

International Programs Utilizing Soy Foods: The World Food Program

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ABSTRACT

The World Food Program was set up 10 years ago by the United Nations and Food and Agriculture Organization as a multilateral agency to provide food aid where needed. Soy products in the form of corn-soy milk and wheat-soy blend are playing increasing roles in this program described in this paper.

INTRODUCTION

I am pleased to represent the executive director of the World Food Program (WFP) and to convey his greetings and best wishes for a successful seminar. The Program has good reason, as you will see, for being interested in the subject matter of the Conference since the soy fortified commodities that have been developed are becoming a very important component in the WFP food basket.

It is not my intention to tell you about the activities of the WFP, beyond saying that it was set up ca. 10 years ago by the United Nations and Food and Agriculture Organization (FAO) as a multilateral agency with responsibilities for promoting economic and social development in developing countries through food aid. What I would like to relate is our experience in introducing and utilizing soy foods in WFP assisted projects and the impact this has made upon our activities.

First let me give you some idea of the range of commodities commonly found in our food basket. Cereal grains account for ca. 80%. We also supply dairy products, fish, meat, eggs, fats and oils, and a number of miscellaneous food items, such as pulses, dried fruits, sugar, and beverages. The soy foods first made available for programming in WFP projects by the USAID Food for Peace Program under Title II of Public Law 480 were the two blended foods, corn-soy milk (CSM) and wheat-soy-blend (WSB). More recently, the products derived from the soy fortification of bread flour, cornmeal, bulgur, rolled oats, and sorghum grits also have been added to the basket. A new blended food, corn-soy blend (CSB) which avoids the currently scarce milk or currently expensive wheat elements, is, we understand, likely to join the others in the near future.

You may be interested to know about the Program's position when considering the possible utilization of new or modified food commodities which are being offered to WFP by our donors for the first time. It should be emphasized that WFP can only cooperate when new commodities are offered by donor governments. To make a proper initial assessment of whether a foodstuff is suitable for WFP use, certain basic data are needed, such as details of composition, type and quality, the free on board cost, packaging, transportation and storage capabilities, and the quantities that can be made available, both immediately and in the foreseeable future. As a second step we seek, as appropriate, the advice of our technical colleagues in the Nutrition Division of FAO. If, at this point, it is considered that a commodity shows good promise for use in WFP projects, we would then, as a third step, arrange for acceptability trials to be carried out in a variety of suitably selected WFP projects in a number of different countries around the world. Once the trials have been completed, and

taking into account all the other relevant data, we then make a proper assessment of a new food, including the economic and nutritional aspects and any problems related to the more practical matters of utilization, before giving approval for full-scale use in WFP assisted projects.

We feel it is our responsibility, not only to provide additional food items, but also to consider whether in doing so we are satisfying nutritional needs, encouraging good food habits, and taking account of our recipients' position once a project is terminated and new food aid commodities, to which they have become accustomed, are no longer available. Admittedly, all this may take a little time, and sometimes we may be considered somewhat conservative in our approach; but we are convinced that a proper initial evaluation of a new commodity is well justified.

USE OF SOY FOODS IN WFP AID

How does all this relate to our experience in introducing and using soy foods in WFP projects? In the first place it should be noted that, particularly in the case of CSM and WSB, the U.S. Department of Agriculture (USDA) had carried out wide-ranging research and development work, including field tests in some developing countries, before these products first were offered for inclusion in the WFP food basket. Accordingly, much useful commodity data and some good indications of acceptability were available to us from the start. It was, therefore, anticipated that these nutritionally balanced foods containing up to 20% protein were likely to be, not only acceptable, but also of considerable value in enhancing the nutritional quality of diets generally and in particular those of the more vulnerable groups, such as infants, expectant and nursing mothers, and hospital patients. Nevertheless, wide-ranging acceptability trials were carried out initially by WFP and, in general, these indicated a good overall level of acceptability and thereby enabled us to give approval for regular programming in suitable WFP projects.

It would be less than honest to say that there have been no problems, as of course there are always some problems and resistance to change when one is endeavoring to introduce new or unfamiliar foods to a wide range of people around the world with very diverse eating habits. It is important to overcome these difficulties by education; and, in this regard, the value of providing suitable recipes, simple illustrated literature in the right language, and practical advice and demonstrations, coupled with a reasonable element of persuasion, cannot be over-emphasized. In this context, experience clearly has shown the importance of trying to integrate new food products into local dishes and feeding habits, rather than presenting them as separate food items.

This process of education is an area in which the donors or their suppliers, WFP, and the recipient authorities all play important roles. As far as the soy products are concerned, I can assure you that many of the "teething troubles" were overcome thanks to the good cooperation of all concerned. In particular the assistance provided by the donor country and their suppliers in carrying out the preliminary studies to which I referred earlier and, subsequently, in rendering much helpful assistance, of which the

recipe pamphlets in a number of different languages have been particularly appreciated.

In relation to promoting acceptability, our experience has confirmed that, where commodities are considered to be nutritionally equivalent or superficially similar to other products which are to be replaced, (for example the substitution of dried skimmed milk by CSM or WSB), it is better to promote them as distinct commodities in their own right, rather than as direct replacements with similar properties, which, more often than not, is an erroneous concept.

WFP trials and subsequent utilization also have shown that acceptability may be improved significantly by modifications to the original product. Two good examples of this are the development of the precooked instant forms of blended foods, such as CSM, which with their smoother consistency and easy digestibility greatly facilitate programing, particularly as weaning foods or for feeding preschool children. Secondly, the addition of sweetening, particularly sugar, has been found to improve acceptance in most child feeding programs. As sugar is not always available locally, the provision by our donors of alternative, sweetened forms of blended foods would, of course, be most helpful. U.S. Agency for International Development presently is not in a position to supply this sugar component in PL 480 Title II commodities, but it is hoped that research work presently undertaken by the suppliers to develop an acceptable nonsugar sweetener for these products will soon yield positive results.

Let me give a brief summary of our experiences to date in programing soy products and the impact this has made in relation to our resources position and the nutritional welfare of our recipients.

The two blended foods, CSM and WSB, which are high in protein and enriched with vitamins and minerals, first became available to the Program in 1970 at a time when we had started to experience a shortage of protein-rich commodities, such as milk, cheese, meat, and fish. Accordingly, these commodities were being reduced in the project rations with an accompanying reduction in protein value, sometimes to low levels. CSM and WSB made it possible to reinstate a reasonable quantity of good quality protein, as well as to provide some vitamins and minerals which were often deficient in the diets of WFP beneficiaries.

Following our acceptability trials in 1970-71, to which I referred earlier, certain criteria were adopted for introducing the blended foods. As a general principle, and taking into account the results of acceptability testing, WSB preferably was used in wheat-eating countries and CSM in maize-eating countries. They were utilized as supplements to the rations, rather than as replacements of the respective base cereals, maize and wheat. Accordingly, with few exceptions, such as emergencies, the maximum recommended quantity was 100 g/person/day; this limitation was made, not only because of the different composition of the foods from the original cereals, but because of their higher cost. The need for educational efforts and demonstrations was especially emphasized in projects for preschool children to impress upon mothers the specific nutritional value of these foods for children and discourage their use for the whole family; this risk appears to be higher with the blended foods than for milk, which has a stronger connotation of a food for children. Consideration also was given to the possibility of developing similar protein-rich foods locally in the interests of meeting nutritional needs once a WFP project has been terminated.

The other soy fortified cereals only became available more recently, and to date little experience has been gained in WFP projects. They differ from CSM and WSB in having, with some exceptions, a slightly lower protein content and are not enriched with vitamins or minerals. WFP intends to use these commodities at somewhat higher levels of rations

in countries where the protein level of the local diets is very low. The most recent product to be added to this group, soy fortified sorghum grits has, in appearance, preparation, and, to some degree, taste, properties similar to those of broken rice. As a result of acceptability trials, it is expected to have good potential for programing in WFP projects in rice eating areas, such as the Far East and some parts of Africa, where, because of the scarcity of rice itself, WFP is experiencing difficulty in introducing wheat or other unfamiliar cereals.

To give you some idea of the quantitative level of utilization which has developed, it may suffice to mention that in 1971, when the blended foods first were introduced into WFP projects, we shipped 1250 metric tons blended food which consisted of 630 metric tons CSM and 620 metric tons WSB. In 1972 these figures had doubled to 2500 metric tons, 1200 metric tons CSM and 1300 metric tons WSB. For 1973, 16,400 metric tons is being called for—14,600 metric tons CSM and 1800 metric tons WSB, and our requirements in 1974 are estimated to be ca. 22,200 metric tons—18,000 metric tons CSM and 4,200 metric tons WSB. With instant CSM we have called for 700 metric tons in 1973, and our expected requirements for 1974 are ca. 2,500 metric tons.

Overall, the total quantities so far committed to our on-going projects for the future are 60,600 metric tons CSM, 24,800 metric tons WSB, and 18,000 metric tons instant CSM. Ca. breakdown of the types of projects receiving CSM and WSB is: human resource development, 65%; economic and social infrastructure, 20%; and directly productive projects 15%, with instant CSM being used in infant and child-feeding programs. Use of the soy fortified cereal grains has only just started, but for 1973 we have called for 8,240 metric tons, mainly for the rehabilitation of flood victims in the Far East. We anticipate increasing use of these commodities in the years to come.

These requirements for soy fortified foodstuffs should be considered against an annual disbursement average of 700,000-800,000 metric tons. Currently, it is somewhat lower because of the scarcity and high price levels of cereals which has been reduced by 50%. As a result our present disbursement rate is ca. 500-600 thousand metric tons annually. However, if and when the equilibrium in supply and demand of cereals is restored with a consequent downward trend in price levels, this should restore the volume of programing to earlier levels. Such a level of disbursement provides ample scope for utilization of protein fortified commodities, particularly when 80% disbursements on a quantitative basis are comprised of cereals.

There can be no question about WFP's interest in promoting and utilizing protein fortified cereal commodities, but our capacity to do so is contingent on three key factors: (A.) that donor governments include them in the basket of commodities offered to the Program, (B.) that continuity and stability of supply is ensured to permit WFP and recipient governments to plan and fulfill commitments to beneficiaries (this also encourages governments to ensure continued availability of such commodities once they have become established in the local diet and WFP assistance has been withdrawn), and (C.) that price levels should remain attractive in relation to other commodities, not only to WFP, but for consumer purchasing power in developing countries, thus enabling governments to consider local availability of these or similar commodities as a viable proposition.

The figures shown above indicate that the soy blended or fortified foods generally are well accepted and have become firmly established in our projects. As a food-aid program one of our most difficult problems is to maintain, as far as possible, a nutritionally well-balanced food basket in times of scarcity and fluctuating supplies. At a particularly critical period when conventional protein commodities

are limited, the timely introduction of soy foods has played a vital role in maintaining the nutritional value of rations, particularly with respect to filling the protein gap. This

whole exercise has, I think, been a good example of what can be achieved by close cooperation between our donors, the Program and recipient countries.