Milk-into-school Operation Management System

Professor Jiang Jian Ping
Head of Expert Panel for Chinese “School Potable Milk Program”

School Milk Program is an interrelated and complicated action. The Program not only involves the entire flow of raw milk, processing, storage, transportation, distribution, selling, after-sales service, but also has to provide safer, more nutrient, read-to-drink, and cheaper milk as well as introducing more knowledge about milk. Therefore, School Milk Program, which plays an important role in milk industry, should establish an effective operation management system based on the specific demand of school children. The following is a discussion about the Milk-into-school Operation Management System, which is a key component of the whole program.

I. Definition and Objective of Chinese “School Potable Milk”

Chinese “School Potable Milk”, simply called “School Milk” which is a term internationally used, is defined as the milk distributed in school under the financial or political support of the government, or through other channel. Today’s Chinese School Milk refers to sterilized milk for school children only and produced by certified manufacturer under Chinese “School Potable Milk Program”. The clear definition of School Milk is helpful to make a suitable plan, establish an appropriate operation management system and facilitate the implementation of School Milk Program.

The objective of Chinese School Milk Program is to improve nutrition for and health of school children so as to build up Chinese people’s fitness, to accelerate milk industry, to facilitate the readjustment of agricultural structure and to increase farmers’ income. This objective is an interrelated and multipurpose one with social benefit as well as economic benefit. Five years’ experience suggests that it is a correct, effective and practicable objective. In the future, we should go on improving the operation management of School Milk Program, and maintain the current success. The Program will be operated in a positive and stable way. Any inconformity with the objective and definition of School Milk should be avoided.
II. Eight Elements of Milk-into-school Operation Management System

1. Milk-into-school Approval

The following policy should be adhered to under the leadership of relevant provincial and municipal governments:

- Tryout before extensive implementation
- Milk-into-school action is subject to the approval of local education authority. It is preferred to introduce School Milk into schools in major cities at the beginning and then go on the Program gradually. Avoid hurried and unthoughtful implementation of the Program.
- School Milk suppliers must be certified manufacturers. Milk products from uncertified manufacturers should be kept out of schools to ensure the safety of students.

2. Milk-into-school Management

Education authorities play a key role in School Milk Program because the Program is mainly operated in schools under supervision of education authorities. In cities where School Milk is extensively adopted, multi-leveled management system (local education bureau – principal – relevant teacher) is recommended under the leadership of management office of local education bureau, School Milk Program will be carried out by relevant principals and teachers. In addition, school’s program supervisor, manufacturer’s propagandist and milkman should properly do their own work and closely cooperate each other to establish an efficient operation system.

3. Education about Nutrition and Health

A major difference between School Milk and commercial milk is that School Milk Program provides school children with education about nutrition and health as well as milk. This is one of major objectives of the Program. Therefore, according to Chinese state education bureau’s policy, education authorities should concentrate on health education in implementation of School Milk Program. A common practice is: firstly, make propaganda and provide training to principals, teachers and supervisors before introducing milk into schools; secondly, enhance communication between schools and students’ parents by means of open letter and forum etc.; thirdly, employ the idea “educate with fun” in teaching school children with knowledge about milk by means
of entertainment, sports, painting, penmanship etc.; fourthly, include education about milk into health courses for school children.

4. Role of Schools and Milk Suppliers

Local government’s School Milk management office and education authority will invite open bid and choose several milk suppliers from state-certified manufacturers. The suppliers should make contracts with schools. Based on experiences in the past, contract generally includes: both parties promise to observe government’s management policy about School Milk; milk price approved by local price regulatory authority will be adopted; how and when will the cost for milk be paid; suppliers makes promise on School Milk’s quality, reliable distribution, after-sales service and related cost; school will develop School Milk management procedure, assign dedicated supervisor to take care and carry out propaganda and education about milk; responsibility of both parties and penalty for violation. The experiences proved the necessity of this contract.

5. Recommendation for Milk Drinking

China has a long history with small milk consumption, scarce milk source, inadequate knowledge about milk. Urban school children, which are mostly single child, are tender and weak. Therefore, if adverse event due to School Milk is not properly handled, it is likely to significantly reduce people’s faith on School Milk. To avoid this, all students are required to thoroughly clean their hands before they drink milk, to check if the milk product expires and to inspect the package for expansion or damage. They will be instructed to taste small quantity through straw at first. Once there is bitter or sour taste in milk, do not go on drinking it. If a student feels ill after drinking milk, he/she should inform the teacher immediately. Also, schools should launch activities to have students distribute and serve milk and dispose waste packages in order to educate students with tough, laborious and cooperative personality.

6. Accident Prevention and Response

Adverse events due to School Milk maybe occur in extensive implementation of School Milk Program. Emphasis should be made on the following four aspects:

Firstly, be aware of possible risk and be able to prevent and handle milk-related
Secondly, widely employ HACCP quality management system in School Milk production process and establish emergency management system at governments, manufacturers and schools.

Thirdly, recommend proper way of drinking milk and popularize the related knowledge.

Fourthly, since great member of Chinese have lactose intolerance, it is necessary to enhance propaganda allowing consumers to know more about the related knowledge about the difference between lactose intolerance and food poisoning. We have investigated and analyzed the three cases of lactose intolerance in Shanghai City, Simao City in Yunnan and Nanping City in Fujian. We learned many experiences and responded properly to the event.

7. Management of Waste Packages

With implementation of School Milk Program and development of milk industry, large quantity of waste packages will be produced. It is necessary and urgent to properly manage these waste packages and establish collection and disposal system to protect environment and control pollution. Supply of School Milk should be somewhat centralized instead of being too dispersed to make management easier. Students are required to flatten the empty waste packages and dispose them at specific place. At present, waste package management is not adequate and should be improved.

8. Follow-up Investigation on School Milk Program and Student’s Health

Local School Milk management office, education authority and health authority will carry out and supervise the follow-up investigation on School Milk Program and students’ health so as to obtain the relationship between School Milk and Students’ health, which can be referenced to improve the Program and serve as the basis for milk industry development. In investigation, examined items, examination methods, time and number of samples is to be standardized. It is suggested that government finance the follow-up investigation.
III. Final

Lately, we sent questionnaires to School Milk Program officials, experts and specified manufacturers for their feedback. Attention should be paid on two questions:

The first question: How do you comment the operation of the three-level (state – province/municipality/autonomous region – specific city) management system? The answers are as follows:

18.8% for “Good”
50.0% for “Fair”
31.2% for “Not good”

The second question: Should School Milk for students only at present be commercially sold? The answers are as follows:

12.5% for “Yes”
75.0% for “No”
12.5% for “Decided by local government”

The above investigation indicates: although there is some small success in Chinese School Milk Program, the Program is still in its initial stage and the management system is still weak and inadequate. There are a lot of things to do in the future. We should learn experience of foreign countries and practice based on Chinese specific condition. Emphasis should be made on efficient management in implementation of School Milk Program. Appropriate and sound School Milk Program operation management system should be developed and be ensured by legislation. At present, since effective regulation and management system haven’t been achieved yet, governments should enhance the supervision on School Milk Program and modestly commercialize the Program. However, today is not the right time to fully commercialize the School Milk Program.

China has got some experience and proposed some effective methods in Milk-into-school operation management system. These information and progress have been included in Guide for Chinese Milk-into-school Management printed in 2004. In the future, we should learn useful experience of foreign countries and constantly improve the management system.

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