 &</sup>quot;What consumers think about meat traceability in 10 charts," The Grocer, 4 July 2018

<sup>19 &</sup>quot;The Courtauld 2025 baseline and restated household food waste figures," WRAP, 22 May 2018

<sup>20 &</sup>quot;WRAP's 5-5-5 approach to maximizing waste reduction," WRAP

<sup>21 &</sup>quot;Helping Consumers Reduce Food Waste: Retail Survey 2015," WRAP, 27 February 2017

<sup>22 &</sup>quot;Tesco to axe 'confusing' best before dates on its fruit and vegetables," The Guardian, 21 May 2018

<sup>23 &</sup>quot;Jamie Oliver leads drive to buy misshapen fruit and vegetables," The Guardian, 1 January 2015

<sup>24 &</sup>quot;Nose to Tail by Fergus Henderson: the book that changed the way we eat," Independent, 26 January 2016

# Feed Your Body—Health and Wellbeing Trends

Although the connection between food and health goes back generations, research<sup>25</sup> from 2016 shows a rising interest in healthy eating. Millennials drive this trend, and consumer definitions of "healthy" vary with age. Younger consumers often define healthy foods by diet trends such as high-protein, whereas older consumers have more traditional definitions such as low-fat.

With interest at a high and the Millennial pound up for grabs, retailers and manufacturers are responding with the following health- and wellbeing-focused food trends:

#### Healthy diets

The <u>prevalence rates</u><sup>26</sup> of overweight, obesity, and dietrelated diseases such as cardiovascular disease, stroke,

certain cancers, and type II diabetes are increasing in every region—in both developed and developing countries. Food alone isn't responsible for the obesity epidemic, but individuals trying to lose weight link diets with results.

In the UK, the government has long issued guidelines to the public on how to eat to reduce obesity, but these guidelines change as new information becomes available. Recently there has been a change of emphasis from reducing fat to reducing sugar in foods. Public Health England<sup>27</sup> has introduced a calorie-counting plan, a sugar-reduction programme, and a levy on sugary drinks.

As well as government advice, a plethora of diet books offer recommendations. Hundreds of YouTube channels and websites cover the subject, and many conflict with one

- 25 "Healthy eating is increasingly on consumer's agendas, with millennials leading the way," PwC, 26 August 2016
- 26 "The challenge," Biotechnology and Biological Sciences Research Council (BBSRC)
- 27 "Sugar Reduction Programme," Public Health England, 22 May 2018



another. Consumers struggle to discern which ones are the best. New diets that have had considerable publicity include the keto diet (low-carb, high in "healthy" fat) and the paleo diet (cut out processed foods and eat like a caveman).

The <u>BBC Good Food website</u><sup>28</sup> lists many more, including the 5:2, Dukan, Atkins, low Fodmap, Sirtfood, and Dopamine diets. As with the official advice, one of the main trends has been a reduction of sugar and starchy carbohydrates. This trend appears to be replacing the low-fat diets popular in years past.

The interest in diets has led to the phenomenon of food substitutions, seen widely on social media, such as "courgetti" substituted for pasta, cauliflower for rice, lettuce for wraps, jackfruit for pulled pork, and sweet potatoes for regular potatoes. As well as creating a market for spiralisers, the substitution trend prompted supermarkets to start selling vegetables that have been "spaghettied" or "riced" for convenience. It also resulted in product innovation—both for sale direct to the consumer and as ingredients in processed foods. For example, low-carb bread replacements, sugar substitutes, and high-protein "ball" snacks.

Meat-free food isn't just for vegans and vegetarians. In the study mentioned earlier, whilst non-meat eaters were mainly motivated by animal welfare and the environment, the meat eaters who were interested in cutting down cited <u>health and weight management</u><sup>14</sup> as their top two reasons.

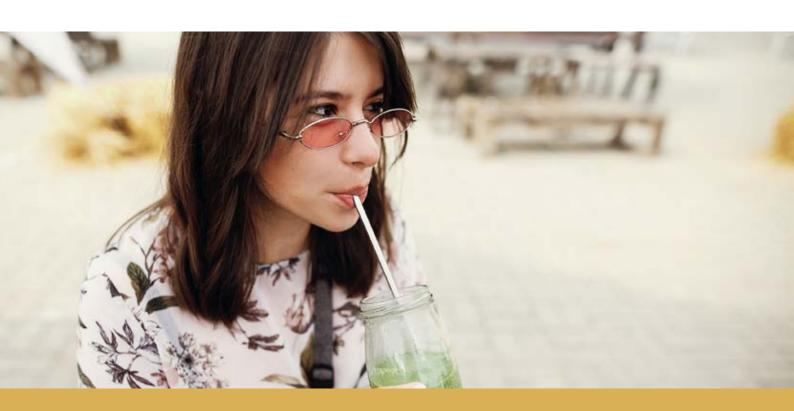
#### Free-from foods

Free-from food sales in the UK grew by £230 million<sup>29</sup> in the year to August 2017. The number of people who claim to regularly buy free-from foods more than doubled between 2015 and 2017, from 19 percent to 43 percent. The bulk of free-from foods focus on dairy- and gluten-free meals.

Allergy UK<sup>30</sup> says that 44 percent of British adults now suffer from at least one allergy (all types of allergy, including food) and the number of sufferers continues to climb. In the 20 years to 2012, the rate of hospital admissions for anaphylaxis in the UK increased 615 percent.

Some of the most common food allergies are to nuts, legumes (such as peanuts), or shellfish. Those affected must be able to buy foods guaranteed to be free from these allergens. In the most severe cases, exposure can be fatal.

- 28 "Spotlight on... popular diets," BBC Good Food
- 29 "Revealed: How free-from sales surged by a whopping £230m," The Grocer, 17 August 2017
- 30 Allergy UK





Some schools have banned nuts, and there is widespread debate about whether this is necessary or effective.

In the UK, plant-based milk sales <u>rose by 30 percent</u> <u>between 2015 and 2017</u><sup>31</sup> and are still rapidly increasing. <u>15 percent of UK households now avoid gluten</u><sup>32</sup>, more than half do so because of perceived health benefits. People who suffer from coeliac disease mustn't eat gluten, but the growth is <u>primarily driven by non-sufferers</u><sup>33</sup>.

Another category of free-from beverages, alcohol-free spirits, emerged recently as consumers choose to drink less. The number of British adults who consume alcohol is at its lowest since 2005<sup>34</sup>.

#### Food for thought

The <u>widespread "mindfulness" trend</u><sup>35</sup>—slowing down, being present in the moment—has expanded to include mindful eating, widely reported as a <u>key food trend for 2018 and beyond</u><sup>36</sup>. This plays out in two ways.

One is about consumers being increasingly interested in the nutritional value, provenance, and ethical status of their food. They study labels and prefer brands that make credible health and environmental claims. The other is about eating mindfully for weight loss<sup>37</sup>—slowly, with full awareness and away from the distractions of the TV or computer screen.

Trends such as juicing and detoxing, once focused on weight loss alone, are now focusing more on the combined effects on both mind and body—and numerous luxurious "juicing retreats" have sprung up, promising their customers a range of mental and physical wellbeing benefits.

With an aging population and a corresponding growth in the prevalence of dementia<sup>38</sup>, consumers are also looking to food to improve the health of their brains as well as their bodies. Researchers publish new findings on the impact of food on the brain all the time. Many foods are credited with elements of dementia and memory loss protection. In particular, consumers value foods rich in omega-3 fatty acids, B vitamins, and antioxidants<sup>39</sup>, such as oily fish and leafy greens, for their expected brain-boosting powers.

- 31 "UK vegan milk sales have risen by 30% since 2015," Vegan Food & Living, 29 August 2018
- 32 "Gluten Free Lifestyle Set To Rise In 2018," Food & Drink News, 25 January 2018
- 33 "The war on gluten," Science Magazine, 23 May 2018
- 34 "'Non-drinkers deserve a great adult cocktail': how alcohol-free spirits became a stealth hit," The Guardian, 10 September 2017
- 35 "Sales of mind, body, spirit books boom in UK amid 'mindfulness mega-trend,'" The Guardian, 31 July 2017
- 36 "2018 Food Trend #1: Mindfulness," Winsight Grocery Business, 2 January 2018
- 37 "Mindful eating can help weight loss, study shows," The Guardian, 19 May 2017
- 38 "Dementia UK report," Alzheimer's Society UK
- 39 "Foods linked to better brainpower," Harvard Health Publishing



### Feed Your Instagram Feed—Lifestyle and Social Trends

Ever since Delia caused a shortage of cranberries back in 1995<sup>40</sup>, the ability of a celebrity to turn a little-used ingredient mainstream has been well known. These days, the celebrities are more likely to be online influencers than TV chefs—and food is big business online.

There are 100 million food boards<sup>41</sup> on Pinterest alone, and by 2016 the platform had seen a 24 percent increase<sup>42</sup> in food-related Pins, year-on-year. Top food bloggers, such as proponent of "clean eating" Deliciously Ella<sup>43</sup>, can build lucrative careers by selling their own food lines and other merchandise such as cookbooks. Consumers—especially younger consumers—are adventurous, eating foods from multiple cultures and using novel ingredients inspired by online content.

At the same time, adults increasingly struggle with worklife balance. Whilst consumers may want exciting new foods, they don't want to cook them themselves. Here,

too, retailers and manufacturers are responding with the following health and wellbeing-focused food trends:

#### Fashionable foodies

Now that food is something to be photographed and shared on social media, fashions and fads can spring up very quickly. Digital-native millennials are in tune with what's hot and what's not—and the more visually arresting the food, the more likely it is to be on trend. Cue vibrant, sparkly mermaid toast<sup>44</sup> and unicorn Frappuccinos<sup>® 45</sup>—and the inevitable backlash of black "goth" 46 food.

The vegan trend mentioned earlier as both an environmental and health trend is possibly most impressive when you consider its push into mainstream culture. As of March 2019, the hashtag #vegan has more than 75 million Instagram posts. In January 2018, more than 168,000 people<sup>14</sup> pledged to go vegan for the month under the

- "Delia's cooks up a commotion," BBC News, 10 January 2000
- 41 "40 Essential Social Media Marketing Statistics for 2018," WordStream, 25 July 2018
- "The Growth of Food-Related Content on Pinterest," Social Media Today, 24 May 2017
- "How to Make Mermaid Toast, Instagram's Most Magical Food Trend," Vogue, 17 April 2017
- 45 Unicorn Frappuccino Blended Crème, Starbucks
- "Oh My Goth: The Food Trend as Black as Your Heart," Vogue, 27 October 2017

<u>Veganuary</u><sup>47</sup> campaign—and organizers say that number grew to 250,000 in 2019<sup>48</sup>.

Veggie food has shaken off its "tofu and lentils" image, as a range of product innovations have enlivened the category, such as meat-free burgers<sup>49</sup> that "bleed" beetroot juice, vegan Magnum bars<sup>50</sup> (currently only available in Scandinavia), and "dirty" vegan junk food<sup>51</sup>—tacos, burgers, and fried "chicken."

Demand for new ingredients can spike very quickly, especially when promoted by social influencers. Hero ingredients or foods include both those unheard of by the average consumer only a few years ago such as aquafaba<sup>52</sup>, chia seeds<sup>53</sup>, or sea vegetables<sup>54</sup>, and those that are already mainstream but have been re-invented such boutique gins<sup>55</sup> with flavoured tonics, or specialist teas served by a tea sommelier<sup>56</sup> in one of the many tea bars that are starting to appear in cities around the UK.

#### The world on a plate

Food bloggers looking for the next big thing often look to other countries and cultures for inspiration—and UK consumers have become more adventurous. Curry is now the <u>favourite meal</u><sup>57</sup> both to eat out and to cook at home, taking over for staples such as fish and chips and the Sunday roast. Recent trends include foods from Korea, Hawaii, Portugal, Japan, Mexico, Cuba, the Philippines, and the Middle East.

Another reason for the rise in food from abroad is the influence of migrants, enriching British food culture by cooking for friends, opening and working in restaurants

and food shops, producing and selling foods, and sourcing ingredients.

#### Instant gratification

Many people today feel time-poor. Research by the Trades Union Congress (TUC) showed that in 2015, <u>15 percent</u><sup>58</sup> more people were working over 48 hours per week than before the economic downturn in 2007. In 2016, UK workers put in a total of <u>2.1 billion</u><sup>59</sup> unpaid overtime hours. In 2017, the number of workers facing <u>commutes longer</u> than 2 hours<sup>60</sup> had gone up by 34 percent in 10 years.

It's no wonder that other research shows a sharp increase in the number of employers reporting employee stress and mental-health-related illnesses, from <u>55 percent in 2017 to 68 percent in 2018</u><sup>61</sup>.

How we cook and eat in the UK has changed radically, too. We are moving away from time-consuming home cooking and relying more on eating out and buying convenience foods.

In 1980, people spent <u>an hour</u><sup>62</sup>, on average, preparing an evening meal at home. Today, research shows average prep time shrunk to <u>24 minutes</u><sup>63</sup>. The same study shows that a fifth of British households no longer own a dining table, and 57 percent don't eat dinner together as a family each night.

Many are not cooking at all, as the rise in delivery services such as Deliveroo and Just Eat shows, with such services projected to increase to an additional 101 million visits by 2019<sup>64</sup> (an increase of 16 percent on 2017).

- 47 Veganuary
- 48 "250,000 people have tried vegan with Veganuary this year...," Veganuary
- 49 Food and Beverage Industry Trends
- 50 "Vegan ice cream: Unilever to debut dairy-free Magnum bars in Sweden and Finland," Food Ingredients First, 28 August 2018
- 51 "A 'dirty vegan' fast food takeaway service has opened in Nottingham," Vegan Food & Living, 18 February 2019
- 52 "This Genius Hack Is The Secret to Making Raw Cookie Dough Edible," Cosmopolitan, 11 May 2016
- 53 "The seed trend is growing in 2017," Food & Drink Resources
- 54 "Food Trend: Sea Vegetables," Viva Glam Magazine, 1 March 2017
- 55 "Gin is in vogue again—but beware those barmy botanicals," The Telegraph, 29 March 2016
- <sup>56</sup> "Tea sommelier: Boom in global tea culture to bring teahouses to UK high streets," Big Hospitality UK, 28 April 2015
- 57 "How curry became Britain's favourite home-cooked dish," The Telegraph, 18 June 2018
- 58 "15 per cent increase in people working more than 48 hours a week risks a return to 'Burnout Britain', warns TUC," TUC, 9 September 2015
- 59 "Workers in the UK put in £33.6 billion worth of unpaid overtime a year," TUC, 24 February 2017
- 60 "Average worker now spends 27 working days a year commuting, finds TUC," TUC, 17 November 2017
- 61 "Aon Benefits & Trends Survey shows sharp increase in workplace mental health issues," Aon, 30 January 2018
- 62 "Can't cook won't cook Britain..." Daily Mail, 27 March 2014
- 63 "Average British dinner lasts 21 minutes," AOL News, 18 January 2018
- 64 "Continuing strength of delivery to bring home the bacon in Britain's foodservice industry of the next two years," NPD Group, 15 November 2017



As property prices rise, the space given to kitchens in new builds<sup>65</sup> shrinks. As more people live alone, co-living spaces with shared kitchens become more common. Given these trends, we may see future homes built with no kitchen at all—leaving consumers to rely entirely on restaurants, delivery services, and convenience foods.

The convenience foods we eat have changed, too. Frozen foods are on the decline while ambient or fresh options are on the rise. The latter are perceived as more healthy and enticing, particularly by younger and more affluent<sup>66</sup> consumers.

This fits with the way our shopping habits have also changed. The weekly shop has declined—meaning we are less likely to fill a large trolley with frozen food. More than half of British people<sup>67</sup> have given up the traditional "big shop," and one in 10 people<sup>68</sup> decide what to buy for an evening meal just before they eat it—often stopping to shop for it on the way home from work.

Many new businesses have been created to meet the need for great quality, convenient foods. Some prepare gourmet meals for your freezer, others provide restaurant-quality vegan ready-meals, others deliver recipe boxes with all the ingredients necessary to cook from scratch at home. Spending on recipe boxes alone in the UK was up by 65 percent<sup>69</sup> in the first half of 2016, compared with the same period the year before.

<sup>&</sup>quot;Would you live in a house without a kitchen? You might have to," The Guardian, 24 June 2018

<sup>&</sup>quot;What shoppers really think about... frozen food," The Grocer, 27 April 2017

<sup>&</sup>quot;Death of the weekly supermarket shop sparking 'tap-and-go' card boom," The Telegraph, 2 March 2017

<sup>68</sup> "Why Britain is ditching the weekly shop," The Guardian, 1 November 2017

<sup>&</sup>quot;The rise of the DIY meal kit: fad or future?" The Telegraph, 23 July 2017

### What's Next?

Unfortunately, we don't have a crystal ball with which to predict which new food trends are on the horizon. We expect that our three key themes—the environment, health and wellbeing, and lifestyle—will persist.

However, with the speed of food trend changes, the only thing we can be sure about is that nobody knows exactly what the coming year will bring. Some reports say <u>Hawaiian poke bowls</u><sup>70</sup> will be in, while others say they are <u>already passé</u><sup>71</sup>. To give you a chance of getting ahead of the game, we've included a round-up of some of the predictions in the market.







- Probiotics—a focus on gut health and fermented foods<sup>71</sup> such as kimchi, pickles, sauerkraut, tempeh, and kefir
- ► <u>Transparency</u><sup>72</sup>—as environmental and health concerns grow, brands will have to become transparent about their ingredients and supply chain to gain consumers' trust
- ► Snacking<sup>73</sup>—a move from three to four "meals"<sup>71</sup> a day could come as consumers look to more innovative instant food to fit our busy schedules
- ► Eliminating waste—an increased focus on <u>zero-waste eating</u><sup>71</sup> with recipes for leftovers and a fashion for eating ingredients past the best-before date
- Pacific Rim flavours—as global foods gain popularity, foods such as <u>longganisa</u><sup>74</sup> (a Filipino pork sausage), dried shrimp, cuttlefish, shrimp paste could become trends while tropical fruits such as guava, dragon fruit, and passionfruit become favourites in smoothie bowls and cocktails

<sup>72 &</sup>quot;Stay-at-home customers likely to feed growing delivery boom," Morning Advertiser, 3 December 2018

<sup>73 &</sup>quot;Trend five: Snacking, the Definitive Occasion," Food Manufacture, 19 November 2018

<sup>74 &</sup>quot;Whole Foods Market unveils top 10 food trends for 2019," Whole Foods Market, 15 November 2018

<sup>70 &</sup>quot;13 Food Fashion Predictions for 2019," Spires Catering Consultancy

<sup>71 &</sup>quot;Whole Foods reveals the new food trends that will be popular in 2019," Independent, 15 November 2018



# Implications for Food and Beverage Manufacturers

# The Need for Speed

What's clear is that new trends develop quickly and gain pace at an alarming rate. Food and beverage manufacturers need to be able to react fast to get in front of these trends, rather than be left behind.

For example, research in 2016 showed that the number of people in the UK identifying as vegan has increased tenfold in a decade<sup>75</sup> from 150,000 to over 540,000—but that rise has been dwarfed by an astounding increase to 3.5 million<sup>76</sup> by April 2018. Other figures show that the demand for meat-free food increased by 987 percent in 201777.

Some trends can erupt almost overnight. Online searches for the term "plastic recycling" rose by 55 percent<sup>78</sup> following the "Blue Planet II" programme's appeal in the final episode and the Marine Conservation Society saw a 169 percent jump in traffic to its website.

Such rapid change means that demand is unpredictable. Supermarket estimates can be unreliable at the best of times, often changing considerably between the forecast, the final forecast, and the actual order because of the weather, events such as public holidays, or other fluctuations in consumer buying. This means manufacturers must continually adapt their production plans to meet customer demand.

The trend towards fresh and ambient rather than frozen also has an impact here on the velocity of manufacture. To even out the vagaries of demand, it is easier to make and stockpile frozen foods than fresh.

<sup>&</sup>quot;Find out how many vegans are in Great Britain," The Vegan Society, 17 May 2016

<sup>&</sup>quot;Number of vegans in UK soars to 3.5 million, survey finds," Independent, 3 April 2018

<sup>77 &</sup>quot;Statistics," The Vegan Society

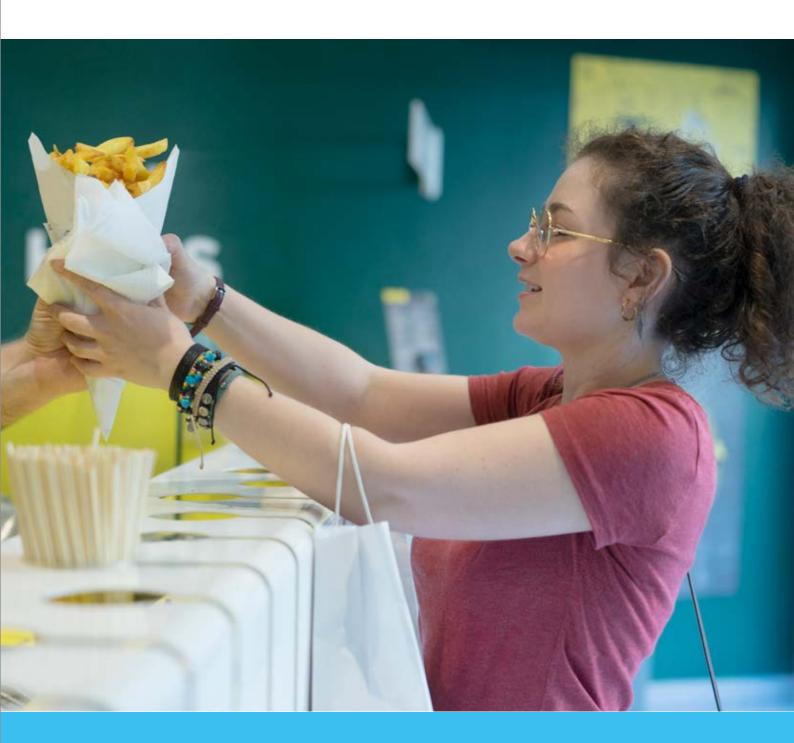
<sup>&</sup>quot;The Attenborough effect: searches for plastic recycling rocket after Blue Planet II," Resource, 5 January 2018

These fast-changing trends also mean that there is a great deal of churn in the types and volumes of products that customers want. Consumers suddenly must have sustainable, healthy, meat-free, photo-ready, multicultural, convenient foods using novel ingredients—which means supermarkets must demand these options from manufacturers who produce them.

If a niche product unexpectedly becomes mainstream, ramping up production to meet demand—perhaps a new contract for a product innovation with a key customer—is challenging and requires agility in business processes.

As well as turning new product development around more quickly to respond to changes in consumer tastes, manufacturers also must reformulate existing ranges, changing the recipe—for example—to reduce the sugar or salt content. Doing so whilst retaining production volumes challenges organisations across the industry.

Understanding the impact on margins and profitability can mean the difference between business success and failure in the market, and requires manufacturers to have visibility of costs, yields, and production volumes at each stage of the process.



### It's Complicated

Food and beverage manufacture doesn't happen in isolation. The global food supply chain is complex and interlinked, and a rapid change in one element can have unforeseen effects somewhere else—in some cases leading to a reversal of the trend.

For example, avocados have been embraced by healthy eaters and hipster Millennials to the extent that in 2017, we saw the opening of an all-avocado restaurant<sup>79</sup> in New York. Only one year later, however, some cafes are now banning the use of avocados<sup>80</sup> in response to concerns about food miles, deforestation, and the impact on farmers in Central and South America. This sort of backlash can play havoc with demand, which makes forecasting and production planning even more challenging for manufacturers.

Similarly, changes in packaging might appear environmentally sound but have unforeseen consequences. For example, consumers might be very supportive of removing plastic from produce such as cucumbers, without understanding the impact on shelf life<sup>81</sup>, and the potential for food waste. When supermarkets and other customers demand these innovations, suppliers need to understand how it will affect their supply and what it will cost them.

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Additionally, the speed with which trends play out can also cause supply chain issues. For example, when a rise in lowcarb spiralised "courgetti" consumption coincided with bad weather in southern Europe in January 2017, the result was a courgette crisis<sup>82</sup>—stocks were low and courgettes were unavailable for a period of time in some areas.

When key ingredients are at risk of disappearing, manufacturers need to be confident in their supplier relationships. They will potentially need to extend and increase their supply chain—especially where new product development requires new ingredients.

Additionally, manufacturers must understand the economics of inventory management. For example, how much stock to order in, how to manage production whilst minimising waste, and how not to run out.

- "NYC's first avocado café," Avocado Appetit Bar & Café
- "Avocados banned from trendy cafes over environmental concerns," Independent, 2 December 2018 80
- 81 "Morrisons to remove plastic wrapping on cucumbers despite food waste risk," British Plastics & Rubber, 8 August 2018
- "Courgette crisis: why the vegetable shortage will hit clean-eaters hardest," The Guardian, 17 January 2017





# Legislation and Compliance

Legislation is becoming increasingly onerous and complex. Many of the trends discussed above have new legislative requirements associated with them. For example, environmentally concerned consumers, mindful eaters, allergy sufferers, and consumers with religious needs—such as for halal or kosher foods—all want to know what is in their food. This means that consumers drive an increased focus on labelling and traceability.

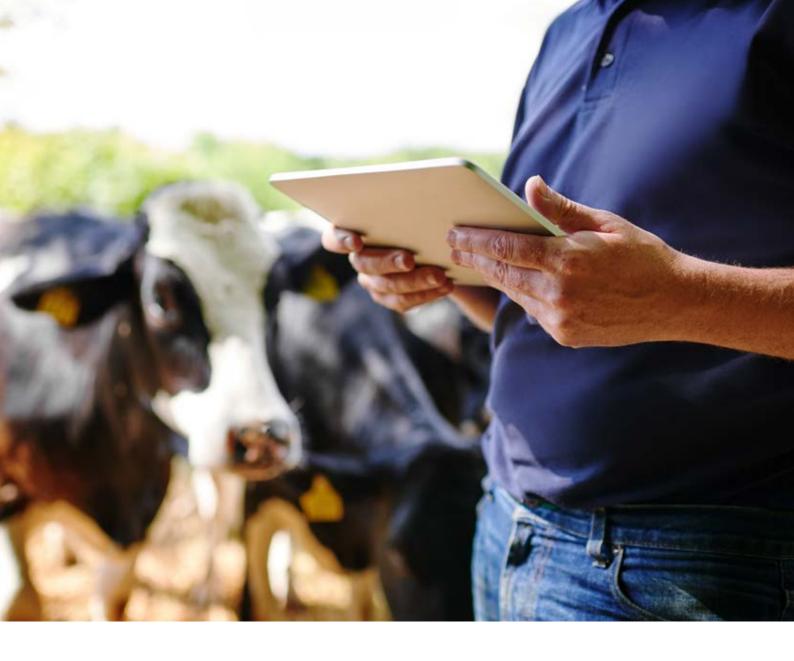
There are also implications relating to production planning and uptime. For example, if you make both vegan and non-vegan products, you will need to ensure that the production lines are fully washed down before switching from the latter to the former—although not the other way around.

The challenge for manufacturers here is to reduce downtime whilst remaining compliant and ensuring full traceability, down to where ingredients have been stored in the warehouse, to reduce the risk of cross contamination. Compliance is essential in all cases, but where allergens are concerned, the risks of failure are can include deadly consequences. A product recall can be devastating for a food business. The cost of one may not only include lost inventory, product replacement, and supermarket fines, but also time and effort involved to conduct the recall, production downtime, damage to the customer relationship and to the brand, and possible legal action.

Packaging regulations also present challenges. There is already considerable legislation around packaging, especially relating to waste and disposal—such as the Green Dot scheme—but changes are inevitable.

Consumer interest will likely drive more change and push manufacturers and retailers to take on even more of the responsibility and cost of reducing plastics in their packaging. In fact, the government has recently announced plans<sup>83</sup> to make businesses in England pay for recycling or disposing their packaging waste.

83 "Businesses must pay to recycle their own waste under new government scheme," Independent, 18 December 2018



# How Epicor Tropos Can Help

With the market changing so rapidly and so much uncertainty about future directions, food and beverage manufacturers can feel under siege. It is crucial to have control of manufacturing processes and visibility of the data that you need to meet the key challenges of increasing sales, improving profitability, maximising yields, increasing margins, reducing costs, optimising the supply chain, and assuring quality and compliance.

Whereas once data about manufacturing processes would have been recorded by hand, now specialist systems exist that automate the processes and provide management and operational information in real time to aid decision-making.

Epicor Tropos is an enterprise resource planning (ERP) system that has been built to help support recipe-based process manufacturers. Unlike generic ERP systems, Epicor Tropos is a single integrated solution with applications designed specifically for the unique requirements of food and beverage manufacturers.

Key ways that Epicor Tropos can help you stay ahead of the trends, deal with the complexity of food production, and comply with legislation follow.

# Forecasting, Production Planning, and Scheduling

Because demand from supermarkets and other customers can be variable and unpredictable, many manufacturers prefer to develop their own forecasts based on their expert knowledge of the market and previous sales figures and trends.

Epicor Tropos enables you to input multiple forecasts and create a production plan based on the most up-to-date data—whether a customer order, the final or pre-final forecast, or a combination of customer and in-house forecasting. You can create your own forecasts based on historic data and your analysis of past order and production data.

Epicor Tropos then enables you to protect yourself against fluctuations in demand by making a percentage of your order ahead of time. For example, depending on your particular business, you can choose to make 60 percent of today's plan ahead of time, plus 30 percent of tomorrow's. That way, regardless of whether the order is more or less than the most recent customer forecast, you can either pull production forward or reduce the next day's plan at the touch of a button.



In the past, we have held excess stock levels to ensure every job will be fulfilled. [With Tropos] we can now be sure of that without overcrowded stockrooms because our forecasting production variances are so accurate and up to date."

—Bells of Lazonby

The software will then adjust forecasts and schedule replenishment for the days ahead accordingly. This limits the risk of penalties from underproduction and minimises the waste associated with overproduction, as the system will also manage the shelf life of all the ingredients and the final product.

The solution helps free you from the constraints of batchdriven material requirements planning (MRP) so you can run more flexible, leaner operations with reduced inventory. This also helps you to manage sales targets and profitability, as you have full visibility of the impact of production volumes on your financials.

From order to delivery, Epicor Tropos is designed to improve the flow of information so that supplier, in-house, and customer activities can be precisely scheduled for maximum efficiency. For example, supermarket promotions like "50 percent extra free" that require manufacturers to create a whole new product or recipe with new packaging can come in at short notice. Whilst they can be profitable, they can also be difficult to control.

Epicor Tropos will help you manage the change of recipe and the date of the promotion and automatically produce the right products for those dates. It can change back once the promotion ends and makes the costs visible to ensure you can track your profit on the promotion.



# Yield Variance, Inventory, and Waste Management

Managing yield is critical to profitability, especially where there are frequent product and ingredient changes that can cause yields to vary. Unlike generic ERP systems which treat yield variance as scrap and attach costs, you can set up Epicor Tropos to your typical yield value, and it will adjust production and perform variance reporting automatically.

The system will also help manage the issue of giveaway. To comply with weights and measures legislation, you will need to overfill, but you will need to minimise this in order to retain your margins. Epicor Tropos can track overfill and gives you visibility if you exceed the minimum so you can adjust production to correct it.

Epicor Tropos also manages the date code on your produce throughout the supply chain to deal with the requirements of supermarket customers. For example, if you manufacture a batch of goods throughout the night, a generic ERP system would attach different dates to goods from before and after midnight. Epicor Tropos will give the batch the same date code, which is what customers expect.

Similarly, the system will enable you to vary the "use by" or "best before" dates on products to meet customers' changing demands, and will plan and schedule production by date code, using the earliest batch first, thus minimising waste.



Tropos gives us real-time insight into stock levels, order flows, and fulfilment. This information on processes as they're happening makes it easier to eliminate any waste throughout the business and makes our future business development easier and more profound. We are able to streamline not only production and stock levels, but also many administrative processes—we are able to reduce the burden of multiple and often duplicated forms of paper work."

—Bells of Lazonby

# Control, Visibility, and Management Information

Epicor Tropos manages your complete production process from quote to dispatch, marshalling and tracking materials to match production and demand. The system uses a touchscreen to collect data on the shop floor and gives operational staff the visibility and workflow they need to be effective.

The system also gives you access to management information in real time, so you can make business decisions based on evidence. If you need to increase or decrease production, you can do so at the touch of a button.

As well as real-time information, Epicor Tropos gives you access to the data and analytics you need to understand where your business gains and loses money, and to optimise performance through scenario planning, developing and monitoring key performance indicators and other forms of

business intelligence, data mining, and analysis.



Tropos allows us to easily analyse segments of our product portfolio for profitability. We can see the costs at a forensic level—something which we were previously unable to do—and this has led to some rationalisation in our offering. These were difficult decisions, but it isn't just about top-line growth. We needed to initially scale back to move forward."

—Pure Malt



# Supply Chain and Quality Management

Epicor Tropos covers the full supply chain from forecasting through sales order entry to MRP, which goes through all of your recipes, forecasts and orders, works out how much you need to make and buy, and sets up contracts with preferred suppliers to auto-order.

When you need to find a new supplier—for a new ingredient, to increase volume, or to ensure availability due diligence is essential in finding a reputable company with traceable products, reliable delivery, and financial stability. Epicor Tropos has a quality management module to support supplier auditing, and builds up a set of questions and tests to manage suppliers.

Full support for eCommerce messaging using electronic data interchange (EDI) or Internet messaging means that Epicor Tropos will integrate directly with supplier and customer systems, cutting carried costs and improving the efficiency of the supply chain.



We include the maturing of whisky, purchasing, manufacturing, and selling of finished goods entirely in Tropos. From the moment we take it off the still to the moment we get the pound in from the customer, it's all processed through Tropos."

—lan Macleod Distillers

# Traceability, Regulation, and Labelling

Epicor Tropos integrates traceability without the need for a separate system. Using bar code scanning from goods in, through the warehouse, and onto on the production line, the solution automatically builds up layers of traceability. You know which ingredients came from which supplier, which batch they went into, and which customer you sold it to.

Generic ERP systems typically give one level of trace in each direction, for example, a bakery may be able to trace its flour supplier. What about the mill that processed the flour? What about the wheat grower? What about where those ingredients have been stored? Is there a risk of cross-contamination?

Epicor Tropos enables end-to-end traceability at the touch of a button, which is invaluable in the case of a product recall. In addition, you can plan for audits and recall situations by creating simulations to ensure that your traceability is flawless.

Packaging regulations mean that suppliers have limitations on the proportions of non-recyclables they can use. Epicor

Tropos enables you to track packaging by type, assess whether you are within the limits, and—if changing—see the implications on product costs with one enquiry.

There are also regulations around producing certain types of certifiable foods. Epicor Tropos has built-in plant maintenance management with scheduling algorithms that will schedule productions to minimise changeovers, such as from nuts to no nuts, to get the maximum uptime. The system will manage budget, processes, and bills of material (BOMs), and integrate machine and line maintenance for changeovers and cleaning within production scheduling to achieve more efficiency whilst maintaining promise to order.

In beverage manufacturing, HM Revenue and Customs (HMRC) require that distillers must account for all movements of bulk spirit, including in or out of bonded warehouses. This means accounting for both incoming and outgoing goods that contain alcohol, as well as paying duty on any alcohol content that is unaccounted for. Here again, traceability is important.



# Summary

These are challenging times for food and beverage manufacturers—many of whom are struggling to remain profitable while dealing with volatility in product demand, pressures to increase quality and reduce prices, the need for transparent traceability, and the production of detailed and accurate food labelling. The businesses that grow and prosper will be those who address these challenges head on.

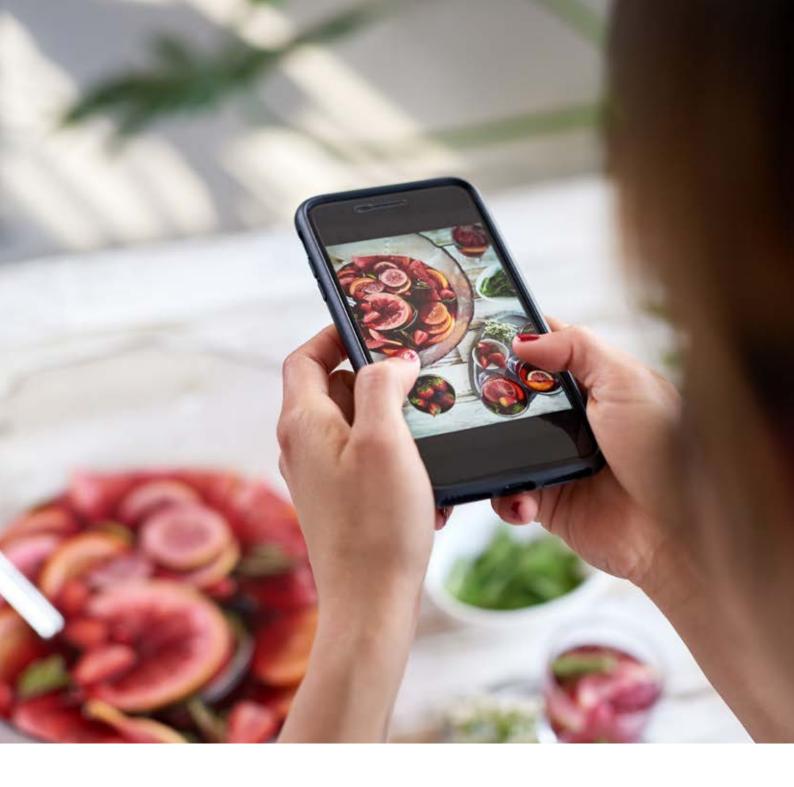
The introduction of modern process-industry focused ERP systems such as Epicor Tropos can give you control of your business processes and visibility of the data that you need to meet the key challenges of increasing sales, improving profitability, maximising yields, increasing margins, reducing costs, optimising the supply chain, and assuring quality and compliance.

Epicor Tropos can automate these processes and provide management and operational information in real time to help ensure that you have the timely and accurate information you need to make the decisions to profitably grow your business.



"When working with some of the UK's leading food retailers and suppliers, complete visibility and transparency is vital to ensure we maintain our high level of service and quality. Tropos enables us to manage items such as materials, stock, and the planning of our big service lines....Tropos records and controls all our recipes and methodology of manufacture. Everything is recorded as live data in real time and ensures that products are manufactured, packed, despatched, and delivered to our customers at the right time and that their order is correct and exactly as it should be."

—James T. Blakeman



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Epicor Software Corporation drives business growth. We provide flexible, industry-specific software designed to fit the precise needs of our manufacturing, distribution, retail, and service industry customers. More than 45 years of experience with our customers' unique business processes and operational requirements are built into every solution—in the cloud or on premises. With this deep understanding of your industry, Epicor solutions dramatically improve performance and profitability while easing complexity so you can focus on growth. For more information, connect with Epicor or visit www.epicor.com.







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