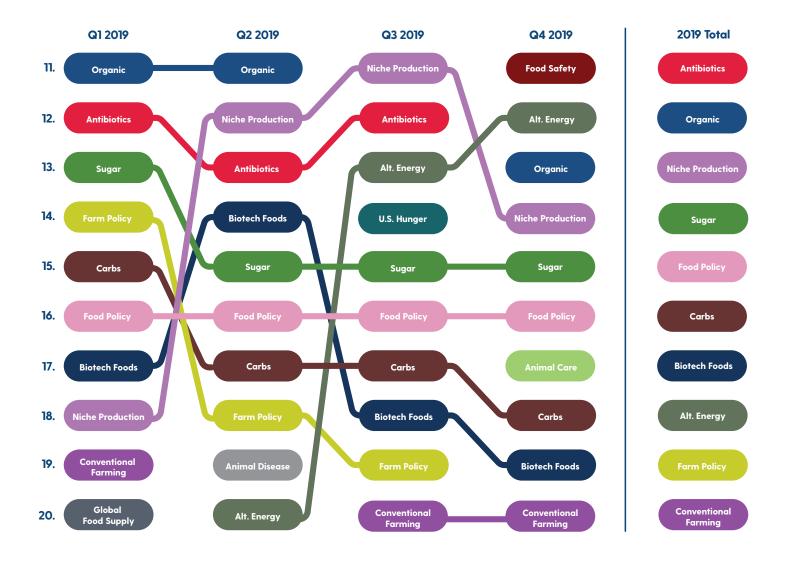
Digging Deeper:

Topics Beyond the Top Ten



The Intel Distillery tracks and analyzes the Top Ten Topics in the food and beverage space, and provides quarterly summaries that show the interactive relationships between these key topics over time. This report takes a look at topics 11-20 — issues that didn't make our Top Ten Topics list, but still informed important conversations among leading voices in our business. Our goal is to deliver powerful observations and analysis, giving our subscribers a wide perspective on the food, beverage and agriculture industries. Given the interconnected nature of our food system, this summary is a great resource for diving deeper into the issues that affect what we eat, how we eat it and where it comes from.





11. Antibiotics

The use of antibiotics in animal agriculture



On December 10, the FDA <u>released</u> its annual report on antimicrobials purchased for use in food animals, finding a 9% increase between 2017 and 2018 — despite a tide of commitments from companies to reduce or eliminate antibiotic use in supply chains. Industry group Animal Health Institute <u>advocated</u> for "the careful and judicious use of antibiotics that keep food animals healthy." Activist group Natural Resources Defense Council (NRDC) also <u>encouraged</u> more responsible antibiotic use. CBS 60 Minutes <u>interviewed</u> George Washington University Professor Lance Price and Liz Wagstrom of National Pork Producers Council (NPPC) about an outbreak of antibiotic-resistant Salmonella in 2015.

12. Organic

The organic label: legislation and farming techniques



From 2015 to 2018, the topic of organic foods topped the list, but began to fall in conversation volume as more niche food production topics emerged. Despite this decline, organic sales are still on the rise. The Organic Trade Association announced, "The U.S. organic market in 2018 broke through the \$50 billion mark for the first time, with sales hitting a record \$52.5 billion, up 6.3% from the previous year."



13. Niche Production

Non-conventional production practices that lack federal certification (e.g., cage-free and natural)



Niche production methods have become a means for companies to address environmental, social and governance (ESG) policy goals. In October, a *Civil Eats* article <u>discussed</u> ways major food companies like General Mills, Danone, Kellogg Company and Nestlé are investing in regenerative agriculture and putting sustainable production practices into use. Additionally, states have also begun requiring niche production practices — *Bloomberg* <u>highlighted</u> cage-free requirements in Oregon, California and Washington.

14. Sugar

Sugar as an ingredient and its role in human diets



Conflicting evidence of the health benefits of artificial sweeteners in comparison to sugar arose after the *British Medical Journal* reviewed multiple studies and found "no evidence was seen for health benefits from [nonsugar sweeteners] and potential harms could not be excluded." *The Washington Post*'s Tamar Haspel presented an alternative opinion to the artificial sweetener naysayers in a June 24 article, "The Case for Diet Soda."

But debates about sugar consumption have not affected demand. On December 11, Dan Charles of NPR: The Salt <u>reported</u>, "America will import more sugar this year than it has in four decades."

THE IMPACT OF ADDED SUGAR
LABELING TO NUDGE CONSUMER
CHOICES COULD PREVENT NEARLY 1
MILLION CASES OF CARDIOVASCULAR
DISEASE AND TYPE 2 DIABETES, SAVE
\$31 BILLION IN NET HEALTH CARE
COSTS, AND SAVE \$62 BILLION IN
SOCIETAL COSTS.

DARIUSH MOZAFFARIAN,
 MD, DRPH, TUFTS FRIEDMAN
 SCHOOL OF NUTRITION SCIENCE
 AND POLICY (AMERICAN HEART
 ASSOCIATION)



15. Food Policy

Regulations that impact sale of food: nutrition guidelines, labeling and legal standing



Food policy discussions ramped up at the end of the year when the FDA <u>issued</u> guidance on the new, double-column nutrition facts label. The guidance is intended to "reflect what people actually eat and drink — not a recommendation of what to eat or drink." Lawmakers also <u>passed</u> a rule limiting who qualifies for Supplemental Nutrition Assistance Program (SNAP, aka food stamps) benefits. In response, mayors from 70 cities <u>wrote</u> to the USDA to "express ... strong opposition" to the rule change, as it "would also limit access for school children to reduced or free school meals as well" (*DTN/The Progressive Farmer*).

READERS CONCERNED THAT THEIR EATING CHOICES ARE THEIR OWN BUSINESS — AND NOT ANY AFFAIR OF THE GOVERNMENT'S — SHOULD REFLECT THAT THE NATION'S DISMAL PUBLIC HEALTH STATUS ... IS BOTH A FIRST-ORDER CRISIS AS WELL AS A MASSIVE MARKET FAILURE.

- SARAH REINHARDT, FOOD SYSTEMS AND HEALTH ANALYST, UNION OF CONCERNED SCIENTISTS

16. Carbohydrates

Carbohydrates (including fiber) as macronutrients and their role in human diets



The health conversation is split between carbohydrate enthusiasts and the carb-conscious. On March 1, *Bloomberg* reported that people are eating less carbs, causing beer sales to decline, and the keto diet — a low-carb, high-protein approach — has increased in popularity despite conflicting health benefits, as reported by *The New York Times*. Despite this, a joint Harvard and Tufts University study found "low-quality carbohydrates from refined grains, starchy vegetables, and added sugars accounted for 42% of the typical American's daily calories."

17. Biotech Foods

Bioengineered (BE) foods, genetically modified organisms (GMOs), genetic engineering (GE), and gene editing of food and livestock



On June 11, President Trump <u>signed</u> an executive order that outlined requirements for regulation of biotechnology in food production. The American Soybean Association <u>applauded</u> the rule, but NPPC <u>worried</u> the order could "undermine U.S. agricultural competitiveness relative to other countries with more progressive gene editing regulatory policies." *Consumer Reports* <u>commended</u> the USDA for redefining genetic engineering, but warned the new

technology also "raises environmental and health questions."

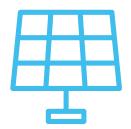
WITH GENE EDITING, LIVESTOCK BREEDERS CAN KNOCK OUT SPECIFIC GENES THAT MAKE ANIMALS VULNERABLE TO VIRAL INFECTIONS. HEALTHIER ANIMALS BENEFIT BOTH FARMERS AND CONSUMERS.

 DAN KOVICH, PHD, DIRECTOR OF SCIENCE AND TECHNOLOGY, NPPC



18. Alternative Energy

Biofuels and solar and wind power as they relate to food production



Farmers often produce renewable energy in addition to food crops, including electricity from onfarm solar panels (<u>Los Angeles Times</u>), wind turbines (<u>Smithfield Foods</u>) and methane (<u>The Wall Street Journal</u>). However, biofuels drove the bulk of conversations. After the EPA released a list in

August of refiners that would be exempt from mandatory blending of ethanol into gasoline, Renewable Fuels Association (RFA) <u>criticized</u> the agency for "exacerbating the economic pain being felt in rural America" by reducing demand for corn and soybeans. University of Illinois Economist Scott Irwin <u>questioned</u> this narrative.



19. Farm Policy

Regulation and legislation related to farms and ranches



Farm policy landed the top spot in conversations in 2018 due to the Farm Bill, but fell off substantially in 2019. Most discussions last year focused on payments to producers affected by Chinese tariffs on food imports. Agriculture Secretary Sonny Perdue <u>announced</u> in May that \$16 billion had been made available for the relief program. In November, Democratic senators <u>criticized</u> the fairness of fund distribution. USDA also offered relief funds for natural disasters, delayed planting and a dairy downturn — see Page 5 for a guide to the agency's offerings.

AG INDUSTRY WORKING CAPITAL HAS BEEN ERODING. FARM DEBT CONTINUES TO RISE. WE'RE NOT RUSHING TO BUY NEW TRACTORS OR COMBINES.

- JOHN BLOCK, FORMER SECRETARY OF AGRICULTURE (<u>JOHN BLOCK REPORTS</u>)

20. Conventional Farming

Modern agriculture production practices



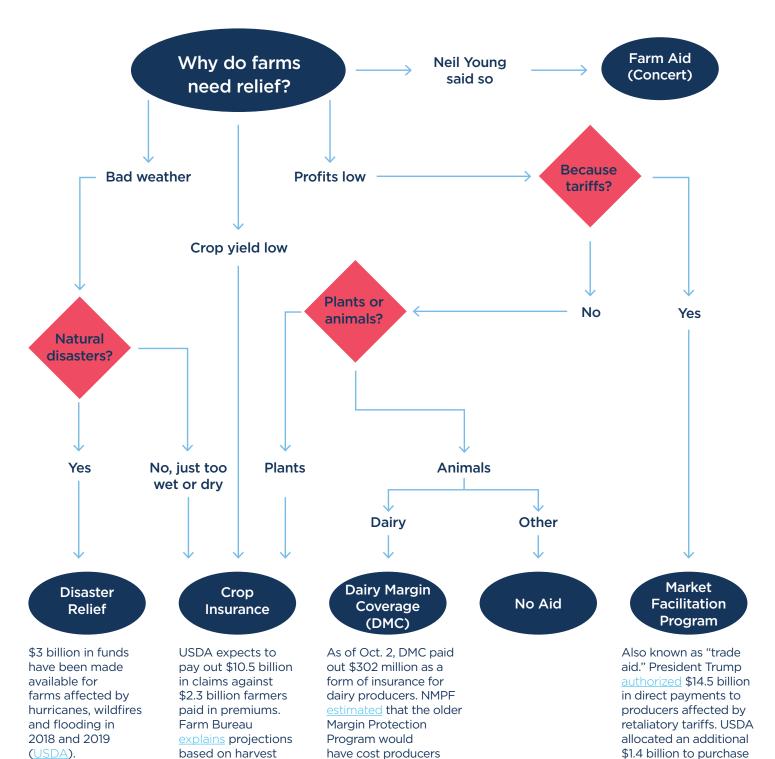
Conventional farming came under attack last year when noted vegan Sen. Cory Booker (D-N.J.) proposed a bill that would place a moratorium on concentrated animal feeding operations (CAFOs) with the intention of phasing out any operations classified as "large" by 2040. In

September, residents of Fremont, Nebraska, <u>protested</u> the opening of a Costco farm and processing plant facility, citing air and water pollution (FERN).



Following Farm Aid Funds

Farm policy may have fallen to the 19th spot in our rankings, but changes in policy often impact a wide array of other topics. We found it helpful to illustrate how and why the U.S. government makes certain payments to farms, as well as the wide array of factors at play. Whether it was disaster relief, crop insurance or tide-over funds from money lost over tariffs, farmers across the country had good reason to use the protections in place to stabilize their incomes. Despite the availability of aid programs, farm bankruptcies rose 24% between 2018 and 2019 (American Farm Bureau Federation).



money instead.



surplus goods.

yields and prices.