



Rabobank

# Talking Points

## 'Opportunities Abound' - Part One

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We start the year by sharing more results from our industry survey. In December's edition we discussed [The Big Surprises in 2017](#), but here we begin to focus on the answers to the second question, **"What food innovation do you think presents the biggest commercial opportunity over the next five years?"** We received over 200 responses from industry rock stars on a broad range of topics; as one noted, "there is a lot going on in food innovation." To reflect the diversity of themes we've split it into two parts. Here, in part one, we cover the following themes:

1. It's not a product – "The revolution is everywhere"
2. Clean meat – "The wheels are in motion"
3. Food & health – "A huge mass market waits to be unlocked"
4. Select quotes – "An innovator's market for sure"

## 1. It's not a product – "The revolution is everywhere"

***"Five years ago, I would probably have answered with a product answer, this year I'm answering you with a 'solution view'."***

***"Revolution is everywhere, all along the value chain, from farm to fork, and there is no one (innovation) clearly more impactful than the others."***

***"I don't think it is a product, category, or ingredient, but whichever product is able to capture the full sensation."***

Let's begin with an apology. Although there was no shortage of comments, the question—"What food innovation do you think presents the biggest commercial opportunity over the next five years?"—was perhaps too simplistic. As one reader admonished us, "if I may, this question really is too reductive." For many it was wrong to enquire about "an innovation" per se but to recognize that the "revolution is everywhere" and what we are witnessing was more profound, extending beyond just a particular food "product, category or ingredient." As one put it, "I feel that 'organic', 'healthy' and other 'convenient' options are just individual features that will not win if they are not connected into a consumer-centric solution such as a healthy meal plan subscription."

Similarly, rather than a single innovation, others talked about wider connections such as the relationship between food and health (see below) or the "intersection between food and technology" that will pave the way for "an explosion of e-commerce" or "the breakthrough of a sustainable food mix" where "people and society are ready to put their mouth where their brain is, and then their money where their mouth is." A closer connection to the consumer "in every way" was also seen as important by one, "healthier, idiosyncratic, micro-market local, more craftsmanship than scalable innovation."

Others felt that when trying to connect and get closer to the consumer, a product solution was still fine as long as it "captures the full sensation" by providing a "traceable and human" backstory around where and how it was made and by whom. This reminds us of the importance of branding in forming these connections with the consumer, where "brands stress the origin of the

ingredients they used as a key marketing feature” and become better at creating “a stronger linkage between the brands with the consumers’ personal purpose.” One argued that, “the more a company is seen as sustainable/good guardian, the better its products will do over the next few years.”

In short, “everything is inter-related” and we need to look at solutions over products as we explore the wider connections and linkages to the food space. Clearly for people who like to pigeonhole and sort things into boxes, this is a challenging time to be in food, and perhaps we need to spend more time hanging out at events such as the [Consumer Electronic Shows](#) rather than trying to pick the next shooting star in the snack bar or ready-to-eat popcorn market.

## 2. Clean Meat – “The wheels are in motion”

***“This will be the biggest change in food since we domesticated animals.”***

***“Clean meat has the greatest commercial opportunity among innovations on the horizon.”***

***“We hope to see more players come in and diversify the new space with new directions to make meat that is tastier, healthier, and meatier!”***

***“I think lab-grown meat—so-called ‘clean meat’—stands to be really, really game-changing.”***

Many clients mentioned the shiny new emerging field of lab-based meat alternatives or so-called ‘clean meat’ as one of the innovations to present the biggest commercial opportunity in the years ahead. Loyal readers will recall that protein, particularly alternative proteins or ‘protein from many sources’ has been a hot topic in past surveys. Indeed one person wrote in to say, “there are so many companies, and so many approaches, from plant-based to lab grown.” But in our latest survey, we observed greater interest in meat (“meat”?) that aims to take animals entirely out of the equation or as the hyperbolic title by Paul Shapiro’s timely book puts it, “Clean Meat: how growing meat without animals will revolutionize dinner and the world.” Some of our audience were equally enthused, “people are underestimating the effect of this by a magnitude of a billion times. Literally a billion times!” and “this will fundamentally change agriculture.” For one, “unquestionably, the advent of cellular agriculture is the most exciting development in the reshaping of the food industry in the coming years” referencing Uma Valenti’s (CEO of Memphis Meats) quote from the cover of the November 2017 issue of Inc magazine, “We have the potential to create a world without slaughter”.

Certainly many are convinced that we have started on the path to commercialization because “many people want to consume less animal protein for various reasons.” In reviewing the current landscape with its billionaire backers, “the wind of VC interest” and, for some, “a moral imperative to succeed”, one concluded, “the wheels are in motion to pave the way for this new product.” Similarly, the fact that two major protein players, Tyson and Cargill (in Impossible Foods, not cultured meat but plant-based) have already made investments in this space could only be “good news” for the new players and their long-term prospects.

Although some thought it was conceivable for clean meat to become commercial within the timeframe of the question, “I’ll bet in five years we will see chicken fingers and burger products that are 100% lab-grown, cost competitive, and scalable” others thought, “so maybe the five-year timescale is a little ambitious,” and that a 10-20 year horizon was more realistic for meat substitutes to become, “the biggest change in food since we domesticated animals.” One respondent was convinced, “the technology is there and there’s brilliant work being done in a few of the eight companies racing to get this stuff to market.” (One of our respondents claims to have tasted one of the clean meat products and found it “pretty convincing.”)

One convert was convinced these “companies are already producing very good food products on a small scale right now, the yield curves are improving at an astonishingly high rate.” Others flagged some of the hurdles to commercialisation, including that “no animal needs to be killed to grow clean meat” (a non-starter for vegetarians and vegans but less of an obstacle for mass market omnivores) and “bringing the cost of production down to at least 125% of the cost of regular meat.” One felt that despite, or because of, all the hype, “the nascent sector is grossly underestimating how much pushback they’ll get from meat producers.”

A few reflected on the profound implications on land-use if we no longer raise animals for slaughter (“30% less crops”), the family farm (“the farm disappears”), employment (“it is likely that the labs who grow meat will be big huge companies, with highly automated facilities, so what happens to all those jobs?”), the leather and shoe industry, etc. As one observed, “this may turn out to be bust” but “the upsides (emissions, water, food safety) are so compelling that I don’t see innovations with greater transformational potential.” And a longer quote, “the likelihood is strong that conventional industrial-scale animal farming will be threatened by the more sustainable, more environmentally friendly cellular agriculture industry, and as this happens, it will disrupt hundreds of billions of dollars’ worth of conventional, factory-style production of animal meats and other animal based products...” Something to ruminare on.

### 3. Food & Health – “A huge mass market waits to be unlocked”

***“Some brand is going to find a simple way to make the connection between food and health impact. It’s on the fringe but I expect it to become bigger.”***

***“The biggest commercial opportunity over the next five years lies with making healthy foods and beverages affordable. A huge mass market waits to be unlocked.”***

***“Younger, better educated and more food-aware consumers are listing access to ‘healthy affordable food’ as their number one life concern!”***

***“Health and food are merging in a completely new way”***

Returning to the ‘connection’ theme, there were several remarks about the growing awareness of the relationship between diet and health among consumers. As one pointed out, our diet, like smoking, is a risk factor for early death—most deaths in the U.S. are preventable and related to nutrition. This awareness has been triggered by a range of factors including rising healthcare costs, food safety concerns, an aging population looking to stay healthy, and of course the fact that as a nation we are not getting any thinner. Consumers are already moving in this direction by looking for fresh foods over shelf-stable ones, cutting back on sugar and seeking out more plant-based options. As one respondent put it, “people want to feel better and they are looking to food to find answers to their health.” This is a vast subject and we will limit ourselves to a few observations:

**Advances in science.** One called for the food and agriculture industry to partner with other stakeholders such as pharmaceutical companies “to further the science related to human nutrition” because understanding the real links between what we eat and our health will provide innovation targets” for food and agriculture companies. The renewed interest in functional foods by consumers also ties in to this. As one survey respondent observed, “I think functional foods are going to present big opportunities as more consumers look for their food to deliver medicinal benefits.”

**Affordable healthy food.** In this health-food intersection one saw, “the biggest commercial opportunity” lies in finding innovations that make healthy foods and beverages affordable. Another put it, “it is not a single innovation, but rather the growing interest in (affordable) healthy

eating and the opportunity to define that market.” This runs counter to the premiumization trend we are currently experiencing with “Expo West and (old) Whole Foods-type products” which are targeted towards the more affluent or aspirational and possibly open up an opportunity for big food—“I was thinking about innovations that would make such products accessible to a much broader market. And this does play to the strengths of big food companies.” One suggested that indoor farming might prove to be an alternative to traditional farming in keeping the rising demand for fruits and vegetables affordable – “I would be surprised if we didn’t see companies like Wal-Mart, Costco, and Amazon having strategic relationships with small family farms that are willing to diversify their traditional farming methods and start exploring more options in the indoor, vertical realm.”

**Healthy convenience.** Healthy food options need to be not just affordable but convenient—“I think the biggest opportunity in food today is the shift toward fresh convenience food” or “portable healthy meal/snack offerings for consumers on the go.” The U.S. is already witnessing the growth of packaged fresh options with “ready-made salads already seeing the fastest increase of any food category in terms of both total distribution points and velocity in store.” One looked to the experience of the UK market to highlight the country’s “better execution in fresh, prepared foods.” Stepping back one respondent saw the move to packaged fresh as the next stage in the “ongoing blurring of the lines between food at home and food away from home”. And to sum up, “There are simply a lot of ways to play to the consumer’s desire for a combination of freshness, clean ingredients, and convenience.”

## 4. Select quotes – “An innovator’s market for sure”

In addition to the themes above, our readers were excited about a broad range of commercial opportunities over the next five years, leaving one highly successfully entrepreneur to proclaim, “it’s an innovator’s market for sure”. Here are some interesting quotes:

- “Let’s not forget about protein (and healthy fats), which I believe will continue to win, over sugar and carbs, in the minds of consumers.”
- “Cold brew coffee taking market share from energy drinks.” “The one I think that is getting big and can be dramatically bigger is cold brew Coffee.”
- “Donuts are making a huge comeback now and we are selling more donut mix than ever after a dip over the last three to four years.”
- “From the great meal kit boom, there will be some Phoenix that rises from the ashes, and I’m curious to see what that is.”
- “I continue to believe in high-frequency consumption categories as the biggest win over the long term.”
- “I still believe functional beverages will be bankable in the coming years.”
- “I think algae/seaweed CPG products coming to market are super interesting and are poised for a really big future.”
- “Non-alcoholic beverages/food with a kick—THC edibles and even mind-altering beverages without alcohol or designed to be safe for alcoholics.” “Novel ingredients for human health that are discovered in plants by high-throughput search efforts.”
- “Voice-ordering platforms for restaurants.”

# Imprint

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