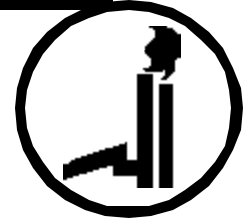


Bakery Products Workers



Occupational Brief Title Codes:

- D.O.T.: 526., 520.
- G.O.E.: 06.04.15, 06.02
- S.O.C.: 51-
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- H.O.C.: No Code

Occupational Brief Subtitles:

- Automatic Oven Operators
- Bakery Helpers
- Bakers
- Batter Mixers
- Bench Hands

Work Classification Based Related

D.O.T. Occupations:

- Canning and Preserving Industry Workers
- Dairy Products Manufacturing Workers
- Slaughtering and Meat-packing Industry Workers
- Tobacco Products Industry Workers

Interests Based Related

G.O.E. Occupations:

- Brewery Workers
- Coating Machine Operators
- Coffee Roasters
- Confectionary Workers
- Metal and Plastics Machine Operators
- Metal Processing Equipment Operators
- Paper and Paper Products Equipment Operators
- Tobacco Curers

Skills Based Related

O*NET Occupations:

- Cooks, Fast Food
- Dining Room and Cafeteria Attendants and Bartender Helpers
- Glass Blowers, Molders, Benders and Finishers
- Precision Etchers and Engravers, Hand or Machine
- Pressers, Delicate Fabrics
- Pressers, Hand

Noteworthy Quote

"Being a baker is very rewarding both personally and professionally. Every day you not only admire your work, but you can also eat it and share it with friends. A baker always has a job because people always have to eat."

Dr. Kirk O'Donnell
Vice President of Education
American Institute of Baking
Manhattan, Kansas

Bakery products workers (bak-ery 'prod-ucts 'work-ers) bake breads, pastries, pies, doughnuts, and other baked goods. May use high volume production equipment in large commercial bakeries, or do work by hand in smaller market bakeries.

Fifty years ago most people baked their own bread, cakes, pies, and pastries. Today, most people don't have time to do their own baking. Instead, they purchase baked goods from commercial bakeries and pastry shops. Bakery products workers make bread, pies, cakes, rolls, pastries, and snack foods.

Work Performed

The basic procedure for making bread and rolls has not changed much in the past century. Workers mix ingredients, wait for the yeast to raise the dough, and bake the product. In large, high-volume commercial bakeries automated electronic equipment does most of the work, and manual operations are kept to a minimum. Smaller, old-world style bakeries do more work by hand.

Bakery products workers, often referred to as **bakers**, follow recipes to mix and bake breads, pastries, and other baked goods. In some bakeries, workers measure ingredients by hand. Some bakeries use special equipment to handle ingredients. The age and size of the bakery and the production philosophy of the head baker or owner determine the extent of automation in the bakery. Some bake shops use a base dough, made the same way every time, in all their breads and rolls. Workers add ingredients to the base dough to vary the product. Other



Bakery products workers bake breads, pastries, pies, doughnuts, and other baked goods.

Photo by CGP Staff

bakeries make everything from scratch and use a different recipe for every kind of bread they bake.

Bakers roll, cut, and shape dough to make rolls, piecrust, tarts, cookies, and other items. Workers let yeast breads and rolls rise once or twice to develop texture and flavor. Sometimes bakers let bread doughs and starters ferment longer so that they will develop a tangy flavor. After the bakers put the dough on cooking sheets or in pans or molds, yeast dough is allowed to rise, and then they bake it in ovens.

Bakers use special ingredients and techniques to make cookies, doughnuts, pies, pretzels, and fancy pastries. They may prepare icings and glazes and spread them on pastries with a spatula or brush. Some expert bakers use their creative talents to develop new recipes for cakes, breads, and other products.

In large commercial bakeries, bakers supervise workers who operate equipment to measure and blend dough, load pans, load and unload ovens, and slice and bag the product. Workers operate automated and semi-automated equipment that can turn out thousands of bakery products an hour. Head bakers have a broad knowledge of recipes, processing, and baking techniques. They keep up-to-date on consumer preferences, new ingredients, processes, and equipment for large-scale baking procedures.

Bakery products workers have titles that vary according to the size of the bakery and the machines they tend.

Dough mixers tend machines that mix ingredients for dough or batter. **Dividing machine operators** operate machines that divide, proof, and shape dough into specific shapes and sizes. In small bakeries, workers called **bench hands** roll, shape, and cut dough by hand. **Oven tenders** load and monitor stationary or rotary hearth ovens to bake bread and other products. These workers use long handled paddles, called peels, to put bakery products on the hearth and to remove them when they are done.

In large commercial bakeries, equipment is more automated. **Dough mixer operators** run the equipment that weighs and blends the ingredients in large batches with refrigeration systems to control dough temperatures.

Automatic oven operators tend automatic reel or conveyor-type ovens to bake bread and other bakery products. These workers set the speed of the conveyor and control the baking time and temperature of the oven. They make sure that baking pans are loaded into the oven properly. When pans of bread or other baked goods come out of the ovens, an automatic vacuum depanner lifts the product out of the pan. Magnets in the conveyor hold the pans down and keep them separate from the baked goods. The depanner deposits bakery products on a cooling conveyor. In some bakeries, workers called **bakery helpers** empty pans, load racks with loaves, and wheel the racks to slicing and packaging machines. Bakery helpers

may also fill, ice, package, seal, stack, or count baked goods. They may also clean equipment in the bakery.

Batter mixers tend machines that mix ingredients for cakes and other products. These workers select and install beaters in huge mixers. They control the speed and time of mixing and check the consistency of the batter. Other bakery workers operate equipment to make pretzels, crackers, cookies, and doughnuts.

Working Conditions

This is active work. Bakery workers lift, carry, and push containers from place to place. The work is fast paced and continuous. Most workers spend all day on their feet. Machines can be noisy. Some plants are air-conditioned, but workers who are near ovens and proofing rooms may find the temperature uncomfortable even in air-conditioning.

Bakeries must meet federal and state standards of cleanliness and safety. Most bakery workers wear white uniforms and hairnets or caps supplied by the employer.

Hours and Earnings

Bakery workers usually work forty hours a week. Many work night and evening shifts to prepare goods for early morning delivery. Bakeries that operate on Sundays may give their workers time off during the week, or they may give them extra pay. Because the demand for bakery products is steady, bakery workers seldom have layoffs.

According to Bureau of Labor Statistics figures, in 2000, the average pay for all bakery workers was \$19,710 a year. Earnings ranged from a high of \$31,720 a year to a low of \$13,170 a year. Salaries vary with the size of the bakery, geographic location, employer and years of experience.

Fringe benefits for bakery workers include paid vacations and holidays. Many bakeries have health and life insurance plans and retirement programs. Workers in union shops often have a pension plan paid for by the company.

Education and Training

Aspiring bakers can learn many of the skills needed for this kind of work right on the job, although it can take several years to master everything. Most bakers and production workers begin as bakers' helpers. Some start as apprentices. Apprenticeships last three to four years and consist of on-the-job training and related class instruction. To qualify for an apprenticeship, applicants must have a high school diploma or a GED.

Those who want to enter this field can also take courses in high school or at trade or technical schools. High school students who are interested in baking should take courses in chemistry, biology, home economics, and business mathematics. After high school, many trade and

technical schools offer programs in baking that lead to full-time jobs. These programs vary in length. Some are as short as a few weeks—others may take up to two years to complete.

Kansas State University offers a four-year program in bakery science and management that teaches students the skills they need to assume management and technical positions in the field.

The American Institute of Baking offers a twenty-week program in baking science and technology as well as other courses on the science of baking and baking production. Scholarships are available for this program. The American Institute of Baking also offers correspondence courses and on-line courses.

Unions and Professional Societies

Bakers and bakery workers may have a contract with one of several unions. Many belong to the Bakery, Confectionery, and Tobacco Workers' International Union (AFL-CIO). Other organizations that promote activities in the bakery industry are the American Bakers Association, the Independent Bakers Association, Retailers' Bakery Association, the Bread Bakers Guild of America, and the Quality Bakers of America Cooperative.

Personal Qualifications

Most bakers and bakery workers must pass a physical examination before they begin work. Workers must also have a health certificate stating that they are free from any contagious diseases.

Bakery workers must be able to operate complex machines. They must be able to understand the chemical processes used in baking. Bakers and bakery workers should be responsible workers and should have a sense of pride in what they do.

Occupations can be adapted for workers with disabilities. Persons should contact their school or employment counselors, their state office of vocational rehabilitation, or their state department of labor to explore fully their individual needs and requirements as well as the requirements of the occupation.

Where Employed

According to the Bureau of Labor Statistics, in the year 2000, there were 160,000 bakers employed in the United States. Most of these workers lived in large urban areas and worked in plants with more than 100 employees. About half of them worked in New York, Pennsylvania, California, Illinois, Ohio, New Jersey, and Massachusetts.

Traditional bakers may work in bakeries, cake shops, hot bread shops, hotels, restaurants, cafeterias, and factories. They may also work in the bakery department of supermarkets, and on cruise ships.

Employment Outlook

Increasing consumer demand for fresh baked goods will create a need for more bakers and bakery workers. According to the Bureau of Labor Statistics, overall employment of bakery product workers is expected to increase through the year 2010 due to growing numbers of large wholesale bakers, in store and specialty shops, and traditional bakeries. Automation and greater efficiency may limit employment prospects in some large plants, but other jobs will open as workers retire or move to other occupations.

Most of the growth in this field will be in specialty baking—especially high quality European-style breads. Unskilled workers may find employment, but only those who acquire technical knowledge and skills can be sure of continued employment and advancement.

Entry Methods

Job seekers may apply at bakeries for jobs as bakery helpers. State employment offices may also have job leads. People who attend a baking school may find jobs through the school's placement office. Company personnel offices or union offices have information about apprenticeships.

Generally, new workers start as all-round helpers. After some time on the job they may become machine operators. Some begin a formal apprenticeship program if the bakery is able to sponsor them.

Advancement

Many bakeries offer on-the-job training programs so that workers can learn new skills. Training is also available at vocational schools, community colleges, universities, and through correspondence courses. In many cases, advancement is possible only after workers have completed some kind of special training. With this training, skilled machine operators may become all-round bakers or supervisors. Some may find jobs in hotel or restaurant bakeries or in retail bakeries that make goods by hand.

Some bakery workers go on to management positions. In most large bakeries, management candidates must have a college degree in marketing, accounting, labor relations, personnel, advertising, business administration, or baking science before they are considered for a position. It is less common for these workers to gain management positions by working their way up through the ranks.

For Further Research

American Institute of Baking, Education Department, 1213 Bakers Way, Manhattan, KS 66505-3999.

Bread in the Making. Sixteen-page booklet that explains how bread is made in a modern bakery. Each booklet is \$0.50.

Kansas State University, Department of Grain Science and Industry, 201 Shellenberger Hall, Manhattan, KS 66506.

Grain Science and Industry. Three pages. Free. Careers in bakery science and management, feed science and management, milling science and management. Includes scholarship information.

The Retailer's Bakery Association, Education Department, 14239 Park Center Drive, Laurel, MD 20707.

Bake, Rattle & Roll Your Way into a Fast-Paced Hands-On Highly Rewarding Career in Baking!

21 pages. Free brochure on jobs in the baking industry, with a list of schools for training.

Bakery Training Programs. Free. Annual publication lists schools offering bakery training.

Acknowledgments

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Kirk O'Donnell, Ph.D., Vice President of Education.
American Institute of Baking, 1213 Bakers Way,
P.O. Box 3999, Manhattan, Kansas 66505-3999.

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