

## The Food-Processing Industry in Indiana

From your Thanksgiving turkey to your favorite pop, the food-processing industry includes an eclectic variety of products. The general groupings within food processing, and their relative size in terms of employment, are shown in Figure 1. According to the most recent Covered Employment and Wages Survey data from the U.S. Bureau of Labor Statistics, Indiana's food-processing industry consists of 439 establishments employing more than 34,000 people (see Table 1). This represents 5% of Indiana's manufacturing employment in 1999 and only 1.2% of the state's total non-farm employment.

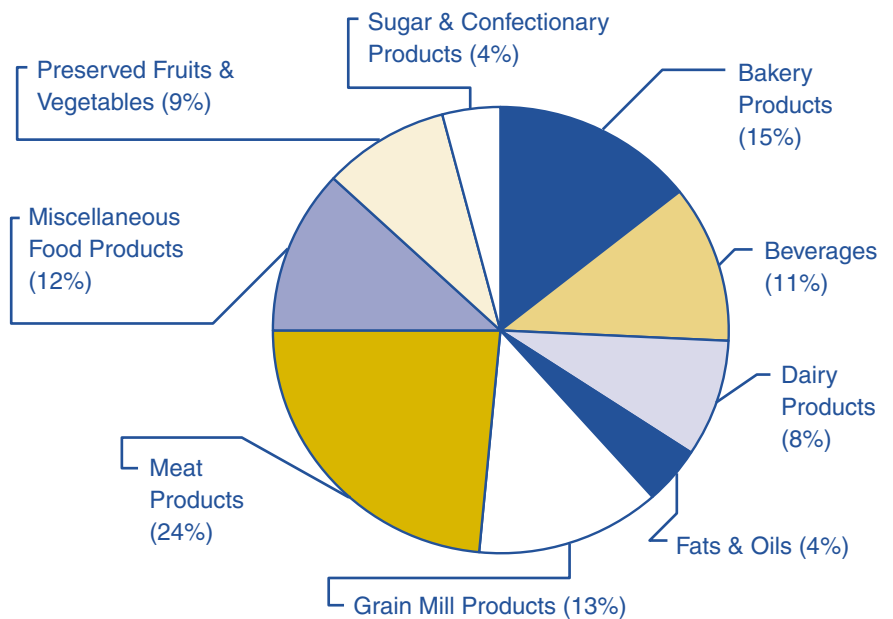
The majority of food processing takes place either at the point of agriculture production or at the place of food consumption. Therefore, most production will either be in states like California, Illinois, Ohio, Pennsylvania and Texas (consumption by

population) or Arkansas, Georgia, Illinois, Iowa and Nebraska (agriculture production). To mitigate

the effect of population, it is possible, using the 1997 Economic Census, to rank the top five food-processing states

**Figure 1: 1999 Food-Processing Industry Employment**

**Meat Products sector employs the largest percentage**



Source: U.S. Bureau of Labor Statistics

**Table 1: Food-Processing Industry, Relative to Manufacturing & All Industries**

Industry Sector	Establishments	Employment	Average Annual Wages	Wages as a % of Manufacturing Wages	Wages as a % of Total Private Wages
All Industries	153,890	2,905,306	\$30,035		
Manufacturing Industries	9,847	690,031	\$41,532		
Food-Processing Industry Totals	439	34,363	\$32,837	79%	109%
Bakery Products	83	4,930	\$30,681	74%	102%
Beverages	45	3,923	\$40,079	97%	133%
Dairy Products	38	2,911	\$33,992	82%	113%
Fats & Oils	22	1,436	\$44,875	108%	149%
Grain Mill Products	72	4,498	\$44,515	107%	148%
Meat Products	74	8,070	\$24,004	58%	80%
Miscellaneous Food Products	58	4,090	\$29,871	72%	99%
Preserved Fruits & Vegetables	35	3,093	\$33,625	81%	112%
Sugar & Confectionary Products	14	1,412	\$25,759	62%	86%

Source: U.S. Bureau of Labor Statistics, Covered Employment and Wages

by value of shipments per capita (see Table 2).

Certainly due to Indiana’s renowned agricultural tradition, the perception exists that it is also a major food-processing state. Indiana does rank among the top 10 producers of dairy products, processed grain and soft drinks in terms of employment, payroll and value of shipments (see Table 3). Although Coke or 7-Up cannot really be considered food, a major ingredient of soft drinks is the corn syrup produced by wet corn milling facilities

in Indiana. Nevertheless, food-processing enterprises by no means dominate the state’s economy. Within manufacturing alone, the industry is relatively small compared to motor vehicle production, metals, electronics and industrial machinery.

Wages within the food-processing industry vary significantly depending on the product area (see Figure 2 on page 4). Wage differences can be explained, at least in part, by the variation in production methods and in the accompanying skill requirements.

For example, wet corn milling involves high-skill, complex manufacturing processes and produces high-demand goods such as corn syrup, fructose, gluten and others. Wages in this area are significantly higher than in the meat-processing industry, where employees are not required to be highly skilled.

Given the advanced nature of Indiana’s manufacturing sector as a whole, it is not surprising to find that food-processing wages are below the *(continued on page 4)*

**Table 2: Top Food-Processing States Ranked by Industry Value of Shipments Per Capita, 1997**

Rank	Animal Feeds	Bakeries & Tortillas	Dairy Products	Fruit & Vegetable Preserving & Specialty Food	Grain & Oilseed Milling	Meat Products	Other Food Products	Soft Drinks & Ice	Sugar & Confectionary Products
1	Iowa	Tennessee	Wisconsin	Idaho	Iowa	Nebraska	Maryland	INDIANA	Pennsylvania
2	Delaware	Illinois	Vermont	Oregon	Nebraska	Kansas	Georgia	Georgia	Illinois
3	Arkansas	North Dakota	Idaho	Wisconsin	North Dakota	Iowa	Illinois	Iowa	Louisiana
4	Nebraska	Pennsylvania	Iowa	Arkansas	Illinois	Arkansas	Louisiana	Oklahoma	Tennessee
5	Kansas	Georgia	South Dakota	Washington	Arkansas	South Dakota	Missouri	Texas	Minnesota

Source: U.S. Census Bureau, 1997 Economic Census

**Table 3: Worker Productivity in Indiana’s Food-Processing Industry, 1997**

Industry	Establishments	National Rank	Employees	National Rank	Annual Payroll (\$1,000)	National Rank	Shipments/Sales/Receipts (\$1,000)	National Rank
Animal Food	51	15	1,677	11	48,664	13	840,106	15
Bakeries and Tortillas	155	18	7,645	13	219,461	12	1,269,983	12
Dairy Products	33	16	4,750	8	180,022	7	2,197,874	9
Fruit/Vegetable & Specialty Food	25	18	2,033	21	52,469	20	547,337	22
Grain & Oilseed Milling	26	14	2,868	8	122,023	6	2,493,907	6
Meat Products	63	24	7,742	20	166,800	20	1,795,820	20
Other Food Products	50	20	4,820	8	144,795	8	1,197,930	14
Soft Drinks & Ice	27	12	2,244	9	76,635	9	1,483,137	6
Sugar & Confectionary	43	14	1,527	18	33,953	20	277,545	18

Source: U.S. Census Bureau, 1997 Economic Census

**IN the Spotlight**

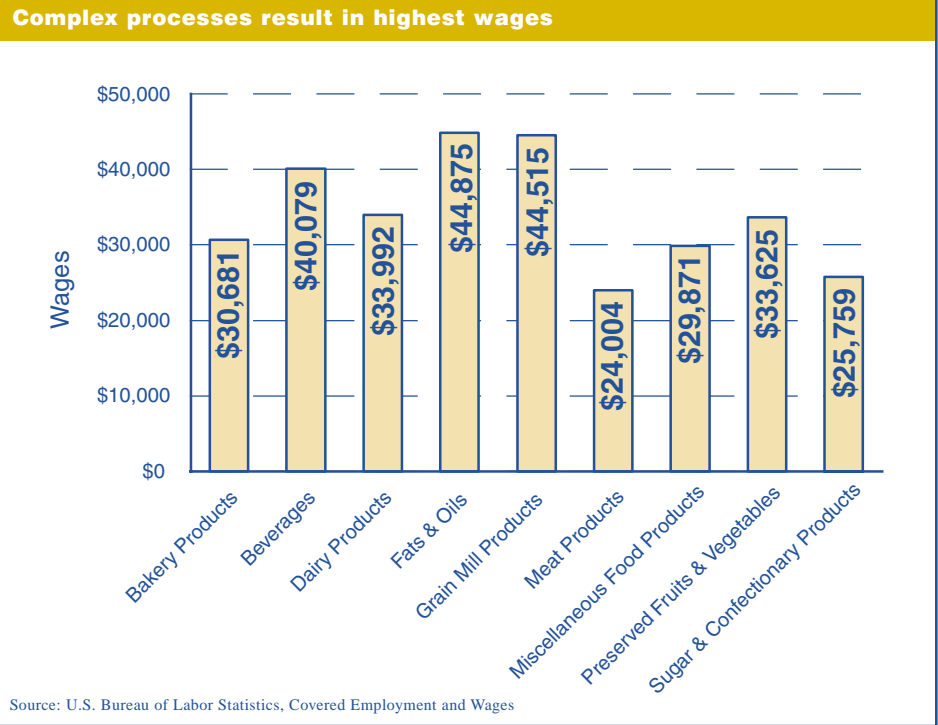
(continued from page 3)

state average (see Table 1). On average, a manufacturing worker in Indiana will earn just over \$41,000 per year, while those within food processing will average around \$33,000 annually. Nevertheless, the average food-processing wage is approximately 9% higher than Indiana's overall average wage of approximately \$30,000. Again, the variation in wages is not surprising given the variation in skill requirements across industries.

The productivity of the food-processing industry can be estimated using the dollar value of shipments per worker. Using the 1997 Economic Census for Indiana, three areas — grain processing, soft drinks and animal food, respectively — have the highest levels of productivity in the industry (see Figure 3). Generally, the level of value added during the production process will increase the value of shipments per worker — a trend that is reflected in these productivity results.

**Technical Note:** The 1999 food-processing data available through the Bureau of Labor Statistics are organized by Standard Industrial Codes (SIC). The 1997 Economic Census data, however, are organized by the new North American Industry Classification System. Therefore, the categories seen in Table 1 and Figures 1 and 2 will be different than those in Tables 2 and 3.

**Figure 2: 1999 Food-Processing Industry Wages in Indiana**



**Figure 3: Worker Productivity in Indiana's Food-Processing Industry, 1997**

