

## Special Service Article

### SOME PUBLIC HEALTH ASPECTS OF FOOD AND BEVERAGE VENDING

*Editor's note: Some Public Health Aspects of Food and Beverage Vending will be the next Journal presentation as a Special Service Article. The subject will be presented in three parts, the first appearing in this issue. Health departments commonly understaffed, have to allocate time and personnel to carry on existing programs yet cannot ignore new methods of merchandising which may have public health significance. This article, and the two which are to follow, will present factual information which should help establish the place of food and beverage vending in the environmental health program.*

#### A NEW AND GROWING INDUSTRY

The merchandising of food and beverages through automatic vending machines has shown a remarkable and rapid expansion in recent years. One does not have to look far to find machines which will deliver such products as cold drinks, hot coffee, milk, sandwiches, pastries, and even hot food in cans. In earlier days, vending consisted mainly of candy bars, peanuts, chewing gum, and pop in bottles. But now vending has grown and expanded to the point where the patron can purchase food and beverage varieties on a scale unknown and, perhaps, unthought of ten years ago.

Gross sales of food and beverages through automatic vending devices have reached such proportions that they represent a sizable share of the consumer's food dollar. For 1957, the National Automatic Merchandising Association<sup>1</sup>, has estimated that gross dollar sales of vended foods and beverages exceeded one billion dollars, delivered to the consumer through some one million, eight hundred fifteen thousand machines. These estimates arranged in tabular form by number of machines, by categories of products vended and by gross dollar sales are shown in Table 1.

It is readily apparent from the above tabulation that the automatic vending of foods and beverage has become a highly significant segment of our economy. As a merchandising method, it has a number of attributes which can not be ignored. First, it is a quick and convenient means of supplying consumer demand. Whether one wants a cold drink, an ice cream bar, hot coffee, or a beef stew, the machine is there and will deliver your selection by the simple expedient of dropping a coin in the machine. Because it is a mechanical device and delivers a product promptly, there is no waiting to be served; none of the formalities of other types of food dispensing. In public places like bus stations and airports, and in manufacturing plants and

TABLE 1—PRODUCTS VENDED, NUMBER OF VENDING MACHINES AND GROSS DOLLAR SALES OF FOODS AND BEVERAGES, 1957<sup>1</sup>

Product	Number of Machines	1957 Gross Dollar Sales (in millions)
Hot Foods	13,500	6.65
Coffee and Hot Beverages	70,000	135.00
Candy	465,000	240.00
Chewing Gum*	260,000	13.00
Milk (machines outdoors)	3,500	10.25
Milk (machines indoors)	40,000	59.00
Ice Cream and Novelties	29,000	28.00
Cookies, crackers, pastries	52,000	10.2
Soft drinks in bottles	800,000	430.00
Soft drinks in paper cups	80,000	120.0
Fruit juices	2,200	2.25
<b>Totals</b>	<b>1,815,200</b>	<b>\$1,054,350,000</b>

\*Defined by FDA as a food

at similar busy locations it is on the job twenty-four hours a day. The American public has accepted the vending machine as a convenient service entity. It has taken its place in our society just as has the automobile and the television set.

#### INDUSTRY TAKES A LEADING ROLE

The vending industry, through both its leaders and its active trade association, has recognized its responsibilities as purveyors of commodities that are subject to public health regulation. In the mid 1940's bacteriologists and sanitarians were engaged to advise with machine manufacturers, supplies of goods and commodities and operators on problems of machine design, product protection and keeping quality. This early advice, was quite generally followed but even the experts, at that time, did not and could not see all of the ramifications of an industry both in transition and rapid expansion. In addition, the types and varieties of foods and beverages vended ten or

<sup>1</sup> National Automatic Merchandising Association, Directory of Automatic Merchandising, 1958. Published by the Association, 7 South Dearborn St., Chicago 3, Illinois.

more years ago were quite limited when compared with those of today.

The expansion of this industry did not go unnoticed by regulatory agencies and a number of our larger cities either enacted special ordinances or applied sections of existing food ordinances to vending machines. However, supervision generally was spotty, and lacked uniformity. Sanitarians too were feeling their way, not knowing just how much or what kind of regulation was necessary.

#### PLAN OF ACTION CARRIED FORWARD

In 1951, the Armed Forces requested the Committee on Sanitary Engineering and Environment of the National Research Council, through its Subcommittee on Food Sanitation, to study problems attendant upon food and beverage vending. This was done, and in 1952 a recommended set of regulations were promulgated. Their use was, of course, limited largely to the Armed Forces. Some civilian health agencies did use them as a guide, but they were rather incomplete and in certain respects lacked essential or important detail.

At about this same time the industry took active and particular cognizance of the need and desirability for an ordinance that could have national application. Machine manufacturers, especially, were confused by conflicting local requirements. This, prompted representatives of the industry, in 1954, to make formal request of the Public Health Service for assistance in the formulation of a recommended model ordinance and code which would be suitable for adoption by state and local health departments and serve as a uniform guide which industry could follow. To assist in the drafting of such an ordinance the industry appointed task committees, representing all phases of vending, to consult and advise with the Public Health Service.

The Service, in turn, consulted with state and local health authorities in an attempt to draft reasonable practical regulations, acceptable to those who later would adopt and use them. At the completion of deliberations, the present document, *The Vending of Foods and Beverages, A Sanitation Ordinance and Code, 1957 Recommendations of the Public Health Service*, was issued in July of that year.

In the fall of 1956, while the ordinance and code was still undergoing final revision, the National Automatic Merchandising Association realized that one of the first and most fundamental steps to be taken was the implementation of a plan whereby vending machines could be impartially examined and evaluated in terms of sanitary acceptability before they reached the retail market and were in the hands of machine operators. This resulted in the consummation of ne-

gotiations with two universities, both having staff members who had had prior experience in the evaluation of various types of food service equipment. Early in 1957, agreements were made with Michigan State University, East Lansing, Michigan, and with The Indiana Research Foundation\*, Bloomington, Indiana, whereby manufacturers wishing their machines examined and evaluated could have this done at either of these two institutions.

While the pending ordinance and code and the evaluation plan were reaching the point of final activation, the industry felt a third step was necessary. This involved the organization of a health-industry advisory group. This would be designed to help guide the industry and health authorities alike in the application and understanding of satisfactory health protective measures at all points involved. This committee, which is known as AMHIC, (Automatic Merchandising Health-Industry Committee), was formerly organized in December, 1956. Public Health is represented by appointees from the following organizations: The Association of State and Territorial Health Officers, The American Public Health Association, The Conference of Municipal Public Health Engineers, The Association of Food and Drug Officials of the U. S., The International Association of Milk and Food Sanitarians, and The National Association of Sanitarians. The Public Health Service and the Armed Forces, while not represented formally as voting members on AMHIC, generally attend all meetings and participate in the deliberations.

#### PUBLIC HEALTH COUNSEL APPOINTED

To further expedite the close working relationship between industry and public health, the National Automatic Merchandising Association appointed a public health counselor to its staff in August, 1957. The man appointed, David E. Hartley, came to the Association after serving twelve years with the Indiana State Board of Health as a member of the Division of Food and Drugs, and supervisor of the retail foods section. As the title implies, Mr. Hartley serves as liaison between the industry he represents and the official agencies. All matters concerning machine allocations for evaluation, consultations with manufacturers and operators and advisory assistance to both industry and public health, fall within the scope of his responsibilities.

#### SATISFACTORY PROGRESS BEING MADE

In the light of this relatively new food industry, noteworthy progress has been made. Machines design-

\*Testing is done at the Department of Public Health, Indiana University Medical Center, Indianapolis.

ed by major manufacturers within the past twenty months have been built in accordance with specifications contained in the vending ordinance and code. In some instances, it has been possible to provide conversion kits for older models, still in use, so essential

public health safeguards can thus be incorporated.

In the next article of the series, a discussion will be given covering the items of public health importance which need to be considered, especially in machines which vend readily perishable foods.