

### Missouri Food & Boyerage Manufacts

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Food and beverage manufacturing accounted for 18% of Missouri manufacturing jobs in 2020. Nearly 47,500 people worked in these industries, followed closely by the second largest manufacturing employer, transportation equipment producers with 44,000 jobs. Missouri is particularly specialized in *Animal Food Manufacturing*; it has more than four times the employment concentration in this industry compared with the national average. Because many food and beverage manufacturing jobs require extensive on-the-job training, employers can face challenges related to maintaining a skilled workforce.

### Missouri Food & Beverage Manufacturing Employment

In 2020, Missouri had 841 food and beverage manufacturers that employed nearly 47,500 workers. It ranked 13th among all states for employment in these businesses.

Food and beverage manufacturing jobs have tended to concentrate in Missouri's major cities, along the I-70 corridor and in the southwest corner of the state.

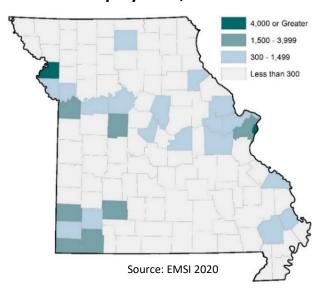
In Missouri, top employers in food and beverage manufacturing include Anheuser-Busch, Conagra, General Mills, Gilster-Mary Lee, Kraft Heinz, Nestle Purina, Schreiber, Smithfield, Tyson and Triumph Foods.

### **Food & Beverage Employment Trends**

Since 2001, Missouri food and beverage manufacturing employment has had a 0.4% gain compared with a 25% decline in total employment for all other Missouri manufacturing industries. Food and beverage manufacturing employment grew by 4,222 jobs from 2010 to 2020 — a 10% increase.

From 2010 to 2020, all but one subindustry — bakeries — added jobs. The bakery industry endured large employment declines in the early part of the decade. When Hostess Brands declared bankruptcy, many bakery employees lost jobs in Missouri and other Midwest states.

### Food & Beverage Manufacturing Employment, 2020



### Missouri Food & Beverage Mfg. Employment Trends, 2010-2020

			2010 -	2010 -
	2010	2020	2020	2020 %
Description	Jobs	Jobs	Change	Change
Animal Processing	17,780	18,637	857	5%
Beverage Manufacturing	4,479	5,698	1,219	27%
Dairy Product Manufacturing	5,377	5,539	163	3%
Animal Food Manufacturing	3,544	5,058	1,514	43%
All Other Food & Beverage Mfg.	3,496	3,911	415	12%
Bakeries & Tortilla Manufacturing	4,703	3,523	(1,180)	(25%)
Fruit, Veg. & Specialty Food Mfg.	1,730	2,692	962	56%
Grain and Oilseed Milling	2,160	2,433	273	13%
TOTAL	43,270	47,492	4,222	10%

Source: EMSI data based on U.S. Bureau of Labor Statistics payroll employment figures

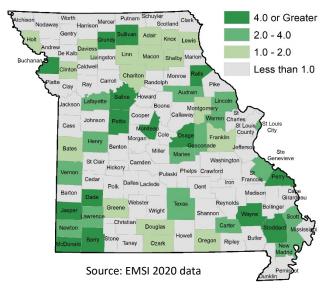
Animal Processing accounted for nearly 40% of Missouri food and beverage manufacturing jobs in 2020. It includes plants that process and package animals such as cattle, poultry, and other livestock. Two other large industries, Animal Food Manufacturing and Beverage Manufacturing, added the most jobs from 2010 to 2020.

### Food & Beverage Manufacturing Employment Concentrations

Location quotient (LQ) analysis shows the extent to which an industry concentrates in a particular region compared with the nation overall. For example, the *Animal Food Manufacturing* industry, which processes raw ingredients into livestock and pet food, has a Missouri LQ of 4.1, which indicates Missouri's industry is more than four times as concentrated in this employment than the national average. Other high-concentration Missouri industries with an LQ near 2.0 include *Grain and Oilseed Milling, Dairy Product Manufacturing* and *Animal Processing*.

LQ analysis also highlights counties that depend on food and beverage manufacturers for employment. Firms in these industries employ many people in Missouri cities, but counties

## Food & Beverage Manufacturing Location Quotient, 2020



across the state rely on food and beverage manufacturing as the LQ map shows. Relative to their total employment, many rural counties have high food and beverage manufacturing concentrations — indicating these industries serve as economic drivers in rural areas.

#### **Key Occupations and Skills**

Food and beverage manufacturing ranks as the largest and fastest growing segment of the state's food, agriculture and forestry sector. These industries hire workers in a range of occupations — most of which are considered middle-skilled jobs that typically do not require post-secondary education, pay \$30,000 to \$40,000 per year and require on-the-job training and experience.

These industries most commonly employ food batchmakers. This occupation had 5,290 jobs in Missouri during 2019, and food and beverage manufacturers employed 83% of all food batchmakers in the state. Alternatively, packaging & filling machine operators — their 4,757 jobs in 2019 ranked second for positions employed by Missouri food and beverage manufacturers — may work in varied industries. Food and beverage manufacturers only employed 45% of these jobs statewide during 2019. Here,

### Missouri Food & Beverage Manufacturing Top Jobs by Typical Skill Level, 2019

Occupation	Food & Bev. Mfg. Payroll Jobs	Median Annual Earnings				
Post-secondary degrees jobs						
General & operations mgrs.	569	\$81,494				
Industrial production mgrs.	324	\$97,302				
Bookkeeping & accounting clerks	307	\$36,774				
Middle-skilled jobs						
Food batchmakers	5,290	\$33,176				
Packaging & filling machine operators	4,757	\$32,656				
General maint. & repair workers	1,196	\$36,150				
Food cooking machine operators	1,132	\$28,683				
Inspectors, testers,& sorters	992	\$39,416				
Short-term training & semi-skilled jobs						
Meat, poultry, & fish trimmers	4,103	\$29,702				
Freight & material movers	1,899	\$28,891				
First-line production supervisors	1,562	\$56,098				
Industrial truck & tractor operators	1,311	\$34,112				
Hand packers & packagers	1,251	\$24,606				

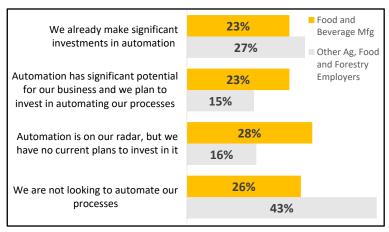
Source: EMSI and the Missouri Ag Workforce Needs Assessment Study. Jobs by typical skill level.

employers compete with other industries when hiring workers with these skillsets — an important distinction when seeking to fill job openings. A <u>2020 agricultural workforce study</u> provides more details.

# Food and Beverage Workforce Challenges

Finding enough skilled workers may affect future growth of Missouri's food and beverage manufacturing industries. In early 2020, 92 Missouri food and beverage manufacturing employers indicated in a survey that they primarily rely on employee networks and social media to recruit new workers. Employers struggle to hire workers with the necessary skills and experience, and a majority of respondents said they often hire less experienced workers and then train them.

## Missouri Survey Respondent Sentiments about Internal Process Automation



Source: MU Extension Food, Agriculture and Forestry Employer Survey, Jan.-March 2020

This can be a significant challenge in industries

such as meat processing. A new meat processing employee may need six months to a year to learn food safety, animal handling and animal slaughter skills. Employers participating in the survey also noted they often require employees to work nights and weekends while processing food items, and some employees seek more flexible work schedules.

Missouri's population has grown slowly for many years, which creates further challenges for employers seeking workers. Food and beverage manufacturers may turn to automation to offset labor needs. Only 26% of responding food and beverage employers said they had no intention to automate compared with 43% of all other responding agricultural, food and forestry employers. Aside from automation, the industry will need to create interest in food batchmaker and meat processor jobs and be able to compete for freight movers, packagers, first-line supervisors and other occupations by offering competitive pay or other incentives.

#### **Additional Resources**

- Show-Me-State Food, Beverage & Forest Products Mfg. Initiative: agriculture.mo.gov/food-beverage-forestproducts
- Missouri Food, Agriculture and Forestry Workforce Needs Assessment: <u>tinyurl.com/MUAgWorkforce</u>
- Ag and Entrepreneurial Factors Driving U.S. Food Manufacturing Startup Locations: extension.missouri.edu/dm103
- Missouri distilling industry economic contribution and value chain analysis: <a href="mailto:tinyurl.com/MUExceedAnalysis">tinyurl.com/MUExceedAnalysis</a>
- Missouri Small Business Development Centers provide confidential business assistance at sbdc.missouri.edu.

All Missouri Economy Indicators briefs in this series are available at tinyurl.com/ExceedEconomyIndicators

Authors: Alan Spell, Assistant Extension Professor, <u>alan.spell@missouri.edu</u>

Mallory Rahe, Assistant Extension Professor, <u>mallory.rahe@missouri.edu</u>



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