DECEMBER, 1959 Vol. 22 No. 12

Journal of

MILK and FOOD TECHNOLOGY,

Official Publication

International Association of Milk and Food Sanitarians, Inc.

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Vol. 22	December		No. 12
	Contents		Page
Editorial—What Do I G Membership in Inte national?	et Out Of er-	5. r	363
The Sanitarian in Tomor Public Health Progr John D. Porter	rrow's rams field		364
What is Wrong With Of Regulation of Food J. Lloyd Barro	fficial Sanitation m		
Problems Encountered k Public Health Servi Out its Responsibilit Interstate Milk Shi Program	by the U. S. lee in Carrying ties in the pper Certification	Ĵ Ĵ	
John D. Faulk	sner		
Constitution and By-Lav Association of Milk	vs—International and Food Sanitarians, Inc.	-	
Amended			
Index to Volume 22	·····		
News and Events	,		393
Index to Advertisers	· · ·		

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EDITORIAL

WHAT DO I GET OUT OF MEMBERSHIP IN INTERNATIONAL?

Having been active in the affairs of the International Association of Milk and Food Sanitarians, Inc., since 1940, and Executive Secretary since 1951, I, recently, meditated upon what question I am most frequently asked. Above all others, the question "What do I get out of membership or what does IAMFS do for me?" stands out most clearly in my mind. My stock answer has always been in the form of a question, "What do you put into membership?" It makes no difference to what group or organization a person belongs, what they get out of their membership depends on each and every individual.

I have come to believe over the years, from my experience in organizational work, that some persons asking the above question, are those who take little if any active part in organization affairs, even to the extent of paying no attention to materials and benefits available through active efforts of others. Certainly there is no one, if it is impossible for him to attend meetings, serve on committees, etc., who can not expend enough energy to improve his own mind, and thereby increase his effectiveness in his profession. This effort alone, is active participation and makes more worth while the efforts of those who do devote a lot of time and hard work for the betterment of everyone in their profession. Nothing is more disheartening to people who contribute so much, than to have it ignored by so many.

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In October 1911, thirty five men founded IAMFS because of a common need. That common need is just as strong today as it was then. It was simply a need to exchange experiences, ideas and materials, and to accomplish collectively by men in a common endeavor what is impossible individually. This is the basic reason for any organization. Now I do not think that it is an unfair question for any member or prospective member to ask what the organization has done and what it is doing, with the sincere purpose in mind of being informed. Your IAMFS Executive Boards, and I've had experience with several, are always worrying about what we are doing for the members, so I would like to list a few of the many things which have been done and is being done. It is impossible to cover forty nine years of life and growth of IAMFS in this little space, but here are a few accomplishments any one of which has been worth all it has ever cost me to belong.

(1) I put this point first because I believe it is by far the most important contribution and the most comprehensive. No group ever becomes professional or is recognized as such without a large and long accumulation of specialized educational material, particularly pertinent to their field. Facing me as I write this is the complete file of such material which has been developed by IAMFS. When I think of its value, my custody of it scares me. It is invaluable to each and every member. In this file there are annual reports, all volumes with several hundred pages, from 1912 to 1936 inclusive, and volumes of the Journal from 1937 to 1959 inclusive.

(2) Participation in development of 3 A Sanitary Standards for dairy equipment.

(3) Cooperate in developing sanitary standards for food and baking equipment.

(4) Public Member of the Food Law Institute.

(5) Member of the American Association for the Advancement of Science.

(6) Publication and distribution of "Procedures for the Investigation of Foodborne Disease Outbreaks." This was the work of our Committee on Communicable Diseases affecting man.

(7) Publication of the *Journal of Milk and Food Technology*, which is referred to and used more than any other publication in our field.

(8) The work of all our committees on all the various phases of sanitation.

(9) The Sanitarians Award, which gives recognition to achievements of local sanitarians.

(10) Member of the Sanitarians Joint Council.

(11) Educational and Professional Development committee, which administers the scholarship award and promotes registration of sanitarians by law, and development of educational material.

I can think of many more examples of what IAMFS does for its members, but if you will give your support and participate in Association affairs in one or more ways you too will be proud and will be able to answer the question "What do I get out of membership in International Association?" for yourself or any one else who may ask it.

"Red" Thomasson

THE SANITARIAN IN TOMORROW'S PUBLIC HEALTH PROGRAMS

JOHN D. PORTERFIELD, M.D.

Deputy Surgeon General U. S. Public Health Service Department of Health, Education, and Welfare Washington, D. C.

I recently attended the retirement party of a man who had worked for the Public Health Service for more than 40 years - a service record actually extending back to the days before our entry into World War I. In talking about what the Public Health Service was like in 1915, he told me that it was indeed a very different organization in those days than it is now. My brief interview with this retiring staff member, sandwiched in between felicitations and non-alcoholic punch, brought out some stories which were pretty interesting. And one thing which stuck to my ribs was the fact that in the Public Health Service of his earliest day the headquarters staff, then comprising some 60 or 70 people, consisted of about 80 percent physicians aided and abetted chiefly by messengers and male stenographers.

Today, although the Public Health Service is still primarily a medically oriented establishment, we physicians have been materially diluted. New skills, new methods of operation, and new principalities of knowledge have developed in the health field. In fact, health work now involves so many of the human crafts and specialties that it is sometimes much easier to decide what you want to do than to determine who can best carry out the job.

On the whole, physicians are no wiser than other men. And in trying to live with this whole new bag of tricks which we have picked up during the past few decades; in trying to understand the signals and communicate on the wave lengths of these new veryand ultra-high frequencies, we doctors have become a pretty worried group. We skip from the complexities of radiation physics to the intricacies of macromolecular physiology and then to the patent problems in contract chemotherapeutic screening, hoping that our advisers have been well chosen and our briefings adequate. All the time we hold the bag lots of bags, in fact — for every field of expertise involved.

Yet it's a grand life — it's like directing a supersymphony orchestra without a score, and occasionally hearing at least one or two bars which truly sound like the essential music of the spheres.

What I am trying to say is that in our fast-growing world we have to be flexible, cooperative, good at teamwork, if we want to do really effective health work.

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In the past few decades there has been, as we all know, a shift from the communicable to the chronic diseases. So too there has been a corresponding change in the nature and extent of disease and injury arising from the environment: the air we breathe, the water we drink, and the food we eat. Formerly, this environment was frequently implicated in communicable disease; now it has become strongly implicated in producing chronic disease.

The environmental public health stresses which apply today may not be clearly definitive but they are generally identifiable. They relate to technology, chemistry, and radiation. They are concomitant with population growth, congestion, speed, and byproduct wastes. They are manifested in chronic impairments.

Our environmental health problems are closely related to concentrations of people and machines. In terms of people, although we all are aware that our population already approaches 180 millions, most of us do not quite credit the fact that it might even reach 260 millions by 1980. Certainly it is growing at an unprecedented rate. And as it grows it clusters. Already more than 100 million people live in 184 metropolitan areas. Within two decades three out of every four people will be living in metropolitan centers.

At the same time industrial development continues apace: in fact, its growth is even more phenomenal than population growth. Industrial production is up ten-fold over 1900. And some two-thirds of this increase has occurred since 1940. In recent years, completely new industries have sprung up. This economic growth creates new processes and thousands of new substances. And, with respect to both its products and by-products wastes, a host of new forces has sprung into being whose health implications have yet to be diagnosed.

I shall not go into the details of the problems of air and water pollution which we presently face. But what about foods and milk in this great era of change?

¹Presented at meeting of the International Association of Milk and Food Sanitarians, Glenwood Springs, Colorado, August 26-28, 1959.

In addition to the traditional sanitary considerations, food and milk now also run the risk of chemical exposure. Some 500 million tons per year of insecticides, weedicides, and fungicides are used in crop production.

Processing and preservation of foods include increasing amounts of chemical additives and preservatives. And, even in preparation and serving, foods come in contact with more and more proprietary compounds, some with questionable toxicological significance.

As a House of Representatives Select Committee report said recently, "There is hardly a food sold in the market place today . . . from our daily bread to the maraschino cherry — which has not had some chemical used on or in it at some stage in its production, processing, transportation or storage." In short, our foods expose each of us to a complex environment of chemical and physical exposures — all poorly understood and often unquestionably hazardous.

The atomic age introduces new terms and dimensions. We must now consider radioactive contamination in air, water, milk, and other foods. There is a growing awareness and keen public interest in radiation exposure, and there are pressures to establish standards or levels governing environmental exposure. On the one hand, there are the facts that all radiation exposure is harmful and that total radiation over a lifespan is cumulative, regardless of souce. On the other hand, there is need to be realistic in this atomic age; to recognize that the peacetime uses of radioactive materials will increase - not decrease, and that because of world tension the general population may well continue to be exposed to radioactive sources resulting from military uses of fissionable materials.

This very inadequate summary of our current situation and our future prospects sets the stage for the title of my talk: The Sanitarian in Tomorrow's Public Health Programs.

Sanitarians are both numerically and qualitatively a very important group in public health programs. In terms of numbers, the sanitarians are second only to the profession of public health nursing. Some 10,000 strong, they are a great reservoir of human strength for health.

But strength is relative. Comparatively speaking, you are a small number comprising only the number of individuals who might be required to fill out a single Army division. It is rather on the record of accomplishment that your strength should be weighed; the performance not only of day-to-day duties but also the constant pursuit of excellence and the wisdom of foreseeing the future.

Sanitarians belong to a rather new profession cre-

ated to meet more effectively needs which had existed over a considerable period. The Public Health Service recognized the profession in 1943 by establishing this category in its Reserve Corps. In 1949 sanitarians were first commissioned in the Regular Corps.

At about this time the American Public Health Association agreed upon a definition of a sanitarian. It has been substantially unchanged in meaning, but frequently reworded. The original language is worth underscoring:

A public health sanitarian is a person whose education and experience in the biological and sanitary sciences qualify him.to engage in the promotion and protection of the public health. He applies technical knowledge to solve problems of a sanitary nature and develops methods and carries out procedures for the control of those factors of man's environment which affect his health, safety, and well-being.

Here is a charter and a challenge which both you and your employers, public and private, have accepted and endorsed. Your work and progress have had the full support of the American Public Health Association, and the Association of State and Territorial Health Officers.

The States are also recognizing the increased professional stature of the sanitarian with Registered Sanitarian Acts in some 16 States enacted into law and others already in the legislative mill.

Just a year ago at your sessions in New York City, Mark Hollis lauded the work of the Sanitarians Joint Council as another forward step in professional progress. Permit me to quote from his paper published in the *Journal of Milk and Food Technology* this April:

"The formation of the Sanitarians Joint Council... can prevent the wastes and tragedies that have occurred with other professions who did not provide a forum where organizations having parallel interests could meet and agree on one program with consolidated support."

This is important for all health workers to remember. Whether as physicians or sanitarians, we should bear in mind that our thinking inevitably tends to function on the basis of past experience. Therefore many of us still subconsciously tend to operate in the bacterial age of public health, still cherishing a rationale appropriate to the pathways of disease whose obliteration made the first five decades of this century an era of great public health achievement. But if we are to make half as much progress in the second half of the 20th Century as we did in the period 1900-1950, we shall have to organize a veritable renaissance of learning and action focussed on the new health environment. And we shall have to do this right speedily.

This does not mean that I deprecate the need which every population has for some kind of organized protection against the spread of infectious disease. Here the concept of surveillance and of standby control mechanisms is gaining acceptance. But it certainly appears unnecessary, unrealistic, and wasteful for local public health services in lowprevalence areas to devote a substantial share of scarce health resources to many of the control routines which are no longer needed. Yet in many communities these routines are still observed, being maintained, as it were, in the hope that some epidemic or small outbreak will eventually justify their existence.

He also sounded a warning when he said:

"In developing your program I would suggest that you not limit your thinking to the traditional and established activities of the sanitarian. There is need for new skills and competencies to cope with coming problems. The stature of sanitarians will be increased if these can be supplied from his category."

As is the case with other health workers, sanitarians are going to have an extremely uneasy time of it unless they can make very rapid adjustment to our forthcoming tomorrows. Otherwise we and these tomorrows won't hit it off very well. Our era calls for major social invention of a caliber equal to technological advance and, for my money, we technologists must accept the responsibility for inventions needed to keep our field at least in balance with social change because if we don't, other groups will take over.

To make the transitions from yesterday through today and into tomorrow requires constant and highly critical reassessment of all the factors which have positive and negative impacts on health and of the constantly increasing flow of new developments which research brings.

I stress this point in my conversations with all health workers not only in terms of the priority of current health needs as I see them, but also because I believe that the retention of outmoded practice is a source of intense frustration to newly recruited and technically competent young workers who may well be lost to public health as a career unless we give them tasks of high priority to perform.

My comments on the need for critical reassessment also do not mean to imply that all old programs are unnecessary merely by virtue of their seniority.

For example, progress in foodborne disease control is probably not keeping pace with progress in other fields of public health. I say probably, because no one really knows how many outbreaks of foodborne diseases occur in the United States.

Even though your Association has developed and publicized an excellent procedure for the investigation of foodborne disease outbreaks and though there is an established way of collecting and publishing national data on food and waterborne disease outbreaks, many States and cities rarely report them.

In 1957, for example, of the 250 outbreaks of foodborne disease reported to our National Office of Vital Statistics, 106 or 42 percent were reported from California. But even though California reported far more than its proportionate share, its State Department of Public Health "estimates that only 3 percent of all cases of foodborne disease are reported . . . Each year some 100,000 persons are affected with food poisoning (in California) . . . "

Dr. Karl F. Meyer, internationally recognized epidemiologist, estimated in 1953 that over 300,000 cases of foodborne illness occur each year in the United States. Of course, extrapolations from the California data would set a figure much higher than this for the entire United States.

Certainly these indications of the level of foodborne disease show that we are not yet ready to relax control procedures in this area.

Moreover, thorough and meticulous investigation of individual outbreaks can be expected to bring to light factors which point up the need for alteration in milk and food sanitation programs.

Action following the discovery of Q fever on the West Coast is a story with which you are familiar. Epidemiological investigation of cases revealed that dairy cattle were a source. A cooperative study by the University of California, the Milk Industry Foundation, the Dairy Industries Supply Association, and the Public Health Service developed the need for certain changes in pasteurization techniques. This was done with good results.

But I understand that the problems of Q fever are not yet entirely resolved, and I note that your agenda for tomorrow afternoon includes a paper on Q fever in the neighboring State of Wyoming.

However, the kinds of controls I have been talking about so far are well developed. What about some of your forthcoming problems?

Some of the sweep of the sanitarian's possible future destiny can be surmised by inference from what has already happened yesterday and is happening today. Let me give you some examples.

Let's first talk about that very adaptable organism, the staphylococcus, which has been highly successful in maintaining a parasitic relationship with man and other species for as long as we know. You all know that the most highly educated staphylococci

are presently found in hospitals where they have learned to resist most of the antibiotics and are being given postgraduate courses in the newest antibiotics as they come out. So, for lack of a simpler avenue of approach to staphylococcus control, our hospitals are going to have to revert to the aseptic regimens of pre-antibiotic days.

But we know that although these staphylococci are domiciled mainly in the hospitals, they are also entering into the community. It is therefore quite reasonable to hypothecate their establishing a two-way linkage between the hospitals and the food-producing industries whose personnel become hospital patients. And these potential interchanges are developing at a time when the etiology of bovine mastitis has been shifting from the streptococcus to the staphylococcus, coincident with the newer therapies for mastitis. There are also some remarkable identities in phage types among the staphylococci found in food, milk, and hospitals. What all of this may mean for the future is not certain but I would venture to guess that the sanitation emphasis will tend to increase.

Another feature of our civilization which relates to the sanitarian's future is the geometric rate at which our civilization spawns new products, some of which may contaminate food. The soil, water, and air by which crops grow may contain large quantities of contaminants: some inadvertently present as by fallout; others present by intent like the pesticides. While resolution of the extent to which mankind must compromise with such contamination is both a high level technical and policy matter, application of standards in this area will certainly be a function needing the sanitarian's aid.

Still another possible example relates to the field of our future relationships with other nations. The Civil Defense Foods Advisory Committee of the National Academy of Sciences-National Research Council has pointed out that "certain segments of the food industry are extremely vulnerable to covert activity with Biological warfare or Chemical warfare agents or both, and possibly to Radiological warfare," and that "under present conditions of food manufacture, packing, and distribution, it would be possible to contaminate sufficient food - to impair the health or endanger the lives of large numbers of people scattered over wide areas in the USA." The implications of this statement represent a challenge to the sanitarian and this is certainly an area where he should be prepared to render service to his community.

These are some instances of what the future role of the sanitarians might include. At best they are guesses, and I am sure you share my hope that you will never be called on to protect our food and milk supplies from the contamination of warfare. But I think even this example will serve to illustrate what the future may require of you.

And I know that you as sanitarians and as members of what a learned philosopher once called the "opinion-making minority" of your own community are anxious to accept the challenges by which you can be of help tomorrow as well as today.

I think the composite membership of the International Association of Milk and Food Sanitarians, which includes industry, government, and the public health professions, has already made an outstanding contribution and, which is more important, has laid an important foundation for the future.

Here I want to pay tribute to some of the programs which exemplify these potentials for futurity. The 3-A Sanitary Standards program presents much more than a commendable purpose of developing standards for dairy equipment. It is symbolic of the growing partnership of industry and the government in coping with contemporary public health problems.

Similarly in the field of food you have participated in the development and operation of the National Sanitation Foundation and its Testing Laboratory which, as a nonprofit-making organization, concerns itself — as do we all — with disease prevention and improvement of the health of the environment. The National Sanitation Foundation does this by sponsoring or conducting research to find improved sanitation methods and to determine facts.

The baking industry has also made a very substantial approach to establishing principles of sanitary design for baking equipment in similar cooperation with this Association and with public health workers generally, and here too the development of standards has given us significant health benefits.

I should also mention recent developments in the vending machine industry which provide an excellent example of cooperation between government and industry. When technologists combined the fundamental idea of coin vending with the use of electronic circuits and developed machines which could provide a variety of hot and cold food items, they also introduced a new potential for spreading foodborne disease. Fortunately this hazard was anticipated and, because an excellent relationship existed between this industrial group and public health officials, these machines have been so designed as to safeguard the products they sell from contamination and deterioration.

Here indeed are concrete instances of an important tendency in the approach to community health: a change in emphasis from regulation and enforcement to education and cooperation. In our highly interdigitated society, it is becoming more and more important that organized groups coordinate their activities with others so as to maximize public good. This is certainly most true in the health field.

Hence, just as producers and distributors are now working with public health authorities to maintain high standards of cleanliness in the equipment which processes milk and food, so it should be gradually possible to develop similar cooperative efforts with the primary producers of crops and the ultimate distributors of food and milk, whether this distribution be in restaurant, institution, or the home. By the same token, as new hazards affect food and new areas of cooperation are required, your profession should play a large role in arranging for appropriate joint action.

This of course requires a high degree of leadership. And in thinking about how this leadership must be applied, Dr. Burney is fond of saying, "*Health isn't an isolated problem*." He feels that the role of leadership in each of the health professions is to understand how its function in the quest for health can best be fitted into the pattern of community life, and to discover the dynamic forces of society which are bringing forth new resources as well as new needs with which and toward which the individual health professions can shape their future.

Such leadership will of course involve an increasing amount of cooperative effort — cooperation within government between workers in health and food and drug agencies; cooperation between levels of government — Federal, State, and local; cooperation between units of government; cooperation between the food industries and public agencies concerned, as well as cooperation between sanitation personnel and workers in related fields such as agriculture, radiological health, and civil defense.

There will of course be fluctuations of interest and pressure in your careers as sanitarians as in other fields of public health endeavor. Sometimes as health workers we get discouraged because our particular field of endeavor seems for the moment to have gotten lost in the shuffle. There is no doubt that health too has fads and fashions just as do the women's dress and the shape of automobiles. This is a perfectly natural phenomenon characteristic of all human endeavors and if as Americans we seem prone to shift our interests somewhat more rapidly than is the case in other nations, we differ only in degree and not in kind.

All of you have heard about the new "programs" in public health: the research expansion in many fields, the developments in radiological health, accident provention, air pollution, health mobilization, and the like. Why are these programs being highlighted at the Federal level and other program areas being retrentched?

You may not have thought of asking yourself a patallel question: Why are other programs receiving heavy support even though they are not intrinsically "new"? Why for example is so much Federal support being given to the construction of hospitals and water pollution abatement plants? Certainly we have had hospital and water pollution abatement needs for a long time.

I do not think there is any fundamental difference in the amount of public support that can be enlisted for a program exclusively on the basis of whether it is a new program or an old program. It seems to me that factors are instead twofold: one, the factor of need and two, the factor of the public's understanding of this need.

The important thing to remember is that any cause, any crusade, needs constant re-evaluation and reinvigoration if it is to remain productive and, even more, if it is to continue to receive deserved recognition from the various publics which give it support.

Such revitalizing interests should most desirably come from the professional groups concerned with the field of endeavor at hand. Not that this is necessarily always the case. Sometimes unfortunately a need becomes so acute that the public without professional guidance must explore many blind avenues in an urgent need for problem solutions. When this happens it is both wasteful and pathetic. Of course, if people were sickening in quantity from the use of improperly processed milk or from food processed by Typhoid Marys, popular interest would soon threaten to overwhelm the sanitarian functionaries of the health department. But this is, as you all know, not necessary. It is therefore most desirable that as a fundamental part of every professional career there be incorporated a continuing and searching study of the many future problems which can be anticipated by an enlightened and imaginative professional group.

In addition to the new worlds which you as health workers may be destined to conquer, you should also constantly direct yourselves to another task: the intensive as well as thoughtful development of relationships between your profession and your public which will permit the profession to convey to its public the existence of emerging problems, the need for exploration of solutions, the carrying out of demonstrations and dispositions.

This kind of communication between public and profession cannot be generated from the outside, from Washington, or through occasional and perfunctory use of the channels of public communication.

I think that what is involved here is the progressive

development of new attitudes by all health workers at every level of government toward not only our fellow health professionals and our colleagues in other areas within and without the government, but also toward the public. The future will certainly require more and more careful self-examination as well as much more active alliance with all of the professional and public groups who can help us to achieve greater vitality and viability in the particular areas where we function.

It probably cannot be over-stressed that a great part of our difficulties today as public health workers is that we have engendered a public attitude of indifference to public health. And, although it is probably true that public health does not now measure up to the needs of our time, it is equally true that our time does not recognize its own needs because our health professions have not provided the public with the material on which that recognition could be based.

In public health whether we be sanitarians, laboratory workers, researchers, or physicians, the responsibility inherently is not only ours as a profession but fundamentally ours as individuals to serve as instruments in providing for the health aspects of national growth. In a democratic society we must each communicate with our public and our acceptance is contingent on the success of that communication. Here too the future of the sanitarian in public health is his own to make.

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It may seem both presumptuous and foolhardy for one on the receiving end of official inspections to be critical of regulatory agencies and their proceduresbut, while food regulation may occasionally be inept, and rather generally inadequate, regulatory officials are rarely petty or resentful of constructive criticism. From past personal experience, I am well aware of the operating handicaps of agencies concerned with sanitation of the environment and with food sanitation in particular. First of all, there is competition among the many agencies of government for tax dollars and other revenues; equally strenuous but less apparent is the inside competition, as in health departments between medical and environmental functions for fund and personnel allocations and support. An even more persistent and difficult problem is finding qualified personnel and then giving them enough on-the-job training to make them competent to deal with the complexities of food sanitation as well as the many other ramifications of the environment.

The Handicap of Low Pay

To point out, then, a basic wrong in the official regulation of food sanitation, it is the generally low level of pay to official sanitarians, an inadequacy which extends to the sanitary engineering and other technical and administrative personnel in environmental sanitation. In all sizeable health units where competence should be expected, there is a constant struggle to recruit and retain personnel with appropriate education and training for field, supervisory, and administrative functions. The prevailing salary scales, even though rising, still lag far behind competing fields and deter many young people entering higher education from careers in public health and sanitation. On the other side, the relatively vast bureaucracy of the U. S. Public Health Service has blotted up a large percentage of professional administrative personnel of competence who otherwise might have devoted their life efforts to the front lines of environmental sanitation. A recent scanning of the membership list of the Conference of Municipal Public Health Engineers shows about 130 engaged in

city, county and district work, whereas the Public Health Service engineering staff numbers well over 500.

There is, of course, a direct effect of inadequate salary scales on the competence of official sanitation personnel. Civil service lists tend to be filled, albeit sparsely, with the poorly qualified, more or less by default. The consequence is that business and industry properly subject to public health surveillance does not receive the intended sharp and perceptive application of regulations, and the public paying for such supervision does not get its money's worth. It is a regrettable fact that in many communities the alleged protection of the public interest by socalled sanitary inspection is little more than a pious fraud. This is not to say that there are not many dedicated and effective sanitarians striving mightily to establish effective programs and with obvious success in some public health jurisdictions. But they are exceptions rather than the rule, and the agency producing creditable results is likely to be characterized by one or more professionally qualified administrators who have the capacity to establish rational programs actually engaging the problems and designed for results rather than window dressing. An effective sanitation unit cannot be all privates or all generals, but needs balanced organization to provide policy and planning, as well as performance in the field.

It is a matter of distress to me that the number of professionally qualified sanitary engineers working in local health units is declining and the influence of their thinking and planning in environmental sanitation performance is being attenuated as they find more comfortable and better paying berths in state and federal agencies, somewhat remote from the actual battlefronts. Leadership by professionally qualified administrators in local health agencies continues to be the prime need because it is the basis for competent food and other regulatory work.

Respect or Contempt

How do the recipients of food inspection judge these representatives of official agencies — with fear, annoyance, respect, or contempt? The owner or manager of a food establishment wherein sanitation is a matter of chronic neglect or unwitting in-

¹Presented at the annual meeting of the Institute of Sanitation Management, New York City, September 24, 1959.

difference may feel considerable trepidation over official inspections, and properly so if they cause him to make significant improvements. If the inspectors do not discover violations of consequence and both help and force the management to correct them, the fear is replaced by annoyance, and ultimately by contempt.

Contempt is certain if the inspector is perfunctory and only concerned with listing an inspection in his day's work record; contempt is acute if the inspector is one of those few who is only concerned with setting the stage for a shake-down, or who perhaps is satisfied with a hand-out of a food package. Few in business or industry want inspections from persons who are venal, although there may be some who think it smart and convenient to set up such a relationship, and who smirk about this "business expense." Where this practice exists, both parties are equally criminal and guilty of conspiring to defraud the public.

Some years ago, the Conference of Municipal Public Health Engineers undertook to develop a Code of Ethics applicable to those employed by official agencies in inspection work involving the exercise of police power. It is pertinent to this discussion to here reproduce this Code — which has been approved by the American Public Health Association and adopted by some, but not enough, health departments:

CODE OF ETHICS

Employees of the Department of Health, engaged in the control of the environment on behalf of the public health, recognize the obligations of public trust and the responsibilities related to the exercise of police power under which it shall be considered improper conduct and inconsistent with the dignity and honor of public service:

- To solicit or accept either directly or indirectly — gratuities, favors, or other valuable consideration from those subject to official regulation by the employing agency where such gratuities, favors, or other valuable consideration are intended or could be construed to influence official action.
- To engage in the preparation of plans or the performance of services outside of official duties which are subject to review or approval by the employing agency.
- To represent or promote any enterprise, product, service or patent directly or indirectly in the course of regulatory work where such action may benefit the official employee.
- 4. To have a business interest, other than ownership of stock not involving a controlling interest, in any enterprise, product, service, or patent used by those subject to regulation by the employing agency.
- To engage in political activity as an officer of a political party, or to abuse official authority or compromise the health department through political activity.

General observance of this Code of Ethics would

do much to bring dignity and respect to all officials engaged in food sanitation work. Yet many health departments seem extremely passive and indifferent in promoting its observance — until some distressing revelation of misconduct brings down a storm of public criticism and tears down the standing and effectiveness of the decent and responsible employees.

TROUBLE AT THE CROSS-ROADS

Such misbehavior is not confined to health departments, but can be found in other regulatory agencies. Let me illustrate. There is now in general operation a device for industrial washing designed to use steam to deliver a hot, high pressure jet containing a detergent solution. It is capable of installation with such safeguards against back-siphonage as would satisfy any reasonable and alert plumbing department and the nationally recognized plumbing codes. Yet there is one large city in this country in which the use of this device has been barred - on speciously vague grounds – and in a manner so arbitrary as to raise a question as to the official motive. Here is a cleaning tool, unique in its usefulness, which definitely aids food sanitation and therefore serves the public interest. One wonders about the position of the department of health in this particular city and how it can go along with such interference without protest.

While venality is almost always accompanied by incompetence, the latter can be found in many earnest and honest inspectors where low personnel standards, indifferent training, and nonprofessional leadership prevail. Incompetence must be measured in terms of the continued existence under inspection of grossly unsanitary and violative conditions. This may, however, reflect more on the agency than on the individual, especially where the agency holds a responsibility for serving a public interest but is too remote and too sparsely manned to be effective. We have numerous examples of state agencies preempting and holding onto functions that could be better dealt with by local authority.

SANITARY CHAOS

A vivid illustration of this situation came to my attention recently when I had occasion to visit in a large city a bakery which had supplied a special item for distribution by one of my company's plants. This bakery specialized in pies and did a large local business. As I looked through it, I realized what an impossible situation it would present to any official agency representative. It had no organized sanitation program, practically no equipment with which to do efficient cleaning, its production machinery was old, in poor mechanical condition, congested, and fouled by accumulations of soil. An inspector, surveying this establishment, would be hard put to list specific recommendations for improvement because there seemed to be no point of beginning which could be expected to make any impression on the over-all sanitary chaos. My own suggestion would have been to close down the bakery and put all production employees on a plant-wide clean-up long enough to remove a major portion of the soil. However, this would have afforded only brief benefit before the bakery would relapse into its former condition, unless other long-range measures were taken, chief of which would be the appointment of a person to deal continuously with sanitation as a prime responsibility. This in turn would have to be supported by the provision of some able-bodied sanitation labor in place of the superannuated cripples sloughed off by production departments; next, cleaning tools and equipment would be required, all accompanied by a more sensitive attitude toward cleanliness by management, supervision, and production labor.

How could this situation exist in a city which happens to have a first class health department with capable sanitation administrators and a recognized training program for inspection personnel? The reason is that inspection of bakeries has been reserved to the state agency concerned with agriculture, and local health departments have been barred from responsibility therefor. The state inspections have been infrequent, perfunctory, not from a public health point of view, and obviously without very much feeling of concern for the thousands of local citizens buying and consuming these foods.

It is pertinent to note that health agencies in that state have been waging a battle to obtain the powers normal to them and that they are being opposed by court contests and otherwise by associations of food processors. These interests apparently like the kind of state inspection they have been getting and piously proclaim its excellence; they object to local health inspections on the grounds of duplication of both inspections and fees, and variability of requirements. That is their privilege, of course, but no one should be fooled as to where the public interest lies.

RED TAPE REGULATIONS

Another aspect of questionable food regulation is in the area of *red tape* requirements. These have no public health or food quality significance but serve perhaps as feeble trade barriers and, ostensibly, as control devices. A prime example of this is the requirement that a state's license or registration number appear on food packages. This has not one iota

of value to the consumer, but it does add to manufacturing costs, and its enforcement tends to absorb the bureaucratic energies of the agency while more constructive activities are neglected.

This matter of red tape regulations leads directly to the problem of non-uniformity among the states in both sanitary and quality controls of foods. At the federal level, we have a single body of laws and interpretations applied to interstate commerce, a fairly known quantity in so far as food processors are concerned. At the local level, the basic pattern of food sanitation requirements are reasonably well standardized through the long history of the use of public health police power and the unifying effects of agencies such as the U. S. Public Health Service and the organizations of sanitarians and other professional public health workers. But at the level of state governments and in spite of the efforts of an organization such as the Association of Food and Drug Officials of the United States, there is great diversity, both in areas of regulation and in specific requirements. Among the now fifty states it is evident that there are too many cross-currents of interests and differing historical backgrounds to achieve the kind of uniformity that would best serve the public interest and give support to this weakest link in food sanitation regulation. The correction of this situation could well be a major project of the Conference of U. S. Governors and is understood to be receiving their attention.

AID OF STANDARDS AVAILABLE

Aids to competent sanitary regulation and inspection are becoming increasingly available through standards of various kinds. The Public Health Service has provided standard ordinances for milk, restaurant food service, vending machines, etc. The National Sanitation Foundation has covered food service equipment, including dishwashing machines. From the milk industry has come the 3-A Standards. The baking industry has developed some sixteen standards thus far for baking machinery. Standards approved by the American Standards Association provide guidance on construction, safety, plumbing and many other problems. The trouble is that not nearly enough of these guides are used by regulatory agencies either as official references for administrative regulations or as tools of the inspectors on the job. Why should insanitary kitchen or food processing equipment and machinery be installed any more without comment or objection from official agency representatives? Why should an inspector walk into a bakery and not be aware of the unsanitary features of a mixer, a depositor, or a flour elevator? Either organized in-service training or some purposeful reading on his own initiative not only of standards, but of the expanding literature of sanitation, should give any enforcement official knowledge and confidence on the job.

The sanitary inspection of a food establishment which does not discover and point out at least one defect or needed improvement is a failure. Under some circumstances, such an inspection is a liability and negative in its effect because it permits the management to become complacent about internally known shortcomings and inadequacies. Such management promptly bestows on itself the tranquilizing accolade — "clean bill of health" a glib and fatuous phrase which means the inspector missed everything.

INSPECTIONS AND COMMON SENSE

On the other hand, there are those inspectors (and departments) who will insist on screens on windows where there is no particular fly problem, or where adjacent doorways are of necessity chronically open; they may require a supply of hot water and ignore the lack of facilities for its effective use; they may make an issue of a sanitary pump on an otherwise uncleanable system; or they may prescribe "wash hands" signs and overlook the handicap imposed on such washing by separate, spring-actuated hot and cold faucets. They or their departments may impose so many safety precautions on pest control measures and material as to seriously handicap this essential element of sanitation. They may harp on self-closing doors, or vestibules to toilets, or head coverings, yet at the same time be blind to more significant defects in the form of ingredients of poor sanitary quality, uncleanable or uncleaned machinery, or bad food processing practices, or insect and rodent infestations.

Beyond possession of adequate technical knowledge of his work, the greatest asset an enforcement official can have is a moderate share of common sense - a sense of values - which should enable him to see clearly his prime purpose – to represent and protect the public interest, but always with fairness and justice to those subject to regulation. Such application of common sense will reduce the amount of contradiction and confusion sometimes arising from inspections by several agencies or from different representatives of the same authority. Nothing perplexes the responsive recipient of an inspection more than to have faithfully carried out instructions of one inspector only to have the next one say its all wrong and should have been done another way. That situation indicates, of course, poor leadership and too little inservice training and coordination within the agency's sanitation staff.

CONVERTING SELF-INSPECTION INTO SELF-REGULATION

Now to revert to the basic question – how is sanitation to be maintained effectively in food establishments - especially those of some complexity? The response of the owner or manager to official regulation should always be either the personal assumption of responsibility for sanitation or an assignment of it to some presumably effective person in management or supervision. The endless repetition of corrections of unsanitary conditions only in response to and after each succeeding inspection is a futile sort of rat race, from which both regulatory agencies and managements should try earnestly to extricate themselves. We should not have to belabor the point that nothing constructive is done anytime, anywhere, until someone is put in charge of doing it. If that is the crux of sanitation maintenance, why shouldn't regulatory agencies recognize it and deliberately spend more time and effort to promote generally and in specific establishments an organizational situation most likely to produce and sustain sanitation?

Much publicity has been given to the new Health Code of New York City, including its further commitment to the principle of self-inspection. This, of course, implies some one designated and presumably able to do such self-inspection. My only apprehension here is that there may be too much preoccupation with the mere formalities of conformance and not enough with making the procedure produce results. For example, will the Department of Health eventually undertake to explore with the executives of a large food processing plant, or a chain of grocery stores or drug stores or restaurants the actual position and function of this person doing self-inspection? Is he for window-dressing purposes, like a five-dollara-month pest control contract, or does he have authority at a level where recommendations can be made to stick; or, if this person is a food sanitation consultant on a continuing retainer, is he competent and will his proposals actually have consideration - other than when his client is in trouble? There is little virtue in the mechanical aspects of self-inspection unless it produces in time integrated, habitual sanitation at an appropriate level. This will require in most instances some persistent pressure and guidance from the regulatory agency. Acutally, enforcement officials will have to do a more skillful selling job with management to make self-inspection into a going sanitation function. I am encouraged by the fact that, in two recent FDA inspections of my company's plants, not only was the examination thorough, but inquiry was specifically made of the plant managers about the in-plant organization for maintaining sanitation. That is progress!

Mandatory self-inspection will result in an expanded field for food sanitation consultants. This field has been pre-empted largely by retired health department personnel but it should attract technically qualified younger men who can render service not only in sanitation, but in quality control and in the complexities arising out of chemical additives and other recent regulations. These consultants will need to evolve among themselves a pattern of practice that is ethical, professional, and rendered with a proper balance of responsibility to client, regulatory agencies, and the public.

THE REAL REGULATORY TARGET

Let me conclude this discussion of what is wrong with the regulation of food sanitation by admitting that my motives in voicing these criticisms are not wholly altruistic. Every manufacurer of foods who tries earnestly and at some cost to put quality and cleanliness into his product — and provide decent working conditions for his employees, resents and suffers from the fringe operator who sets out to undersell the market with shoddy merchandise, by using the cheapest of ingredients, ignoring sanitation, and exploiting labor. The responsible manufacturer, of course, meets such competition in so far as possible by providing quality and brand identification, and by extra selling and advertising effort, relying on the good sense of at least a part of the consuming public to recognize value and pay for it. What hurts is that many shoddy manufacturers seem to be immune to regulation and to receive considerably less than their share of attention from enforcement agencies.

Yet there is encouragement in following the Notices of Judgments and other news releases of the Food and Drug Administration because they indicate that more and more of the obscure operators are being uncovered and made to feel some legal restraint. The time may come when state and local agencies will begin to approach the federal FDA in effectiveness, in persistent follow-up, and in publicizing what is actually done by way of enforcement. What the willing and responsive food establishments want is a balanced application of enforcement effort at all levels. Such inspection and enforcement effort by all agencies should not be distributed on the basis of numbers or size of food units alone, but rather should be related more definitely to the degrees of nonconformance to sanitary requirements as found in such operations; that is what the tax-paying public expects - and assumes it is getting.

PROBLEMS ENCOUNTERED BY THE U.S. PUBLIC HEALTH SERVICE IN CARRYING OUT ITS RESPONSIBILITIES IN THE INTERSTATE MILK SHIPPER CERTIFICATION PROGRAM

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Like many of you here today, I have attended all seven meetings of the National Conference on Interstate Milk Shipments, the first of which was held in St. Louis in June 1950. I am certain that the achievements of this Conference, as demonstrated by the growth and acceptance of the voluntary program for certification of interstate milk shippers, exceed the expectations of the representatives of the 26 states who participated in the first meeting.

The success of the program to date has been largely due to the willingness of representatives of receiving and shipping states to sit down together at these Conferences and to cooperatively work out solutions to their problems, and then, upon returning home, to conscientiously put the agreements into effect. This has resulted in the building of a feeling of confidence in the work of others which has, for the most part, replaced the feeling of distrust which previously prevailed. Consequently, the program has gained prestige and National stature which has facilitated its growth, utilization and acceptance.

While the program has worked unusually well, certainly problems have emerged which require the attention of the representatives attending this Seventh National Conference. This is only natural, and in fact is a sign of progress. It would have been strange indeed if a fast growing program, such as the cooperative program for certification of interstate milk shippers, had not experienced some growing pains.

I would like to discuss with you now some of the problems encountered by the Public Health Service in carrying out its functions in the cooperative program. Mr. Robinson has outlined the functions and responsibilities which the Conference requested the Public Health Service to undertake when the Service was first invited to participate in the cooperative program. These responsibilities need no further enumeration, but the problems which I will discuss are related to them and are those encountered by our regional office and headquarters staffs, and by Dr. Luther A. Black in his laboratory certification work.

Network Construction In Law

¹Presented at the Seventh National Conference on Interstate Milk Shipments, St. Louis, Missouri, April 20, 1959. For purposes of this discussion these problems are grouped under four categories as follows: (1) procedural problems relating to existing agreements on "Supervision," "Certification," "Laboratory Certification" and "Role of the Public Health Service;" (2) problems relating to existing agreements on "Reporting;" (3) problems which point up need for clarity in, and possible "codification" of Conference agreements; and (4) technical problems relating to "Regulations" which will occur in transition from the 1939 to 1953 edition of the Milk Ordinance and Code as the basic standard.

PROCEDURAL PROBLEMS RELATING TO EXISTING AGREEMENTS ON "SUPERVISION," "CERTIFICATION," "LABORATORY CERTIFICATION" AND "ROLE OF U. S. PUBLIC HEALTH SERVICE"

Procedure for Handling Complaints and Challenges of Validity of Ratings

There have been a number of instances in the last few years in which complaints have been made to the Public Health Service as to the sanitary quality of milk being received. There have been other instances in which the validity of the certified rating awarded by the shipping state has been challenged. When such complaints are received by the Public Health Service they are forwarded to our regional offices, and promptly called to the attention of the milk sanitation rating agency of the state in which the supply is located.

In most instances these complaints have been handled by the shipping state concerned, to the apparent satisfaction of the receiving state, without too much difficulty. However, there have been a few such complaints which have not been handled satisfactorily, either because the state making the complaint did not submit specific information, such as bacterial counts of the milk found in violation, or because of misunderstanding on the part of the state which made the rating as to the procedure which should be followed in investigating and handling the complaint. In addition, there has been a tendency, on the part of some people, in some areas, to cast reflections on the validity of ratings awarded by the state milk sanitation rating agencies of other states or areas. This has been detrimental to the continued success of this program.

On the basis of work with a number of states in investigating complaints, they would be classified as follows:

- a. Those which were unjustified or unwarranted on the basis of the facts.
- b. Those which were based on a receiving state's desire for the milk supply to comply with sanitation requirements over and beyond those set forth in the Milk Ordinance and Code, which is the basic standard under Conference agreements.
- c. Those which were justified because the sanitation status of the supply had slipped since the last state rating.
- d. Those which were justified because the milk had been mishandled in transit.
- e. Those which were justified because the original rating made by the shipping state, and published by the Public Health Service, did not accurately reflect the sanitation status of the supply.

To determine the facts, however, it was necessary for an investigation, "spot-check," or resurvey to be made by the milk sanitation rating agency in the shipping state.

All receiving states have the right — in fact the duty — to register complaints, and to request accurate information on any supply which they have reason to believe is questionable. Each shipping state which participates in this program must accept the responsibility to investigate such complaints as soon as possible. Unless this is done, the receiving states will soon lose confidence in the cooperative certification program. Receiving states making complaints also have a responsibility. They should submit complaints in writing stating the reasons why they feel the supply is unsatisfactory or why it does not measure up to the sanitation compliance ratings awarded.

Conference agreements on the handling of complaints and challenges are badly needed. They should spell out specifically the procedure to be followed and the responsibilities of the state certifying agency. At present, Conference agreements state only that "The receiving state shall notify the shipping state of any irregularities in the imported supply."

Revocation or Modification of an Interstate Shippers Rating; or Removal of Shipper from List

Closely coupled with the problem just discussed is the need for a clear procedure to be followed by the state certifying agency when it is found either by the state directly, or through Public Health Service "spot-checks," that the shipper is no longer entitled to the rating which he has been awarded. The answer is clear as to the ultimate action. The Service cannot accept the responsibility for publication on the list of a given rating when it is known that

the shipper is not entitled to such rating. The procedure to be followed, and the action to be taken by the state certifying agency, should differ depending upon whether the information at hand is based on 'a complete survey or a "spot-check."

It is recommended that the appropriate Task Committee of this Conference be requested to develop procedures to be followed in dealing with this problem, and that in their consideration they give thought to procedures for modification or amendment of ratings, revocation or withdrawal of certification, and removal from the list. The Task Committee should also outline the steps which the state certifying agency should take to notify the Public Health Service of any discrepancies found in order that correct information can be disseminated to receiving areas between regular issues of the quarterly list of "Sanitation Compliance Ratings of Interstate Milk Shippers."

It is also recommended that this Conference give consideration to requiring the interstate shipper to state in writing, at the time he signs the publication release, that he understands and will comply with the sanitation and other pertinent provisions set forth in the Conference agreements. Situations have been encountered where a few interstate shippers concentrate periodically on improving the sanitation compliance of their milk supplies in order to achieve high ratings, but then relax until the time when they expect the next survey to be made. The State of Virginia has added the following statement to its publication release form in order to alert each listed shipper to the fact that he has a responsibility for maintaining the sanitation compliance rating of his supply at all times:

"It is understood and agreed by the undersigned that the official surveying agency may review and appraise this supply at any time during the two year period referred to above. It is further understood that we will notify the surveying agency, which is the Virginia Department of Health, if any significant change should occur affecting our raw milk supply or our pasteurization plant."

A statement similar to this, perhaps strengthened somewhat, could be required.

Procedure to be followed when U. S. Public Health Service Spot-Checks Indicate that the Rating Awarded an Interstate Shipper is not Merited

The report of the First National Conference on Interstate Milk Shipments on the "Role of the Public Health Service" states:

"The prime role of the Public Health Service is to bring about the highest degree of uniformity in attitude and performance on the part of state authorities so that any certification of milk supply can be accepted with confidence."

Conference agreements also state that the Service should "spot-check" the inspection and survey work

of enforcement agencies to determine whether milk regulations are being correctly interpreted and enforced.

As Mr. Robinson has pointed out, the Service has conscientiously attempted to carry out this responsibility to the extent that existing staff and fiscal resources would permit. During the past four years USPHS regional milk consultants have "spot-checked" more than 650 listed interstate shippers. In the majority of states, Public Health Service responsibility for "spot-checks" is well understood. In fact, a number of states, in recognition of the value of this function, have initiated "spot-check" programs of their own, which they conduct between biennial surveys. This type of continuous surveillance promotes and maintains high levels of compliance.

There are, however, a few states who evidently misunderstand the purpose of both Public Health Service and state conducted "spot-checks." They consider it a duplication of the survey procedure despite the fact that the number of farms and plants surveyed during the "spot-check" represent only a cross-sectional sample of the total number of interstate milk shippers supplies which have been certified by each state. The value of such "spot-checks" is indicated by the experience of one of our regions. This region made 234 "spot-checks" of listed shippers during the past four years. As a result, it was necessary to request the state certifying agencies to resurvey more than 30 shippers, since conditions indicated compliance was significantly lower than the listed rating. This is not a reflection on the state certifying agencies concerned. This type of situation can be expected when the frequency of survey is once every two years, and it points up the need for the states to conduct "spot-checks" of their own. The Conference should re-emphasize the value of the "spot-check" procedure.

The basic problem, however, relates to the procedure which should be followed when a Public Health Service "spot-check" indicates a drop in the sanitation compliance rating. Present Conference agreements are inadequate in this respect. The following procedure is suggested for consideration by the appropriate Task Committee:

If, as a result of a Public Health Service, "spotcheck," it is indicated that a resurvey is necessary, the Public Health Service regional office shall request the state certifying agency in writing to make another survey within 60 days. If the shipper agrees, this new rating will be forwarded to the Public Health Service for publication. If the state indicates that it cannot make a resurvey, the Public Health Service shall direct a letter to the state certifying agency, with a copy to the shipper concerned, notifying them that the shipper will be dropped from the next quarterly interstate milk shipper list.

There is also need for delineating a procedure that can be followed when a state declines permission for the Public Health Service to make "spot-checks." If the Service is to fulfill its responsibilities, full cooperation is needed on the part of the state authorities, and if a state refuses to allow the Service to "spot-check" listed shippers, certified ratings for publication from the state involved cannot be accepted. Certainly, such a state would not be living up to either the letter or spirit of the cooperative program agreements. It is proposed that the Conference consider inclusion in the agreements of a procedure which spells out that, if a state declines permission to the Public Health Service to make "spot-checks," after being given reasonable notice, the Service shall direct a letter to the state certifying agency, with a copy to each listed shipper in such state, advising that all shippers will be dropped from the next quarterly listing unless the "spot-check" problem can be resolved.

Laboratory Certification Procedures Problems

There are a number of other problems which we have encountered that relate to laboratory certification procedures that should be resolved at this Conference.

Annual vs Biennial Laboratory Evaluation, and Split-Sample Procedures. The annual versus biennial laboratory survey requirement has been interpreted in light of the definition of an "acceptable" split-sample program recommended in the report of the Task Committee on Laboratory Certification, which report was adopted by the Conference. However, a few states have not felt that the recommendations of the Task Committee constituted a mandatory requirement. Therefore, clarification is needed as to the requirement for an "acceptable" split-sample program if the state prefers to make biennial rather than annual surveys.

The Conference report concerning split-sample programs states that an "acceptable" program shall consist of a minimum of 10-12 samples (split samples) to be analyzed each *six months* by all laboratory methods . . . etc. The meaning of this statement should be clarified as to:

- (a) Whether or not the state approved laboratory must send to each local participating laboratory 10-12 samples each six months period; and
- (b) Should the Public Health Service refuse publication of an interstate shippers rating if the state has not split samples with the local laboratory some time during the six months period immediately preceding the date of the survey.

Clarification is also needed as to the required fre-

quency of split samples in cases where the annual laboratory reviews are performed.

Certification of Laboratories Examining Water Samples. A question has been raised relative to the certification of laboratories which perform bacteriological and chemical examinations of samples of water from dairy farm and pasteurization plant supplies. It has been proposed that the certification of such laboratories be required by Conference agreements. The Public Health Service would recommend against such an action as it would mean the Conference would be extending its activities into areas outside its field of immediate responsibility. Information on the reliability of laboratories who make analyses of water can usually be obtained from the State Department of Health.

Collection of Samples from Farm Bulk Tanks. At the last Conference, this subejct was considered by a Committee on Bulk Milk Sampling. The report of this Committee indicated that control agencies should collect and examine at least one sample per six months period from the farm bulk tanks. During the past two years the influx of farm bulk tanks has been great, and milk sanitation agencies are finding it difficult to collect even one sample per six months at the farm. This is a question that involves the basic standard. Undoubtedly, an interpretation of Section 6 of the Milk Ordinance and Code is needed on this subject, and it will be forthcoming.

As you know, the 1953 edition of the ordinance and code permits the health officer to accept the results of industry laboratory examinations of raw milk for pasteurization, provided he periodically checks the industry laboratory and finds it satisfactory. This is one solution. Another is to collect for official examination, as is being done, samples taken by the haulers. The "Service would welcome the views of the Conference on this matter.

Other Questions Relating to Laboratory Certification. A question has been raised as to how the branch laboratories of the states are to be treated in the certification of the state laboratory by the Service. It would appear reasonable for the branch laboratories to be certified by the state laboratory. This is being done now, and Dr. Black states that no particular problems have been encountered on this point.

Reshipment of Milk By Certified Shippers

It has been brought to the attention of the Service that occasionally a listed shipper will purchase raw milk from other certified shippers, and then reship this milk under his own company's name. If such milk is not identified on the bill of lading or shipping tag as to proper source, principles upon which the cooperative program are based are being violated. This problem should be considered by either the Task Committee on Certification or the Task Committee on Information and Reporting, and recommendations developed for dealing with such situations.

PROBLEMS RELATING TO EXISTING AGREEMENTS ON REPORTS AND TRANSMITTAL OF INFORMATION

Transmittal of Information on Bacterial Counts and Temperatures of Milk Upon Arrival

One form of information that would be most helpful to the certifying agencies in shipping states, and to the Public Health Service, would be the reporting, from time to time, of the bacterial counts and temperatures of the milk upon arrival in the receiving areas. Such information would be extremely valuable in dealing with complaints. The Conference may wish to refer this matter to an appropriate Task Committee for consideration.

Transmittal of Information on Volume of Milk Shipped, and Improper Labeling of Shipments

Many states have failed to comply with Conference agreements on volume control. Volumes shipped, in the six months preceding the survey, should be obtained from the milk plant concerned at time of certification, and listed under item 9 on Form PHS-1659, Interstate Milk Shipper Report. The Public Health Service has a definite need for such information to justify its participation in the program budgetwise. The state milk sanitation agencies can also put this information to good use in justifying their participation in the cooperative program, and their needs for adequate resources.

In addition, it has been reported that some states are failing to comply with agreements on proper labeling of shipments and the sealing of transportation tanks.

Submission of Proper Information on Dates of Survey

Occasionally a Form 1659, Interstate Milk Shipper Report, will be submitted to the Public Health Service showing two or more, or different, survey dates for raw milk, pasteurization plants, or enforcement agency. In order to provide the receiving area with the most reliable data available, and because only one "date of rating" should appear on the published list, the "oldest" date has been published as the "date of rating." A question has been raised as to the authority of the Service to make this decision. It is believed this Conference should consider this question and include in its next report a statement that would limit publication to shippers whose dates of rating for plant, producers and enforcement agency are in close calendar relationship to one another.

Problems Arising from Failure of State to Keep Ratings Current

Some state certifying agencies are prone to forget the expiration date of the rating of listed shippers. Shippers who desire to be kept on the list are therefore sometimes omitted because the state milk sanitation rating officer did not make a new survey in time for the shipper to be retained on the list. This causes no end of trouble, and results in letters and long distance telephone calls from the shipper requesting reinstatement. Perhaps the responsibility for applying for a new rating should be placed on the shipper, but until this is done, the states should make every effort to keep ratings current.

PROBLEMS POINTING UP NEED FOR CLARIFICATION OR CODIFICATION OF CONFERENCE AGREEMENTS

Co-mingling of Basic Agreements with Task Committee Reports

As this conference has proceeded from one meeting to another over the past nine years, reports of Conference proceedings have been developed which tend to "co-mingle" the basic agreements and Task Committee reports. As a result, the intent of a specific agreement is often ambiguous or obscure. In addition, this "co-mingling" has made it difficult to differentiate between requirements and recommendations. This is confusing to the states and to industry, and has led to misunderstandings.

Ambiguities and Obscurities in Conference Reports An examination of the last Conference report reveals many ambiguities. The words "shall" and "should" are used synonymously; requirements that relate to "Supervision" or "Certification" are intermingled with the report of the "Laboratory Section;" and the words "it is recommended" are sometimes used where the intent of the Conference agreement was for a requirement. Also, as mentioned previously, in some instances the agreements fail to "spell out" the responsibilities of, and the action required to be taken, by the state certifying agency.

Recommendation for Codification of Basic NCIMS Agreements

There appears to be a need for a codification of Conference agreements, limited to substantive actions, in orderto eliminate ambiguities and to facilitate understanding. In such a codification, existing agreements should be properly organized under major headings, such as "Regulations," "Supervision," "Certification," "Bill of Lading," etc.; should be con-

cisely stated; and the responsibilities of states, industry and the Public Health Service clearly defined for each major facet of the cooperative program. Such codification could be titled "Basic Agreements of the National Conference on Interstate Milk Shipments," or a similar designation. It should be published as a separate document apart from Task Committee technical reports, or should be made a separate part of the over-all report. Conference consideration of this proposal is suggested.

Quarterly Publication of List of Sanitation Compliance Ratings of Interstate Milk Shippers

The original request of the Conference to the Public Health Service was for publication of semiannual lists of the ratings of interstate milk shippers with supplements to be issued bimonthly. As you know, it has proven to be more feasible for the Service to publish the list quarterly. This modification should be noted in the Conference agreements.

Effective Date Provision in Agreements

Whenever it is proposed to establish an effective date provision, with which compliance is necessary to maintain the listing of interstate shippers, the Conference should be certain that the "deadline" date is practical, and one which can be reasonably complied with by shippers and the states within the period specified. The difficulties experienced in placing into effect the laboratory certification and split-sampling provisions of the program well illustrate the need for caution in such matters.

TECHNICAL PROBLEMS RELATING TO "REGULATIONS" INVOLVED IN TRANSITION TO THE 1953 EDITION OF THE MILK ORDINANCE AND CODE

The 1957 Conference agreements specify that the 1953 edition of the *Milk Ordinance and Code* shall become the basic standard one year after date of publication by the Public Health Service of the revised edition of "Methods of Making Sanitation Ratings of Milk Sheds;" and that it can be used at any time following publication of the revised rating method if a state should so desire. The revised rating method was published in January of this year, and the 1953 edition of the ordinance and code is already being used by some states.

- As you are all aware, there are certain alternate technical provisions in the 1953 edition, which can be selected by a state or community adopting the ordinance, which differs from the 1939 edition. There are also differences in some of the recommended administrative practices. Two of the alternate provisions — reduction tests and brucellosis control, are of such significance that the Conference should consider their implications. In calling these items to your attention, it is pointed out that precipitous action on these items by the Conference could result in breaking down uniformity, and in the creation of "trade barriers" within the Conference agreements.

Recognition of Use of Reduction Tests for Raw Milk

The 1953 edition provides as an option that a community can use either the methylene-blue or resazurin reduction tests. Under the "Laboratory Section" of the last Conference report, the following statement appears:

"Where alternate methods are permitted by the Standard Methods, milk intended for interstate shipment should be examined by either the standard plate count or the direct microscopic method."

This raises the question as to whether reduction tests on Grade A raw milk for pasteurization will be acceptable under Conference agreements.

A recent poll made by Public Health Service regional offices indicates that reduction tests for raw milk are being utilized by cities in a few Midwestern states, Louisiana and Oklahoma. The City of Chicago, which supervises the milk supplies of a large number of listed interstate shippers, also uses reduction tests. The Public Health Service feels that since the 1953 edition of the Milk Ordinance and Code permits the use of reduction tests, that the Conference should continue, for the time being, to recognize their use. If the Conference so decides, revision of the "Laboratory Section" statement, just quoted, will be required.

Brucellosis Control

When the 1953 edition of the *Milk Ordinance and Code* was being developed, the Public Health Service strengthened the brucellosis control provision by requiring that either Plan A or Plan B, as approved by the U. S. Department of Agriculture for the eradication of brucellosis, be placed into effect within three years after adoption of the Ordinance. This was a forward step, and one which we feel has led to improvement in brucellosis eradication.

Certain states are now requiring compliance with Plan A as a condition for acceptance of milk from areas outside their jurisdiction, and this has created a problem for other states. In a few instances, compliance with Plan A is required under state law and, of course, must be complied with. However, as far as can be determined, only fifteen states have so far achieved "modified accredited status" for brucellosis control, and to require that all milk shipped interstate under the cooperative program be from herds complying with Plan A would at this time work a hardship on dairy farmers.

We are now working with the U. S. Department of Agriculture on a proposed revision of Item Ir, "Cows Health," and it is recommended that the Conference continue to recognize both Plans A and B until such time as Item Ir of the *Milk Ordinance and Code* is officially revised.

CONCLUSION

In conclusion, this enumeration of problems which the Public Health Service has encountered is not intended as criticism of either the National Conference on Interstate Milk Shipments or of the states which are participating in the cooperative program for certification of interstate milk shippers. It is reemphazised that the program to date has worked unusually well, and that the problems which have developed are in no sense alarming, but simply a reflection of the "growing up" process.

INTERNATIONAL ASSOCIATION OF MILK AND FOOD SANITARIANS, INC.

CONSTITUTION*

ARTICLE I.

ASSOCIATION

There is hereby created the International Association of Milk and Food Sanitarians, Inc., not for pecuniary purposes, which shall hereinafter be referred to as the Association.

ARTICLE II.

OBJECTIVES

1. To foster efforts designed to improve the professional status of the Sanitarian.

2. Develop uniform and proper methods of supervision and inspection of dairy farms, milk and milk products plants, and food-handling establishments, including restaurants, warehouses, and transportation equipment;

3. Develop uniform and proper methods for the examination of milk, milk products, and other foods;

4. Encourage improvements in sanitary methods of production of milk and related food products;

5. Encourage the development of equipment and supplies to improve the sanitary handling of dairy and food products;

6. Assist members in their technical work and development;

7. Co-operate with other professional groups in advancing the public health through improved milk and food-handling technology.

8. Disseminate information concerning sanitary milk and food-handling technology and administration through its official publication and/or by other means.

ARTICLE III.

Membership

Section 1. There shall be two classes of membership in this Association: Members and Honorary

Members.

Section 2. The qualifications of the several classes of members, the dues of each, the manner of their election to membership, and their respective rights and privileges shall be prescribed in the By-Laws, except as otherwise provided in this Constitution.

*Amended by vote of members in session at the 45th Annual Meeting of the International Association of Milk and Food Sanitarians in New York City, N. Y., September 8-11, 1958.

Approved by mail ballot of eligible paid members on Dec. 12, 1958.

ARTICLE IV.

OFFICERS, EXECUTIVE BOARD & COUNCIL

Section 1. The officers of this Association shall be a President, a President-Elect, a First Vice President, a Second Vice President, and a Secretary-Treasurer who shall hold these offices for one year or until their successors are elected or appointed, as provided in the By-Laws. At the termination of each Annual Meeting the President-Elect, First Vice-President, and Second Vice-President shall automatically succeed into the offices of President, President-Elect, and First Vice-President, respectively. A Second Vice-President and Secretary-Treasurer shall be elected by majority ballot at the Annual Meeting of the Association.

Section 2. The Executive Board shall consist of the President of the Association, the President-Elect, the two Vice-Presidents, the Secretary-Treasurer, and the immediate two Past-Presidents. The Executive Board shall direct the affairs of the Association. A majority of the Executive Board shall be composed at all times of members who are officially connected with Federal, State, County, or Municipal Government or with an educational institution. If the status of any member of the Executive Board changes after election, or during his term of office, or after protem appointment as provided in Article II, Section 5, paragraph F of the By-Laws, so that a majority of members officially connected as stated herein, is not maintained in the Executive Board, then such member shall be deemed ineligible without prejudice for his office and such office shall be declared vacant.

Section 3. There shall be created a Council which shall consist of the Secretary or other authorized delegate from each Affiliate Association, and the immediate two Past Presidents of the Association. Each Affiliate Association shall have one vote at Council meetings. The Council shall select its Chairman and Secretary, shall keep a record of its proceedings, and shall, at each Annual Meeting of the Association submit its recommendations to the Executive Board.

Section 4. It shall be the duty of the Council to recommend to the Executive Board programs or activities for the Association; provided, that no recommendation of the Council is binding upon the Executive Board.

ARTICLE V.

AFFILIATE ASSOCIATIONS

Section 1. Members of this Association residing in the same geographical area, and also functioning organizations of milk and food sanitarians or closely related groups whose objectives are consonant with those of this Association, may apply for a Charter as an Affiliate Association under conditions stipulated in the By-Laws.

Section 2. Each Affiliate Association shall have one representative on the Council. The representative shall be the Secretary or other duly authorized delegate of the Affiliate Association.

ARTICLE VI.

MEETINGS

Section 1. Each year when possible, the Association shall hold an annual meeting, and such other meetings as the Executive Board deems necessary.

Section 2. In all meetings of the Association, a quorum shall consist of at least twenty-five members.

Section 3. In case there is no quorum present to transact necessary business, the Executive Board is authorized to act for the best interests of the Association, and the elective officers will continue in office until their successors are duly elected.

Section 4. The Executive Board shall meet at each Annual Meeting of the Association and at such other times as the President shall deem necessary. A quorum for Executive Board meetings shall consist of at least five members and decisions shall be by a majority vote of those present.

ARTICLE VII.

Amendments

Section 1. Any member may propose amendments by submitting them in writing to the Secretary-Treasurer at least 60 days before the date of the next announced meeting, and the Secretary-Treasurer shall promptly notify all members that the proposed amendments will be open for discussion at that meeting. Such proposed amendments, upon a majority affirmative vote of the members present shall be, within 90 days, submitted to the entire membership of the Association by the Secretary-Treasurer. All members voting on such amendments shall, within 60 days after issuance of such notification, register their vote in writing with the Secretary-Treasurer on blanks furnished by the Association. These ballots shall be opened, recorded and filed, and the results shall be reported by the Executive Board to the membership of the Association. If the proposed amendments are passed by a two-thirds affirmative vote of those members who register their votes with the Secretary-Treasurer, they shall become a part of the Constitution from the date of such report and notice by the Executive Board.

ARTICLE VIII.

By-Laws

Section 1. The parliamentary procedure of the Association shall be governed by By-Laws adopted by majority vote of voting members in attendance at a duly called meeting of the Association.

BY-LAWS*

ARTICLE I

MEMBERSHIP AND DUES

Section 1. The membership of this Association shall be composed of any persons who are interested in the objectives of this Association and those engaged in milk or food inspection, or the laboratory control of, or the administration of any such function, or engaged in research or educational work relating to any aforesaid function.

Section 2. The annual membership dues payable to the Association, January first of each calendar year, shall be seven dollars (\$7.00) for each member paying dues directly to the Association, and five dollars (\$5.00) for each member paying dues through an affiliate Association.

Section 3. Honorary Members:

A. The Honorary Membership shall be composed of persons who, on account of their substantial contributions to the objects of this Association, have been nominated by the Executive Board and elected by the members to this class of membership.

B. Honorary Members shall not be required to pay dues, shall not be entitled to vote, or to hold office, but may attend the meetings of the Association and be accorded the privilege of the floor.

Section 4. Any person desiring membership in this Association will submit his application on a form supplied by the Secretary-Treasurer and endorsed by a member. The Membership Committee, by majority vote, will determine eligibility and acceptability as a member.

Section 5. Any person having once become a member may continue membership in the Association so long as the annual membership dues are paid, except insofar as provided in Section 6 of this Article. Any member who shall fail to pay annual dues within three months after first notification by Secretary-Treasurer that said dues are payable shall be placed on the inactive list. Any such member may be reinstated within 90 days thereafter, by the Membership Committee upon notification by the Secretary-Treasurer that the dues in arrears have been paid. Any member who is delinquent in dues for one year will be dropped

*Amended by vote of members in session at the 46th Annual Meeting of the Association in Glenwood Springs, Colorado, August 29, 1959.

from membership, and can be reinstated only by filing reinstatement application in due form and accompanied by the annual membership dues for that year.

Section 6. A member of the Association may be expelled for due cause upon recommendation of the Executive Board after opportunity for hearing by the Board, as provided below in Article II, Section 5G of the By-Laws, and a majority vote of the members at any Annual Meeting. Any member so expelled shall have refunded such prorata part of his membership dues as may not be covered by his term of membership.

Section 7. Each paid-up member of the INTERNATIONAL ASSOCIATION OF MILK AND FOOD SANITARIANS, INC., in good standing, shall receive at no extra cost, the regular issues of the Official Publication of the Association and such other publications as the Executive Board may direct for the year in which his dues are paid.

Section 8. A. The Secretary-Treasurer of the Association shall collect annual membership dues of seven dollars for each member paying directly to the Association, and five dollars from the Secretary-Treasurer of each Affiliate Association for each member paying membership dues through an Affiliate Association as provided in Article I, Section, of these By-Laws.

B. Members of the Association who pay local dues as members of one or more Affiliate Associations will pay Annual Membership Dues only once to the Association through an Affiliate Association, and shall receive only one annual subscription to the Journal so long as dues are paid to the Association.

ARTICLE II.

DUTIES OF OFFICERS, EXECUTIVE BOARD, AND COUNCIL

Section 1. The President shall preside at all meetings of the Association and the Executive Board. He shall appoint all committees unless otherwise directed by vote of the Association or by the Constitution and By-Laws, and perform such other duties as usually devolve upon the presiding officer or are required of him by the Constitution and By-Laws.

Section 2. The President-Elect shall perform the duties of the President in the latter's absence, shall succeed the President when the latter's term will expire, and shall be Chairman of the Program Committee which will be responsible for planning the program for the Annual Meeting.

Section 3. The Vice-Presidents, in order of their elected office, shall perform the duties of the President and President-Elect in their respective absence, and shall serve on the Program Committee.

Section 4. The following shall be the duties of the Secretary-Treasurer:

A. The Secretary-Treasurer shall record the proceedings of the Association and, unless an Executive Secretary has been appointed in accordance with the provision of subdivision B of this Section shall keep a list of the members, and collect all moneys due to the Association, giving his receipt therefor. He shall record the amount of each payment, with the name and address of the person so paying. He shall faithfully care for all moneys entrusted to his keeping, paying out the same only with the approval of the President and taking a receipt therefor. Unless the Association employs an Executive Secretary he shall, immediately after his election to office, file with the President of the Association a bond in the sum of Five Thousand Dollars (\$5,000) the expense of which shall be borne by the Association and shall, at the Annual Meeting, make a detailed statement of the financial condition of the Association.

B. The following prescribed duties of Secretary-Treasurer may be delegated to an Executive Secretary appointed by the President upon approval of the Executive Board:

- 1. To keep a list of the members, and collect all moneys due the Association, giving his receipt therefor.
- 2. To record the amount of each payment, with the name and address of the payor.
- 3. To faithfully care for all moneys entrusted to his keeping, paying out the necessary expenses of the Association and giving an accounting thereof to the Board Members.
- 4. To file a surety bond with the President of the Association in the sum of Five Thousand Dollars (\$5,000), the expense of the bond to be borne by the Association.

6. The Executive Secretary will hold office until the Executive Board authorizes the President to appoint a successor, but the status of the Executive Secretary will be that of any employee of the Association.

C. The Secretary-Treasurer will serve as a member of the Membership and Publications standing committees.

D. The Secretary-Treasurer will be responsible for assembling and transmitting to the Editors of the publications of the Association all papers, addresses, and other matter worthy of publication as soon as possible after the Annual Meeting, and keep currently listed with the publications management the names and addresses of all members of the Association and Affiliate Associations entitled to receive the publications.

E. The Secretary-Treasurer will record and keep accurate minutes of the proceedings of all meetings of the Association and the Executive Board and prepare and keep them for permanent reference. He shall issue notices of all meetings, conduct correspondence pertaining to the affairs of the Association, and perform other duties incident to the office as the Executive Board may authorize.

Section 5. The full management of the affairs of the Association shall be in the hands of the Executive Board, as provided in the Constitution. The duties of the Executive Board shall be:

A. To direct the administrative work of the Association including all matters connected with its publication, its standardization work, its collaboration with other groups and institutions, and its professional development;

- B. To act as trustee of Association property;
- C. To recommend names for Honorary membership;

D. To fix the time and place for the Annual Meeting;

E. To act for and in behalf of the Association in any administration, financial, legislative, educational, or other capacity of the Association may direct, or act on its own initiative between meetings and report such action at the next Annual Meeting;

F. To make protem appointments to fill any vacancy that may occur among the officers between meetings of the Association in the interest of the Association, and to recommend the replacement of an officer at the Annual Meeting, because of inability or inactivity or for other causes which may be in the interest of the Association.

G. To recommend expulsion from membership for cause by two thirds vote of all votes cast, but in no case will revocation be recommended without giving the member written notice of reasons for the contemplated action at least one month before action is taken and an opportunity be given for a hearing in person and/or a rebuttal in writing;

H. To employ personnel, as the situation demands, and fix their compensation and duties;

I. To execute the policies of the Association and report to the Association at its Annual Meeting any action taken that was not specifically authorized;

J. The amount of the registration fee for the Annual Meeting shall be fixed annually by the Executive Board and shall be used for defraying the expenses of the Annual Meeting.

K. To authorize the issuance or revocation of a Charter to an Affiliate Association.

Section 6. The duties of the Council shall be:

⁴ A. To act as an advisory body to the Executive Board;

B. To serve as the means for the interchange of ideas and recommendations on programs, activities, and procedures among and between the Affiliate Associations and the Executive Board;

C. To aid in putting into effect policies and programs authorized by the Association and by the Executive Board;

D. To convey to the respective Affiliate Associations information on the activities of the Association;

E. To make a report of its activities to the Executive Board at the Annual Meeting;

F. The Chairman shall preside at all meetings of the Council. He shall appoint all Council committees unless otherwise directed by vote of the council, and perform such other duties as usually devolve upon the presiding officer or are required of him by the Constitution and By-Laws.

ARTICLE III

AFFILIATE ASSOCIATIONS

Section 1. The conditions for authorizing the issuance of a Charter to an Affiliate Association are as follows:

A. When a regional group of members of this Association want to form an Affiliate Association, a group of at least ten members of this Association will sign the application and forward it to the Secretary-Treasurer of this Association, accompanied with a list in duplicate of the names of the members of this Association suggested by the applicants for allocation to the Affiliate Association and also a definition of the area desired to be covered;

B. When an already-existing organization wants to become an Affiliate Association the Secretary or other duly authorized officer of the applicant organization will make written request for affiliation status, giving the name of the organization, a copy of the Constitution and By-Laws, an attested copy of the minutes authorizing said application, the names and addresses of its officers, the number of members, a statement as to the area now covered, and also the area that it desires to embrace.

Section 2. Upon affirmative majority vote of the number of votes cast, by the Executive Board, the Secretary-Treasurer of this Association will notify the responsible officer of the applicant organization concerning the action taken. Upon receipt of any further information requested by the Secretary-Treasurer and receipt of remittances to cover the amount of the membership dues, as per provisions in the By-Laws, Article I, Section 2 and Section 8, he will execute a Charter to the Affiliate Association in form and substance as approved by the Executive Board. After the granting of the Charter by this Association, the Secretary of the Affiliate Association or other duly authorized officer shall submit the names and addresses of each member, dues, and other official business to the Secretary-Treasurer of this Association as may be required in keeping with the Constitution and By-Laws.

Section 3. Any Affiliate Association may use the expression "Affiliated with the INTERNATIONAL ASSOCIATION OF MILK AND FOOD SANITARIANS, INC." or an equivalent legend that is approved by the Executive Board.

Section 4. An Affiliate Association Charter may be revoked by the Executive Board upon recommendation by the Council on two-thirds vote of the total number of votes cast by the Council, after due and reasonable notice has been given in writing at least three months before such intention and a reasonable opportunity is given for a hearing, for the following causes:

A. When the affairs of the Affiliate Association are not conducted consonant with the Constitution and By-Laws of this Association, or

B. When the Affiliate Association has ceased to function for two years.

ARTICLE IV

COMMITTEES .

Section 1. Standing committees of this Association shall consist of the following: Program, Membership, and Publications.

A. The Program Committee shall consist of the President-Elect who shall serve as Chairman, the two Vice Presidents and the Executive Secretary.

B. The Membership Committee shall consist of a Chairman appointed by the President, the Secretary-Treasurer, one member from each Affiliate, and such other members as are deemed desirable by the Executive Board.

C. The Committee on Publications shall consist of the Editors of the Association's publication and the Secretary-Treasurer of the Association who will report all matters pertaining to the publications to the Executive Board at least once every year and whenever so requested by the Executive Board. This Committee will handle all editorial matters concerned in publishing the Journal of Milk & Food Technology, with the approval of the Executive Board.

Section 2. Each year, the President, as soon as convenient, but at least 30 days prior to the Annual Meeting shall appoint a Nominating Committee of seven members, other than officers of the Association. One member shall have been a member of the Nominating Committee from the previous year. This Committee shall submit to the Association at the Annual Meeting the names of at least one nominee for each elective office in the Association. These names, together with any other nominations duly made on the floor at the Annual Meeting, shall be voted upon. If there are more than two nominees for any office and none receives a majority of all the votes cast the candidate receiving the highest number of votes and the candidate receiving the second highest number of votes shall be retained on the ballot, all others being eliminated, and voting shall proceed on these two candidates.

Section 3. Other special committees and regular continuing committees may be authorized by the Executive Board or by the President for special work or assignment. The need for continuation of such committees shall be subject to annual review of the Executive Board. All appointments to continuing committees shall be made by the President-Elect prior to the Annual Meeting.

Section 4. The terms of office of all members shall expire at the end of the Annual Meeting next following their appointment, except as provided in Section 1, Paragraphs A, B, and C, above.

ARTICLE V

MEETINGS

Section 1. The Annual Meeting of the Association shall be held at such time and place as shall be designated by the Executive Board. Twenty-five of the members registered at the Annual Meeting shall constitute a quorum for transaction of business.

Section 2. Special meetings of the Association may be called by the Executive Board, but in such cases due notice shall be given to the members by the Secretary-Treasurer.

Section 3. The Executive Board and the Council shall meet at the Annual Meeting and at all special meetings of the Association. A quorum of the Council shall consist of a majority of its members. When, in the discretion of the Executive Board it is considered advisable to conduct a vote on a question by mail vote, a majority of the votes cast will be necessary to carry the proposition.

Section 4. Robert's Rules of Order shall govern the procedures at all meetings. Voting by proxy shall not be permitted.

ARTICLE VI

PUBLICATIONS

Section 1. All publications of the Association will be issued under the direction of the Executive Board, but any Affiliate Association may publish its own material if it assumes full responsibility therefor and obligates the Association in no way.

Section 2. The Journal of Milk & Food Technology will be the official organ of the Association. The Journal will be the property of the Association which will own the copyrights to the Journal and all articles published therein. The Editors will serve at the pleasure of the Executive Board.

Section 3. Any other publications of the Association will be produced and handled as the Executive Board will direct.

ARTICLE VII

AMENDMENTS

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Section 1. Any member may propose amendments to these By-Laws by submitting them in writing to the Secretary-Treasurer at least 45 days before the date of the next announced meeting, and the Secretary-Treasurer shall promptly notify all members that the proposed amendments will be open for discussion at the meeting. These By-Laws may be amended by a majority affirmative vote of the members present.

JOURNAL OF MILK AND FOOD TECHNOLOGY INDEX TO VOLUME 22

AUTHOR INDEX

- ABELE, C. A., report on 3-A sanitary standards program and activities of 3-A symbol council, 37
- ADAMS, H. S., is your food control program working?, 279
- ARRET, B., disc assay method for penicillin in milk, 329
- ATHERTON, H. V., field study of sanitary care of milking equipment on dairy farms, 273
- BABEL, F. J., milk quality problems associated with present day marketing, 141
- BANDLER, D. K., recent and proposed dairy legislation in New York state, 170
- BARBER, F. W., presidential address, 263
- BARRON, J. L., integration of industrial sanitation, 100; what is wrong with official regulation of food sanitation?, 370
- BELKNAP, R. A., staphylococcal food intoxication due to cheddar cheese. I. epidemiology, 313
- BOLAFFI, A., use of plastic petri dishes, 67
- BRADFIELD, A., accuracy of weigh tank sampling, 163
- BRANDSMA, L., use of in-can mechanical coolers for manufacturing milk, 304

BYRD, W. P., mixing milk in weigh tanks, 10

- CALBERT, H. E., influence on fat tests of practices used in sampling composite milk samples for use in brucellosis ring tests, 6
- CAMPBELL, J. J. R., dependence of oxidation-reduction potential of milk on its vitamin C content, 346
- CHANLETT, E. T., report on sanitarians completing graduate study, 235
- COGDILL, M. F., ultra high temperature and flavor control processing of milk, 208
- DAUER, C. C., reporting food borne diseases, 332; 1958 summary of disease outbreaks, 335
- DAVIDS, D. J., 1958 summary of disease outbreaks, 335
- DEAS, J. R., the elixis of life, 131
- DOAN, F. J., sensitivities of disc assay and triphenyltetrazolium methods for antibiotics in milk, 74
- ELLICKSON, B. E., insecticide residues in milk and dairy products. I. in milk from treatment of cows and barns, 112; 11. in milk from dairy cattle fed treated crops, 145; 111. in dairy products and associated problems, 179; antibiotic residues in milk and milk products – a review, 241; problems created by presence of antibiotics in milk and milk products – a review, 226
- ELLIKER, P. R., virucidal activity of a phosphoric acid-wetting agent sanitizer against bacteriophage of S. cremoris, 109
- FAULKNER, J. D., problems of public health service in interstate milk shiper certification program, 375
- FELLERS, C. R., a bacterial survey of commercial frozen breaded shrimp, 310
- FISTERE, C. M., legal aspects of 3-A sanitary standards, 172
- FORD, H. F., milk quality problems associated with present day marketing, 141
- GUNDERSON, M., enumeration of coliforms in frozen meat pies, comparison of methods, 176; resazurin test as index of quality of frozen foods, 299
- GRAY, H. E., better dairy farm buildings, 104
- HANSON, G. W., on the training of sanitarians, 50
- HARMON, L. G., recirculation-spray versus manual cleaning of storage tanks, 206
- HAUSLER, W. J. JR., staphylococcal food intoxication due to cheddar cheese. I. epidemiology, 313

- HAYS, H., virucidal activity of a phosphoric acid-wetting agent sanitizer against bacteriophage of S. cremoris, 109
- HEDRICK, T. I., recirculation-spray versus manual cleaning of milk storage tanks, 206
- HELVIG, R. J., tuberculosis and brucellosis as milk borne disseases, 182
- HENDRICKS, S. L., staphylococcal food intoxication due to cheddar cheese. I. epidemiology, 313
- HENNINGSON, R. W., mixing milk in weigh tanks, 10
- HOLLIS, M. D., public health implications of man's changed environment, 97
- JENSEN, J. M., recirculation—spray versus manual cleaning of storage tanks, 206
- KACHIKIAN, R., a bacterial survey of commercial frozen breaded shrimp, 310
- KAUFFMAN, O. W., laboratory "use test" for cleanability of various materials, 35
- KERELUK, K., enumeration of coliforms in frozezn meat pies, comparison of methods, 176; resazurin reduction test as index of quality of frozen foods, 299
- KEUR, L. B., dependence of oxidation-reduction potential of milk on its vitamin C content, 346
- KIRSHBAUM, A., disc assay method for penicillin in milk, 329
- LAUSTER, K. C., sanitation problems in disaster areas, 283

LETOURNEAU, C. U., hospital sanitation, 195

- LINDQUIST, P. A., sanitation problems in disaster areas, 283
- LITSKY, W., use of plastic petri dishes, 67; a bacterial survey of commercial frozen breaded shrimp, 310
- MANSFIELD, R., student project in community health, 4
- MARTH, E. H., insecticide residues in milk and dairy products. I. in milk from treatment of cows and barns, 112; II. in milk from dairy cattle fed treated crops, 145; III. in dairy products and associated problems, 179; anitbiotic residues in milk and milk products—a review, 241; problems created by presence of antibiotics in milk and milk products a review, 266
- MATTLAGE, C., survey of state sanitation control authority, 47 May, J. M., the geography of milk, $137\,$
- MEYERS, V. E., developments in automatic cleaning of storage tanks, 250
- MILLER, W. C., JR., progress on development of food sanitation manual, 1
- MULAY, C. A., interrelation between conductivity, percent lactose and freezing point, 71
- MURDOCK, D. I., sanitation in a citrus concentrate plant, 199
- Olson, J. C. Jr., on the training of sanitarians, 50
- PARKS, O., sensitivities of disc assay and triphenyltetrazolium methods for antibiotics in milk, 74
- PATRICK, R., factors concerning occurrence of coliforms in citrus products, 231
- PETERS, I. I. interrelation between conductivity, percent lactose and freezing point, 71
- PHELPS, R. H., dependence of oxidation-reduction potential of milk on its vitamin C content, 346
- PORTERFIELD, J. D., the sanitarian in tomorrow's health programs, 364
- SHRODE, R. R., interrelation between conductivity, percent lactose and freezing point, 71
- TEMPLE, T. E., relationship of municipal zoning to public health, 238

- THOMASSON, H. L., editorial-benefits of membership in IAMFS, 363
- TODD, J. G., report on sanitarians completing graduate study, 235
- WECKEL, K. G., status of use of nonfat dry milk and condensed milk in the production of market milk products, 77; national conference on interstate milk shipments necessary areas of clarification and procedures for review, 229

WENTWORTH, F. H., epidemiology and the sanitarian, 14

- WENZEL, F. W., factors concerning occurrence of coliforms in citrus products, 231
- WHITMAN, J. H., development and application of food sanitation program, 340

YODER, F. D., recreational sanitation, 106

SUBJECT INDEX

Antibiotics,

- disc assay method for penicillin, 329
- disc assay method sensitivity, 74
- penicillin and others in milk, 344 problems created by presence in milk, 266
- residues in milk, 241
- triphenyltetrazolium method sensitivity, 74
- Bacteria,
 - bacteriological screening procedures, 212 plastic dishes for counts, 67
- Bacterial counts, coliform enumeration in frozen meat pies, 176 Beverages, vending, public health aspects, 18
- Brucellosis ring test, use of composite milk samples as source of sample, 6

Citrus products,

- coliforms in, 231
- sanitation in concentrate plant, 199
- Cleaning,
 - automatic cleaning of storage tanks, 250
 - recirculation—spray versus manual cleaning of storage tanks, 206
- Cheese, staphylococcal food intoxication due to cheddar cheese, epidemiology, 313
- Coolers, úse of in-can mechanical, 304

Community health, student project, 4

Condensed milk, use in production of market milk products, 77 Dairy farm, buildings, 104

Dairy products,

- antibiotic residues in, 241
- antibiotics in, problems created, 266
- disease, summary of outbreaks for 1958, 335
- condensed milk, use in market milk products, 77
- nonfat dry milk, use in market milk products, 77
- Disease,

reporting food borne disease, 332

- summary of outbreaks for 1958, 335
- Dishes, plastic for cultivation of bacteria, 67
- Education, survey on activities of sanitarians after completing graduate study, 235
- Epidemiology, role of sanitarian, 14 Food,
 - citrus products, coliforms in, 231
 - effectiveness of control programs, 279
 - establishment sanitation, 45, 82, 117
 - frozen breaded shrimp, bacterial survey, 310
 - frozen foods, resazurin test as index of quality, 299
 - frozen meat pies, enumeration of coliforms in, 176

regulation of sanitation, 370 reporting food borne disease, 332

- sanitation manual, 1
- sanitation, regulation of, 370
 - sanitation in citrus concentrate plant, 199
- sanitation program, 340
- summary, of disease outbreaks for 1958, 335 vending, public health aspects, 18
- Food poisoning, due to cheddar cheese, 313

Helpful information, 254

IAMFS,

annual meeting,

program for 1959, 316 report, 287

- benefits of membership, 363
- committees, 26
- committee on applied laboratory methods, report, 212 committee on communicable diseases affecting man, re-
- port, 88
- committee on dairy farm methods, summary report, 89 committee on education and professional development, report, 167
- committee on food equipment sanitary standards, report, 87
- commitee on frozen food sanitation, report, 87
- committee on membership, report, 85

committee on ordinances and regulations, report, 84

- committee on recognition and awards, report, 86
- committee on sanitary procedure, report, 89
- constitution and by-laws, 381
- presidential address, 263

Interstate milk shipments,

- national conference, areas of clarification and review, 229 problems of public health service, 375
- Insecticide,
 - residues in dairy products and associated problems, 179 residues in milk through treatment of cows and barns, 112 residues in milk from cattle fed treated crops, 145
- Legislation, recent and proposed in New York state, 170 Life, elixir of, 131
- Letters to editor, 30
- Milk, antibiotics,
 - disc assay method for penicillin, 329
 - problems created by, 266
 - residues in, 241, 266
 - bacteriological screening procedures, 212

composite samples as source of sample for ring tests, 6

conductivity, 71

disease, summary of outbreaks for 1958, 335

tuberculosis and brucellosis, 183

equipment,

- coolers, in-can mechanical, 304
- sanitary care of dairy farms, 273
- storage tanks, cleaning, 206, 250
- test for cleanability, 35
- federal sanitation legislation, 78
- freezing point, 71
- geography of, 137
- insecticide residues in milk from cattle fed treated crops, 145
- insecticide,
 - residues in dairy products and associated problems, 179

residues in milk through treatment of cows and	A Study Project in Community Health.	
lactose, percent in, 71 marketing problems associated with 141	The Influence of Various Practices in Sampling for the A B B. Test on the Fat Test of Com-	_ 4
mixing in weigh tanks. 10	posite Samples of Milk, H. E. Calbert	6
national conference for interstate shipment, 229	Mixing of Milk in Weigh Tanks.	_ 0
oxidation reduction potential, dependence on vitamin C	R. W. Henningson and W. P. Burd	_ 10
content, 346	Epidemiology and the Sanitarian. F. H. Wentworth	_ 14
processing, flavor control, 208	Special Service Article–Some Public Health	
processing, ultra high temperature, 208	Aspects of Food and Beverage 'Vending	_ 18
quality problems associated with present-day marketing,	News and Events	
141	Proposals for Amendments to the Constitution	
sampling, 163	of IAMFS, Inc.	_ 25
vitamin C content, 346	Committees of IAMFS, Inc., 1959	_ 26
weigh tank sampling, 163	Letter to Editor	_ 30
Nonrat dry milk, use in production of market milk products, 77 Plastia dichor, use for cultivation of bacteria 67	Questions and Answers	_ 34
Plastice dishes, use for cultivation of Dacteria, 07		
Public health student project 4	FEBRUARY (NO. 2)	
Public health programs, role of sanitarian in 364	A Suggested Laboratory Use Test for Comparing	
Ouestions and answers, 34, 91, 122, 150, 220, 318	the Cleanability of Various Materials.	
Reduction tests, resazurin test as index of quality of frozen	O. W. Kaufmann	_ 35
foods, 299	A Progress Report on the 3-A Sanitary Stand-	
Regulation,	ards Program, and the Activities of the 3-A	
municipal zoning, 238	Symbol Administrative Council. C. A. Abele	_ 37
recent and proposed in New York state, 170	Invitation to the Forty-sixth Annual Meeting of	
state control authority for, 47	the IAMFS, Inc.	- 42
Sanitarian,	Special Service Article–Some Essenitals of Food	
joint council of, 31	Survey of State Sanitation Control Authority	- 45
role in epidemiological studies, 14	C. Mattlage	47
role in public health programs, 304	On the Training of Sanitarians, G. W. Hanson	. 11
survey on activities after completing graduate study, 255	and J. C. Olson. Ir.	50
Sanitation	News and Events	57
citrus concentrate plant. 199	General Proceedings of the 45th Annual	
environmental, public health implications, 97	Meeting of the IAMFS, Inc.	60
federal legislation, principles for, 78	Questions and Answers	. 63
food control programs, 279		
food sanitation program, 340	MARCH (NO. 3)	
hospital, 195	Studies on Use of Plastic Potri Dichog for the	
industrial, 101	Culitivation of Bacteria A Bolaffi and	
milking equipment, care of, 273	W. Litsky	67
problems in disaster areas, 283	The Interrelation between Conductivity, Freezing	. 91
recreational, 106	Point and Percent Lactose. I. I. Peters.	
state conrol authority for, 47	C. A. Mulay and R. R. Shrode	71
Sanitizer,	Sensitivities of the Disc Assay and Triphenyl-	
virueidal activity of 109	tetrazolium Methods for Antibiotics in Milk.	
Stainless steel test for cleanability 35	O. W. Parks and F. S. Doan	. 74
3-A sanitary standards.	Status of Use of Nonfat Dry Milk and Plain	
legal aspects, 172	Condensed Milk in the Production of Market	
progress report on program, 37	Milk Products. K. G. Weckel	. 77
supplement No. 3 to standards for fittings, 331	Need and Recommended Principles for Federal	-
3-A symbol,	Special Sources Article Source Economic Francisco Article Sources	. 78
authorizations for use, 119	Establishment Sanitation	00
progress on activities of administrative council, 37	Committee Report 1958	. 82
Zoning, municipal, relation to public health, 238	News and Events	. 04 01
	Questions and Answers	. 91
		1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.

1

CONTENTS, VOLUME 22

JANUARY (NO. 1)

Progress Report on the Development of the New Public Health Service Recommended Food Sanitation Manual. W. C. Miller

Implications. M. D. Hollis _____ 97 The Integration of Industrial Sanitation. J. L. Barron ____100 Better Dairy Farm Buildings. H. E. Gray _____104 Recreational Sanitation. F. D. Yoder _____106

Man's Changed Environment-Public Health

APRIL (NO. 4)

Wetting Agent Sanitizer Against Bacterio-
phage of Streptococcus Cremoris. H. Hays
and P. R. Elliker109
Insecticide Residues in Milk and Milk Products.
I. Insecticide Residues in Milk from Treat-
ment of Dairy Cows and Barns. E. H. Marth
and B. E. Ellickson112
Special Service Article–Some Essentials of
Food Establishment Sanitation117
3-A Symbol Authorizations119
News and Events122
Questions and Answers122

MAY (NO. 5)

Notice to Membership–Proposal Ammendment to	
Article I of By-Laws-Open Letter to the	
Membership of the International Associa-	
tion of Milk and Food Sanitarians, Inc.	
F. W. Barber	129
The Elixir of Life. J. R. Deas	131
The Geography of Milk. J. M. May	137
Milk Quality Problems Associated with Present	
Day Marketing. H. F. Ford and F. J. Babel	141
Insecticide Residues in Milk and Milk Products.	
II. Insecticide Residues in Milk from Dairy	
Cattle Fed Treated Crops. E. H. Marth	
and B. E. Ellickson	145
News and Events	150
Questions and Answers	150
Letter to the Editor	160

JUNE (NO. 6)

Is Weigh Tank Sampling Accurate? A. Bradfield	
Report of the Committee on Education and	
Professional Development	167
Recent and Proposed Dairy Legislation in New	
York State. D. K. Bandler	
Legal Aspects of 3-A Sanitary Standards.	
C. M. Fistere	172
Studies on the Bacteriological Quality of Frozen	
Meat Pies. II. A Comparison of the Methods	
for Enumeration of Coliforms. K. Kereluk	
and M. F. Gunderson	176
Insecticide Residues in Milk and Milk Products.	
III. Insecticide Residues in Dairy Products	
and Associated Problems. E. H. Marth and	
B. E. Ellickson	179
Special Service Article-Tuberculosis and Brucel-	
losis as Milkborne Diseases	182
News and Events	186

JULY (NO. 7)

r,

and and

Hospital Sanitation. C. U. Letourneau1	95
Sanitation in a Citrus Concentrate Plant.	
D. I. Murdock1	99
Recirculation-Spray Versus Manual Cleaning of	
Milk Storage Tanks. J. M. Jensen, L. G.	
Harmon and T. I. Hedrick2	06
UHT and Flavor Control Processing of Milk.	
M. F. Cogdill2	08
Special Service Article-Simplified Bacteriological	
Screening Procedures2	12

Program–46th Annual Meeting of the Inter-	
national Association of Milk and Food	
Sanitarians, Inc216	6
News and Events220	0
Ouestions and Answers220	0

AUGUST (NO. 8)

The Agreement of the National Conference on	
Interstate Milk Shipments; Necessary Areas	
of Clarification and Procedure for It's Review.	
K. G. Weckel	229
Factors to Consider Concerning the Occurrence	
of Coliforms in Citrus Products. R. Patrick	
and F. W. Wenzel	231
A Report on Sanitarians Completing Graduate	
Study At a School of Public Health, 1946-	
1956. J. G. Todd and E. T. Chanlett	235
The Relationship of Municipal Zoning to Public	
Health. T. E. Temple	238
Antibiotic Residues in Milk and Milk Products-	
A Review. E. H. Marth and B. E. Ellickson	241
Recent Developments in Automatic Cleaning of	
Storage Tanks. V. E. Meyers	250
News and Events	254
Helpful Information	254

SEPTEMBER (NO. 9)

Presidential Address. F. W. Barber	263
Problems Created by the Presence of Anti-	
biotics in Milk and Milk Products-A	
Review. E. H. Marth and B. E. Ellickson	266
A Field Study of the Sanitary Care of Milking	
Equipment on Dairy Farms. H. V. Atherton	273
Is Your Food Control Program Working?	
H. S. Adams	279
Sanitation Problems in Disasters. P. A. Lindquist	
and K. C. Lauster	283
Successful 46th Annual Meeting Well Attended	287
News and Events	294

OCTOBER (NO. 10) Resazurin Reduction Test as an Index of the Bacteriological Quality of Frozen Foods. Karl

Bacteriological Quality of Flozen Flous. Kari	
Kereluk and M. F. Gunderson	299
Proper Use of In-Can Mechanical Coolers for	
Manufacturing Type Milk. L. Brandsma	
and L. L. Hunt	304
A Bacterial Survey of Commercial Frozen Breaded	
Shrimp. R. Kachikan, C. Fellers and W. Litsky	310
Staphylococcal Food Intoxication due to Cheddar	
Cheese. I. Epidemiology. S. L. Hendricks,	
R. A. Belknap and W. J. Hausler, Jr.	313
News and Events	318
Questions and Answers	318

NOVEMBER (NO. 11)

A Rapid Disc Assay Method for Detecting	
Penicillin in Milk. B. Arret and A. Kirshbaum3	29
Ammendment to Supplement No. 3 to the 3-A	
Sanitary Standards for Fittings used on Milk	
and Milk Products Equipment and used on	
Sanitary Lines Conducting Milk and Milk	
Products3	31
Reporting of Food Borne Diseases. C. C. Dauer3	32

NEWS AND EVENTS

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1958 Summary of Disease Outbreaks.
C. C. Dauer and D. J. Davids335
The Development and Application of a Food San-
itation Program. J. H. Whitman340
Penicillin and Other Antibiotics in Milk344
Dependence of Oxidation-Reduction Potential
of Milk on its Vitamin C Content. J. J. R.
Campbell, R. H. Phelps and L. R. Keur346
News and Events350

DECEMBER (NO. 12)

Editorial–What do I get out of Membership	
in International? H. L. Thomasson	_363
The Sanitarian in Tomorrow's Public Health Pro- grams. John D. Porterfield	_364
What is Wrong with Official Regulation of Food	
Sanitation. J. Lloyd Barron	_370
Problems Encountered by the U. S. Public Health Service in Carrying Out Its Responsibilities in the Interstate Milk Shipper Certification	
Program. John D. Faulkner	$_{-}375$
Constitution and By-Laws of The International	201
Association of Milk and Food Sanitarians, Inc.	-381
Index to Volume 22	_388
News and Events	_392

News and Events

ELLIKER HONORED BY DAIRY SOCIETY INTERNATIONAL

Professor Paul R. Elliker of Oregon State College, Corvallis, was honored recently by being elected, *Dairy Ambassador*, during the Dairy Society International meeting held at Miami Beach, Florida.

Professor Elliker received the honor and commendation for his part as technical director for the Society at the Madrid Fair demonstration at Madrid. Dr. Elliker is an active member of IAMFS.

Among the Society's objectives is a better knowledge of modern dairy technology among countries where dairy practices need up grading and improvement. In addition the Society attempts to increase the consumption of dairy products in those areas where pure safe milk and milk products are considered a luxury for a few. In many cases, Society representatives have demonstrated at international trade shows how good milk and ice cream can be obtained many miles removed from the producing section.

LETTER TO EXECUTIVE BOARD

November 17, 1959

To The Executive Board

The following excerpt is taken from a letter recently received from David E. Hartley, Public Health Counsel to the National Automatic Merchandising Association, Chicago, Illinois:

"On behalf of the N. A. M. A. Public Health Committee and its Chairman and Co-Chairmen who represent our industry group on the Automatic Merchandising Health Industry Council, we want to take this opportunity to extend our thanks to the International Association of Milk and Food Sanitarians for the excellent guidance and cooperation which Jack Fritz has given to AMHIC during his committee chairmanship.

When national groups such as the IAMFS are able to provide industry with enlightened, top caliber men such as Jack Fritz to represent public health thinking in cooperative councils such as our Automatic Merchandising Health Industry Council, progress in public health protection is greatly accelerated.

Please convey to your Executive Board and membership our sincere appreciation for the time and dili-



gent effort which Jack Fritz has given to the Automatic Merchandising Industry during his two years as chairman of the Food Equipment Sanitary Standards Committee.

> Cordially yours, David E. Hartley Public Health Counsel"

GILBERT HOOD OF BOSTON ELECTED PRESIDENT OF MILK INDUSTRY FOUNDATON

Gilbert H. Hood, Jr., vice-president and treasurer of H. P. Hood and Sons, of Boston, Mass., was elected president of the Milk Industry Foundation during the organization's fifty-second annual convention held in Miami in October. The Foundation is an international association of milk processors and distributors, with members throughout the United States, Canada, and many other countries.

Mr. Hood, who has been with the Hood dairy firm since 1920, has been vice-president of the Foundation for the last two years, and prior to that was its secretary.



Index To Advertisers

Babson Bros., Co Back Cover
Creamery Package Mfg. Co394
Difco Laboratories392
Johnson & Johnson Inside Back Cover
Klenzade Products, Inc394
Pennsalt ChemicalsIV
Perfection Mfg. CorpVI
The De Laval Separator Co I, III, V
The Garver Mfg. Co394
The Haynes Mfg. Co 393, 395
United States Steel Corp Inside Front Cover
Universal Milking Machine-Division National Cooperatives, Inc396
Vitex Laboratories-Division Nopco Chemical CorpIV





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The technique of encapsulation—that is, of turning liquids into powders—involves, first, breaking the liquids up into droplets of microscopic size and then, coating each droplet with a thin layer of gelatin. The result is a capsule perhaps a millionth of an inch in size. In bulk these capsules form a fine powder which is dry to the touch, although 70 percent of its bulk is liquid. When wanted, the stored liquid is released either by crushing or by dissolving the capsule.

First commercial application of the process is the NCR "no-carbon-required" paper that makes copies without carbon paper, now being used on many bank deposit slips and other forms. Secret of this process is a light clay coating on the front of the paper and an encapsulated oil on the back. Pressure of a pencil or typewriter on the paper crushes the capsule, releasing the oil which reacts with the clay to form a bright blue dye. But NCR has many, many other ideas for applying the process—in the memory units of electronic computers, in the drug field, in the development of "dry" photography, possibly even in using the capsules as tiny electric cells.

Our thoughts, though, turn to water—and not to such puny possibilities as that of encapsulating distilled water to protect its purity, but to the idea of providing dry storage for the waters of the Southwest and thereby completely eliminating the pressing problem of evaporation. Even if the warehouses had to have 43 per cent more capacity than do the reservoirs now, the problem of siltation would also be solved, and present reservoirs could be devoted entirely to flood control. Reliquefication could be accomplished as required by the use of large presses of the type now employed in the paper industry.

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The sixty-eighth year of presentation of Dairy Manufacturing Short Courses by The Pennsylvania State University is currently under progress.

Testing Milk, Cream, and Dairy Products, will be offered January 11 to 16, 1960. Various processes to be studied include the Gerber and Babcock procedures for testing milk, cream, ice cream, chocolate milk, cheese, butter, and so forth; the Mojonnier tester for determining fat and solids; solids and moisture determination by the Dietert Solfat Determinator; and related items.

The third course, Ice Cream for Plant Personnel, will be held January 18 to 29, 1960. A wide variety of topics will be studied. Approximately twelve hours will be devoted to the principles involved in calculating ice cream mixes. Fourteen hours of laboratory practice will be given in the testing, processing, and freezing of ice cream mix.

The fourth course, Market Milk and Milk Supervision, will be given February 1 to 13, 1960. Subjects covered in lectures, discussions, and laboratory work include: composition and properties of milk, milk bacteriology, quality tests and methods, dairy farm inspection, milk and public health, food value of milk, lactometer and fat tests.

The fifth course, and last of the 1959-60 courses, is for Bulk Milk Tank Weighers and Samplers from, April 25 to 29, 1960. Topics for instruction will include offflavor milk and its causes, milk sampling for fat test, properties of milk, milk sediment test, bacterial counts in milk, cleaning and sanitizing bulk milk tanks and trucks.

Any individual sixteen years of age or older is eligible to attend these courses. For more information concerning the courses, housing, meals, and registration, write to the Director of Short Courses, College of Agriculture, The Pennsylvania State University, University Park, Pennsylvania. FOR CONVENTIONAL OR PIPELINE MILKING

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