WITH the growth of medical professionalization in the late nineteenth century, the city of Philadelphia, long a center of medical education, became home to one of the most vigorous groups of specialists in a new field—pediatrics. Its leaders were profoundly committed to post-graduate education in childhood diseases, and, above all, they believed in the social role of the medical community in promoting public awareness of health problems. This commitment led them to undertake a project to create a supply of pure milk that was aimed at lowering scandalously high infant mortality rates. Their organization and social activism as evidenced in the Milk Commission will be the focus of this paper.

Founded on December 22, 1896, the Philadelphia Pediatric Society had 6 officers and an Executive Committee of 5. Some 74 members attended its first meeting on January 12, 1897. Membership would increase to 218 by 1908, but the original founders and particularly the 11 elected members long remained the most active. These included two neurologists, an internist, and several who were then or would become professors of Clinical Medicine, Clinical Pediatrics, Diseases of Childhood, Therapeutics, and Pharmacy. One of the best known was Arthur V. Meigs, scion of a medical dynasty going back to his grandfather, Charles Meigs, and including his own father, John Forsyth Meigs. The latter was a pioneer in Philadelphia pediatrics whose work on infant feeding led him to encourage his son to study the chemical composition of human milk. Arthur Meigs was the first to publish an accurate analysis of breast milk, a milestone in the understanding of infant nutritional needs.
The major problem facing pediatricians of the day was infant mortality. Despite the improvements in public health and sanitation in the nineteenth century, infant mortality rates had not fallen. One estimate put the death rate for Philadelphia infants at 201.9 out of every thousand live births in 1900. For the same year, the rate for the United States as a whole was 162.4, for England and Wales 154, for France 160, for Germany 229, and for Russia 252. (See chart, p. 3.)

The poor condition of urban milk supplies and its relation to mortality had been recognized for some time. A study of epidemic diseases—typhoid fever, scarlet fever and diphtheria—in England, the Continent, the United States and Australia disclosed that 70% were spread through the milk supply. Within the medical community, debate raged over the best approach to solving the milk problem. The elite medical community, such as the physicians of the Philadelphia Pediatric Society, acknowledged the superiority of breastfeeding and tried to encourage it. The apparent majority of infants who were fed artificially, however, required a pure and appropriate source of nourishment. It was, literally, a matter of life and death. These physicians thought of it in terms of a crusade, to stop “this enormous destruction of human life” by eliminating “the biggest scourge of civilization.”

In the United States, the two major approaches to solving the milk supply problem were pasteurization and certification. By the mid-1890s, knowledgeable medical opinion rejected canned milks as lacking certain vital nutrients for infants. Nathan Straus of New York and Dr. H. W. Conn of Wesleyan University were active and ardent proponents of pasteurization because the increased cost of certification put certified milk beyond the means of the masses. Straus, a retired merchant,
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established the Straus Milk Charities in 1893 in New York City where the poor could obtain pasteurized milk for their children at no extra cost. Straus and Dr. Conn shared the belief that it would be a long time before tuberculosis was eliminated from dairy herds. But the argument against pasteurization was of equal merit.

The process of pasteurization presented serious difficulties. It was not until 1900 that researchers determined the thermal death point of the tuberculosis bacilli and other disease-causing organisms. To insure the safety of the milk, a temperature of 140° Fahrenheit for thirty minutes was required. Two forms of pasteurization were used even after 1900 however. The “flash process” involved raising the temperature to 175° Fahrenheit then allowing the milk to cool. This technique was ineffective in destroying dangerous bacteria. Furthermore, the “holding process” which maintained the milk at a high enough temperature for a sufficient time to destroy the bacteria, was also unreliable as an indicator of the purity of the milk. The points of entry for contamination were numerous and poorly understood. Metal piping, rubber tubing, milk cans, improperly sterilized bottles, capping machines, and the lack of refrigeration during delivery and in the home could all result in serious contamination. Infants were particularly susceptible to gastroenteritic disturbances produced by contaminated milk, but adults were not immune to the dangers. In 1927 in Montreal, 5002 cases of typhoid fever were traced to the milk supply which was supposedly pasteurized, and there were 533 deaths.

Of the 219 pasteurizing plants in the United States in 1912, seventy-five were using the holding process. One hundred forty-four used the flash method. The physicians of the Philadelphia Pediatric Society felt that heat treatment was no substitute for the production of clean milk in the first place. The use of pasteurization was seen as an obstacle in the campaign for pure milk from healthy cows.

The case against artificial feeding itself was overwhelming. Infant mortality statistics, whether from Germany, England, France or the United States, indicated a general infant death rate of at least 150 per thousand births, sometimes going well over 200. Where the breakdown between breast-fed and artificially fed babies was available, it was equally appalling. Artificially fed babies were four to nine times more likely to die before their first birthday than breast-fed babies. Statistics from Berlin in 1906 indicated an average mortality rate of 5.3 times higher for babies on animal milk, with the greatest discrepancies occurring in the months of April through September, the worst being July and August, the months of the “summer diarrhea.”
In the United States, it was revealed that, contrary to popular belief, the highest infant mortality rates were among American-born as opposed to foreign-born mothers, 210.9 to 117 deaths per thousand births. The breakdown between working and non-working mothers was even more revealing, 278 to 131. "This great difference is certainly not on account of their superior knowledge, but because of the fact that breast feeding is more common among them and they nurse for a longer time."  

The other approach to the milk supply problem was certification. The idea of establishing a supply of certified milk in the hope of lowering infant mortality rates began in Newark, New Jersey, with the work of Dr. Henry L. Coit. After frustrated attempts in 1889 to involve the state government in such a project, the Practitioners’ Club appointed a commission of medical professionals in January 1893, to certify a supply of milk under regulations to be determined by themselves. Two years later, Buffalo, New York, obtained a certified milk supply. Following Coit’s ideas, Buffalo’s medical milk commission put one farmer under contract with the following stipulations: a chemical examination of the animals’ water supply, the herd free from tuberculosis, clean and well-ventilated barns, cleanliness in handling the milk, the milk aired, cooled and dated, cows fed a proper diet with no brewers’ grains, and a monthly chemical and bacteriological examination of the milk produced. They succeeded in supplying 130-180 quarts of milk per day with a fat content of 4.5% and no more than 10,000 bacteria per cubic centimeter, an enormous improvement over the previous condition of 1,000,000 or more bacteria per cubic centimeter. This care in producing and handling of milk was expensive. The average cost of a quart of milk in Buffalo was 6 cents. Certified milk cost 10 cents a quart, a 67% increase. It was distributed by a “high class grocer” in the best residential district in the city.

The milk supply of Baltimore was in worse condition, probably resembling that of other cities decades earlier, before any kind of inspection of milk was instituted. In an extensive study of the milk supply there, it was discovered that 57% of the milk sold from wagons had been treated with formaldehyde as a preservative, and some of the milk may have been treated with it more than once. Bacteria counts ranged from 1,339,000 from the better class of dairies to 5,162,000 in the milk sold near Belair Market.

Philadelphia was fortunate in already having some city regulation of the milk supply. Minimums for fat and total solids were specified, preservatives and coloring matter were forbidden, and milk could be
examined at any time for the presence of streptococci and pus cells. There were an inspector of milk. Examinations were required, however, only when a problem already existed and funding was insufficient for vigorous enforcement. As noted by a Philadelphia physician,

This system of inspection doubtless has some beneficial effect in regulating dishonest methods; but it is in no sense adequate to protect the public against the dangers of unclean, carelessly transported, poorly-preserved milks, which are handled by honest, but ignorant, producers and dealers.16

From its inception, the Philadelphia Pediatric Society placed special emphasis on infant feeding. In the first two years of meetings, there were exhibitions of home pasteurizers, papers analyzing the chemical composition of colostrum (the first fluid secreted by the mammary glands for several days after birth and before the milk comes in), the use of buttermilk and various starches in infant diets, methods of calculation for home-modification of cow’s milk, discussions of individualized diets, and the report of a clinical method for estimating breast milk proteins. Then the Society embarked on a course that would gain it a national reputation as one of the most advanced and socially responsible medical groups in the country. The members approved a proposal by Dr. Meigs: “Resolved, that the Philadelphia Pediatric Society be asked to appoint a committee which shall take steps to supervise the production of the milk-supply for infants and children in Philadelphia.”17

The society appointed a committee of five to investigate the possibility of certifying milk in 1899. The Chairman of the Milk Commission was John Price Crozer Griffith, the first president of the Society itself. Forty-three years old at the time, Griffith was the son of Reverend Benjamin Griffith and Elizabeth Crozer Griffith whose family established Crozer Theological Seminary. A graduate of the University of Pennsylvania, Griffith received his M.D. along with a Ph.D. in 1881. In 1889 he became an instructor in clinical medicine there. He was a Fellow of the College of Physicians and Surgeons and served as editor of its Proceedings. He was a member of the American Pediatric Society, was on the Board of The Archives of Pediatrics, and served as treasurer for the Association of American Physicians. He became a corresponding member of the Société de Pédriatrie, Paris, and was the author of several volumes on children’s diseases.18

Other members of the committee were Alfred Hand, Jr., the secretary of the Society, Samuel McClintock Hamill, Thompson S. Westcott and Frederick A. Packard, president of the Society in 1899. Alfred Hand,
Jr., born in 1868 in Scranton, was the son of a State Supreme Court Justice. A graduate of Yale and the University of Pennsylvania School of Medicine, Hand would eventually write over fifty papers on medical subjects, including one on the description of a rare disease which bears his name. At his death in 1949, he was Professor Emeritus of Pediatrics at Penn. 19

Samuel McClintock Hamill was born in 1864 in Oak Hall, Pennsylvania. After his years on the Milk Commission, he served as Director of Welfare for the State of Pennsylvania, 1917–1918. In 1930 he was appointed by Herbert Hoover to the White House Conference on Child Health and Protection, and he was chairman of the National Welfare Committee of the Council for National Defense during World War I. He also served a term as president of the American Academy of Pediatrics. 20

After studying the little information that was available, notably Coit’s work in Newark, the Milk Commission devised its own standards and reported back to the Society in January 1900. The report reflects a highly professional attitude. Its actions were recognized as subject to the approval of the Society, and no statements, either for publication or to dairymen, would be made except in the name of the Milk Commission. Rather than placing one dairy under contract as had been done in Newark and Buffalo, the Milk Commission offered to examine and to certify the milk of any dairy seeking it and to issue certificates for a period of one month if the milk met specifications.

The Milk Commission secured the services of a bacteriologist, a chemist, and a veterinarian. The bacteriologist’s duties were to take specimens from each dairy, at least once a month without prior notification, and to inspect the milk for the number and nature of bacteria and for the presence of pus cells. In order to pass the bacteriological examination, the milk had to be free from pus and disease-causing germs, and to have no more than 10,000 bacteria per cubic centimeter. 21

The chemist’s duties were to determine the percentages of protein, fat, sugar, mineral matter and water present in the milk, as well as to indicate its chemical reaction and specific gravity. He was also to determine the presence of foreign matter, coloring or preservatives. To meet the chemical standards the milk was to have a specific gravity of 1.029 to 0.034. Specific gravity is the ratio of the mass of a volume of milk compared to the same volume of water and could be used to indicate the addition of water or other matter. The protein requirement was set at 3.5 to 4.5%, sugar at 4 to 5%, and fat at 3.5 to 5%. The use of
pasteurization or any other heat treatment before examination was forbidden.22

The veterinarian was to inspect the dairy at intervals of no less than one month and without warning for general cleanliness, cleanliness in the milking process, the care of utensils, the nature of the animal feed, the health of the cows, especially freedom from tuberculosis, and "all other matters of a hygienic nature bearing upon the health of the cows and the cleanliness of the milk," including the health of the employees.23 Charges were $10.00 for the veterinarian and $5.00 each for the bacteriologist and chemist, to be paid by the dairy at the time of examination each month. This meant a cost of $20 each month for each dairy being certified, not including the additional expenses incurred in meeting the Milk Commission's standards. If the milk passed all these requirements, the dairy was issued a certificate. The certified milk could be sold only in sterilized glass bottles hermetically sealed.

Letters were sent out to the better milk producers for the city announcing the intentions of the Philadelphia Pediatric Society's Milk Commission. "The Society is anxious to provide some method by which physicians can know the strength and purity of the milk and cream used in making up the bottles for babies."24 Their services were offered and could be obtained by applying to the Milk Commission in care of the Philadelphia College of Physicians, where the Society met. The letter said,

If you do not wish to have your milk examined, the Commission does nothing prejudicial to your interests; but it is believed that it would be to the advantage of physicians and of the better class of milk producers to have some such method of examination under the supervision of a committee appointed by a society composed of physicians interested in the welfare and treatment of children. In no other way could a certificate be obtained that would be of so much value to all interested.25

Physicians would get what they wanted—a supply of milk that would not kill their patients—and the better class of milk producers would get what they wanted—a competitive edge and increased business.

The Society appropriated $50.00 to support the Milk Commission's work. In the first full year of operation, 1901, four companies applied and were accepted. Walker-Gordon Laboratory Company (whose scientific approach to milk production and percentage modification of milk was directly inspired by the work of Arthur Meigs some years earlier26), F. A. Wills, Supplee's Alderney Dairies and the Thorndale
Dairies of Abbott & Company. None of the dairies had any trouble staying within the chemical requirements of the Commission. All, however, had difficulty at one time or another in meeting the bacteriological requirements. Certification was withdrawn for bacterial counts in excess of 10,000 per cubic centimeter, but the milk itself was sold on the market. Infection borne by one such failure to meet the standard was known to have produced illness in children fed on the milk and at least one death.²⁷

Five dairies were certified in 1902: Walker-Gordon, Willowbrook Farms Dairies and Haddon Farms Dairies (both sold by Abbott's Alderney Dairies), Purity Milk Company (sold by F. A. Wills), and Supplee's Alderney Dairies.²⁸ Knowledge of the successful work of the Milk Commission resulted in a request by the Director of Public Health, Dr. Edward Martin, for a plan for the improvement of the general milk supply of Philadelphia and an endorsement of it by the Society. The Society's Milk Commission recommended to the city the licensing of all milk sellers, to be obtained free of charge on condition that the dealer state the source of his supply and "give satisfactory evidence that the producer from whom he receives his milk maintains his herd and premises up to the standard prescribed by the Department of Public Health,"²⁹ Dealers should also be required to deliver milk from the evening and the morning on the day of its arrival, remove it from the train immediately unless it was refrigerated, maintain a specially constructed milk-room separate from their houses and to clean milk-wagons thoroughly after each delivery. Use of bottles for delivery should be permitted only if the dealer or producer owned equipment for sterilization and used it properly. The Milk Commission also recommended that the standard for the dairy should be the fifty regulations suggested by the United States Department of Agriculture. These regulations were included in the report and give an idea of the kind of conditions which could exist without regulation or enforcement:

#28—If, in milking, a part of the milk is bloody or stringy or unnatural in appearance, the whole mass should be rejected.

#17—Do not haul waste-products back to the farm in the same cans used for delivering milk.³⁰

Funds of fifty dollars per year were voted by the Society for the Milk Commission in 1899, 1900 and 1901, with an additional sum of twenty-five dollars voted in October 1901, to cover the expense of printing and mailing circulars to all Philadelphia physicians alerting them to the activities of the Milk Commission and the appearance of
certified milk on the market. In 1902 the Milk Commission was voted its now regular budget of fifty dollars along with a special commendation of thanks for its success in establishing Philadelphia’s first reliable supply of pure milk. An additional fifty dollars was appropriated later in the year for printing and distribution of their report.

After 1902, there is no further mention of a yearly budget for the Milk Commission, but presumably it was an accepted regular expense as the Commission remained active. The four original members of the Commission—Griffith, Westcott, Hand and Hamill—stayed on until at least 1907 and possibly until 1911, with Hand and Hamill staying on until at least 1913. No doubt, the Commission was strengthened by this continuity of personnel, as well as by their standing within the Society itself. All five of the original members of the Commission served at least one term as president as well as in other offices.

In 1904, money was again voted for the publication of the Milk Commission’s report, and in 1906 the secretary of the Society began acting as secretary to the Milk Commission. Unfortunately, there are no written records of their meetings. That same year the Society sponsored a symposium on the milk problem. Dr. Hamill presented the work of the Milk Commission. Dr. M. P. Ravenel, the Commission’s bacteriologist, spoke on the relation of tuberculosis to the milk supply, Dr. D. J. Milton Miller, past president of the Society and a resident of Atlantic City, New Jersey, spoke on the “Duty of the Pediatrist and General Practitioner to Educate the Public in the Advantages of a Pure Milk Supply,” and Mr. George Abbott of Abbott’s Dairies, addressed the meeting.

Abbott presented himself as a modern, forward-looking businessman, eager to advance dairying and improve his own business through science and technology. He began his attempts at transporting milk in 1873 by shipping milk produced in Salem County, New Jersey, to Camden, forty miles away. The many failures experienced led to the invention of a milk cooler. While in London a few years later, Abbott was introduced to the newly invented corrugated cooler, a design superior to his own. He in turn conveyed it to the Star Milk Cooler Company who perfected it into the device which “became a leading factor in giving Philadelphia its supply of sweet and wholesome milk.”

By 1878, Abbott was in retail milk in Philadelphia and instituted the use of small tin cans in place of open bucket dipping. In 1890, glass bottles were introduced and used along with tin cans, but by 1895 “survival of the fittest” in Abbott’s own words, led to glass bottles only being used. He announced that he was currently experimenting with a
single-service paper container for delivery, but so far the cost was prohibitive. Abbott was pleased with the progressive role he had played in conjunction with the Society.

We had heard of aiming at the moon if one wishes to hit the top of the barn, but to our surprise we have been able to hit the moon, and we thank you for the help you have rendered in securing a better milk supply for our city.\(^\text{37}\)

The amount of milk being certified by the Milk Commission was not staggering. By 1906 it amounted to about 300 quarts per day,\(^\text{38}\) and in 1912 it was stated to be certifying about 2% of the city's milk supply,\(^\text{39}\) at an additional cost to the consumer of about 20%. Its real value to the community was as an example of what was possible that put pressure on both dairies and local government and increased public awareness. In the Presidential Address of 1907, outgoing president Alfred Hand, Jr., spoke of the Milk Commission's unexpected influence:

Not long ago, in talking with a layman connected with the milk industry, I said that while the aim of the Commission was to get a supply of milk suitable for infant-feeding, it was also its hope that ultimately it would lead to an improvement in the general milk supply. The instant reply came, 'It already has done so'.\(^\text{40}\)

The Milk Commission was formally institutionalized in 1907. The by-laws of the Society were amended to include an article on the Milk Commission, specifying four members and the current president of the Society as fifth member, ex-officio. The enduring nature of their work in the mind of the Society is underscored by the appropriation of one hundred dollars for a permanent exhibition of the Milk Commission in 1911.

The cost in both time and money of performing its duties was evidently rising. In March 1908, ninety dollars was voted for work already done by the Milk Commission in that year. In February 1912, the by-laws were again amended, this time to expand the membership of the Commission to ten and specifying monthly and annual reports of activities. The following year the duties of the Society's elected secretary were amended to include the Milk Commission at an additional fee of twenty-five dollars. After this date, however, the Minutes of the Society become less and less complete. The only mention of the Milk Commission in the last three years of volume II of the Society's Minutes is on April 14, 1914, when it was authorized to print 1000 veterinary Report Blanks and 500 sheets of writing paper.
The Philadelphia Pediatric Society's concern with infant mortality and nutrition did not stop with the Milk Commission. In 1904 the Society sent letters to United States Senators Heyburn and Penrose stating their strong support of a then pending bill, which would become the Pure Food and Drug Act of 1904.\textsuperscript{41} In 1908 and 1909, members of the Society worked with another Philadelphia organization, the Modified Milk Society, supervising preparation of modified cow's milk formulas for infants and preparing literature for mothers and physicians on infant hygiene. The Children's Aid Society won their support in establishing a Bureau for Wet Nurses in April 1912, guaranteeing that both wet nurse and infant were free from syphilis and tuberculosis.\textsuperscript{42}

Besides the symposium on the milk supply problem, the Society sponsored symposia on breastfeeding in 1912 and the teaching of infant feeding in 1916. Most ambitious of all was their project to establish a summer hospital on the outskirts of the city for the special treatment of infantile summer diarrhea. In 1911, the Executive Committee and the recently formed Committee on Public Policy and the Reduction of Infant Mortality, including the ever-active Samuel McClintock Hamill, attempted to find and set up hospital facilities for the summer. The motion to take over the country branch of Children's Hospital passed by one vote, was reconsidered and defeated. The major stumbling block seemed to be the minimum of $3000 required. Instead, the Committee worked on preparing literature for both physicians and mothers on how to prevent and how to treat summer diarrhea.\textsuperscript{43}

Guest lecturers were an important part of the Society's program of post-graduate education and included nationally known physicians. Dr. Thomas Rotch, the first professor of pediatrics at Harvard Medical School, Dr. Rowland G. Freeman and Dr. Henry Dwight Chapin, both of New York and active on that city's Milk Commission, Dr. Maynard Ladd of Boston, Dr. Abraham Jacobi of New York, considered the father of American pediatrics, and Dr. Ralph Vincent of London, were featured lecturers between 1899 and 1913. All spoke on one or another aspect of the infant feeding problem, underscoring the overriding importance of the issue.

Despite a rise in membership to 218 in 1908, the active part of the Society remained quite small. In the first decade of the twentieth century, the Society averaged 28 members at each meeting, with about 20 guests present. With five, and then ten, members of the Milk Commission and five members of the Committee of Public Policy (or Child Hygiene), it is clear that the work of Society was carried on by a handful of dedicated individuals who felt a personal responsibility to
address the major social issues of the day and were optimistic about their ability to effect a positive change.

In November 1904, the Society advocated the inspection of all city public schools by a medical officer to decrease the number of cases of contagious disease. In 1909, it sent a long letter of support to the Pennsylvania legislature for the bill limiting factory work hours for women and children. The following month they supported another state bill granting reciprocity to qualified physicians from other states and protecting people “from ignorance and quackery of nonproperly qualified medical practitioners.” At the same time, they restated their unqualified support of the vaccination program, opposing amendment to that program and stating that “all unvaccinated people are a menace to the public health.” In 1911, the Society recommended to the president of the Select and County Councils of Philadelphia the establishment of a corps of Municipal Visiting Nurses to follow up cases treated at the Dispensaries. They endorsed both the formation of the Babies Welfare Association in cooperation with the Child Federation and the formation of the Division of Child Hygiene in the Philadelphia Bureau of Health in 1914, along the pledging one hundred dollars to the Pennsylvania Society for the Protection of Scientific Research, in opposition to the work of the anti-vivisectionist leagues. Delegates from the Society attended the meeting of the Association for the Prevention of Infant Mortality and the Welfare of Infancy in London in 1919. Along with this socially responsible activity, the Society also moved in the direction of increasing professionalization. In 1910, funds were appropriated for the preparation of a seal for the Society and in 1911 it was incorporated.

Ultimately, the work of medical milk commissions like that of the Philadelphia Pediatric Society would be taken over by governments because of the massive scale and expense involved. The future regulation of the milk supply would combine both the cleanliness of production ideas of the Milk Commission and pasteurization advocated by Straus and others, aided by technological advances in electrification and refrigeration. The activities of the Society’s Milk Commission had a decisive impact on Philadelphia city government, especially through Dr. Joseph Neff, Director of the Bureau of Health in the 1910s, who appears to have been a member of the Society. They also made it a national example of what could be done by a small number of knowledgeable people with access to the power structure and with social influence. The Society’s purpose of post-graduate medical education undoubtedly helped to improve the quality of health care in Philad-
philia, but their view of themselves as educators of the public was of even greater significance. It was public awareness that eventually led to the great reforms by state and national government. The Philadelphia Pediatric Society often called upon government to take action, and in turn government often called upon the medical community to participate in enforcement and inspection. The career of Dr. Samuel McClintock Hamill is an excellent illustration of the convergence of the medical community and expanding government. Active in the campaign to lower infant mortality rates and improve child welfare by means of government as well as private action, Hamill later was working within the government directing the kind of programs for which he had campaigned.

The Philadelphia Pediatric Society went one step further on the milk question. Dr. William Bradley, a member of the Milk Commission and Committee on Public Policy, spoke for the Commission in a paper presented to the Society in 1913. Asking “What can Be Done to Prevent Milk Poisoning”? Bradley stated that ten artificially fed babies died to every one-breast-fed baby, unquestionably due to some form of poisoning carried by milk—gastroenteritis, tuberculosis, typhoid, strep, scarlet fever or diphtheria. Only the great demand of cities for cow’s milk had allowed the continuance of such filthy methods of production. While the Society and its Milk Commission favored certification as the best possible guarantee of pure milk, and they were encouraged by the introduction of a bill in Harrisburg whose object was the sanitary production of all market milk, existing conditions made it necessary for some kind of heat treatment to be applied to the general milk supply. Pasteurization may contribute to carelessness in production, but it “is too vital a subject to be left to the whim of the average individual dealer.”

Therefore, we not only advocate pasteurization, but insist that every particle of milk on the Philadelphia market not certified shall be pasteurized under official supervision.

This is a dramatic broadening of the scope of the Society’s involvement and a shift in their philosophy. From the establishment of a limited supply of pure milk intended for the nourishment of infants and children where free choice and market prices influenced the consumer, the Society had taken the next giant step insisting on pasteurization for all milk regardless of its intended use. Evidently education of the public could only go so far in encouraging them to freely choose a better product. Bradley and the Society wanted to eliminate altogether the bad
choice. To do this required the close cooperation of medicine and government—"official supervision" in Bradley's mind implied both, government for legislative enforcement and medicine for expertise. Reiterating words used by Dr. Milton Miller and countless other physicians, Bradley categorically stated that "It is the duty of the physician as the guardian of the public health to make known the unsanitary conditions which usually surround the production and handling of the milk, and discourage the use of any but the best milk obtainable." In order to perform that role as guardian of the public health, the medical community required the active support and involvement of government. This symbiotic relationship between the growth of government and the growth in numbers and power of the medical profession seems to have been important and possibly even essential to both.

From their Milk Commission to the Committee on Public Policy, from the endorsement of vaccination and professional prohibition of improperly qualified practitioners, the Philadelphia Pediatric Society is an outstanding example of the social activism of the medical profession and the spirit of reform at the turn of the century. Underlying their activities is a belief in the role of the physician as a preventer as much as a healer of disease, and as a moral leader to the people. Certainly the influence of the Society, and especially of Griffith, Westcott, Hamill and Hand, was all out of proportion to its size.

NOTES

4. G. M. Rober, American Journal of the Medical Sciences 121, no. 5.


30. *Ibid.*, 775–75. Additional regulations included specifications about the health of the employees, physical maintenance of the stables, types of feed, the milking process and handling of the milk before delivery.


33. Tragic irony struck the Milk Commission in November 1902. Frederick A. Packard, son and brother to nationally known physicians, died of typhoid fever. The Society established the annual Frederick A. Packard Lecture in his honor.
42. *Ibid.*, vol. II, April 9, 1912 (n.p.).
43. *Ibid.*, vol II, April 12, May 9 and June 16, 1911.