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### MESSAGE FROM **Ms. SEEMA MODI,**

MANAGING DIRECTOR, HEINZ INDIA PRIVATE LIMITED



**E**ducation and sharing of knowledge in every discipline is vital to nurture that discipline or walk of life. Nutrition is no exception. It is gaining importance all the more in the present because, the population of the Universe as a whole and Indian people in particular are under the grip of not only simple malnutrition but double burden of over and under nutrition.

National Institute of Nutrition (NIN) which is an ICMR- managed institute runs a separate section for 'nutrition education', 'nutrition communication', 'nutrition promotion', and 'information, education, and communication (IEC)' preparation. Dr. G. Subba Rao has contributed the article for this issue of **In Touch** on this subject. He emphasises "Communication should be continuous and reiterative as behaviour change is a difficult and slow process that requires many messages over a long period of time. It should be phased over a period of time, as people move through stages of behaviour change - unaware; aware; concerned; knowledgeable; skilled; motivated-to-change; trial; and sustained behaviour change".

While information flows top-down, we, the recipients must take this subject seriously to facilitate parents feed our children properly, doctors advice their patients meaningfully and school teachers train children intelligently. The regulators have an equal responsibility to regulate the hotel, restaurants and food caterers to concentrate not only on taste but on nutrition as well. Thus gaining knowledge of nutrition and equally vital is the methodology of imparting that knowledge down the line assumes relevance.

We at Heinz Nutrition Foundation India do it in our own small way, through a) publication of this quarterly journal and b) by providing free counselling and consulting on nutrition by leading nutritionists at two centres, namely Chennai and Delhi, to begin with. For more details send a mail to the managing editor of **In Touch**.

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NUTRITION EDUCATION TO STUDENT VOLUNTEERS IN A RURAL SETTING

## COMMUNICATING NUTRITION IN COMMUNITY SETTINGS – EXPERIMENTS, EXPERIENCES AND EXASPERATIONS



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### INTRODUCTION

Many jobs in the nutrition field, especially those of public health nutritionists and dietitians involve working with people on a regular basis. It often includes a wide range of communication activities such as consultation, teaching and community outreach. Communication for promoting nutrition needs the practitioners to be networking and in constant interaction with people. They have a great role to play in demystifying 'nutrition science' to communicate, interpret, and apply the

information to the language and lifestyles of people to benefit their health<sup>1</sup>.

Even though many factors contribute to people's food choices and lifestyles, communication is one way to emphasise the importance of good nutrition, to promote knowledge about 'appropriate' food choices, to change certain cultural norms or beliefs about diets and to promote healthy behaviours. This can involve a variety of communication tools through which a set of learning experiences are conveyed to facilitate voluntary

adoption of nutrition-related behaviours, conducive to health and well-being of the individual or the group. Therefore, one has to think beyond the didactic ways of nutrition education<sup>2</sup>.

Although the terms nutrition education and nutrition communication are used interchangeably, there is a lot of difference between them. While the focus of education activities is usually on informing the individuals about healthy eating habits and lifestyles, communication recognises that the diet-related behaviour of an individual is the product of that individual's continuous interaction with his or her environment. Most communication programmes, even today, are directed more towards the purpose of mere awareness creation than changing the dietary habits or lifestyles<sup>3</sup>. Such an approach can be effective in increasing knowledge, but not in changing the dietary behaviour or practices. However, the concept of communicating nutrition information has been introduced in the field of nutrition education - both in research and practice<sup>4, 5</sup>.

Given this context, this article attempts to explore how various health communication approaches like social marketing, advocacy, participatory communication, and information and communication technology (ICTs) have been used for nutrition education/communication in India - the experiments, experiences and exasperations thereof.

Prior to that, it would be ideal to put things in perspective and discuss how nutrition educators have come to think beyond mere information dissemination? Why do the aspects that affect nutrition behaviours matter? What is prompting the paradigm shift? What are the common steps in different approaches to nutrition communication?

### BEYOND INFORMATION

**DISSEMINATION:** Although nutritionists have been historically engaged in nutrition education, few have questioned its efficacy. It was assumed that nutrition education would result in such positive outcomes as changes in dietary behaviours. Even the very few evaluations conducted during the early part of the twentieth century, were subjective and focused more on finding out how well the audience liked a specific program. A review of nutrition program evaluations between the 1930s and 1960s, conducted by McKenzie and

Mumford (1965), concluded that only a few of the studies were objectively conducted<sup>6</sup>. Whitehead's (1973) review of studies spanning seventy years found that nutrition education has been directed more towards disseminating nutrition information than improving dietary habits<sup>7</sup>. That approach was effective in increasing knowledge, but it was not very effective in changing dietary practices.

Realising that effectiveness of programs should not be assumed but measured, nutrition educators began to apply nutrition knowledge tests to measure cognitive changes. A review of studies conducted in the 1960s and early 1970s showed that many of these tests only evaluated nutrition knowledge<sup>8</sup>. Few attempted to measure attitudes and practices. Later, more studies were developed to measure behavioural as well as cognitive outcomes. A meta-analysis conducted by Johnson and Johnson (1985) reviewed all the available research in nutrition education until the mid-1980s to assess effectiveness of nutrition education and to delineate new directions for future research. They reported their observations on the impact of nutrition education in terms of knowledge, attitudes and behaviour, since these were the most commonly measured variables. Their meta-analysis of 303 studies found that nutrition education resulted in an overall improvement of 33 per cent in knowledge, 14 per cent in attitude and 19 per cent in

dietary practices. They also indicated that a wide variety of instructional procedures were used in the studies and many of the studies involved participants not in designing communication methods, but in planning menus and preparing and tasting foods. Finally the meta-analysis concluded that as many as 80 per cent of the studies used more than one educational method thus, making it difficult to determine their relative effectiveness<sup>9</sup>.

### INFLUENCES ON NUTRITION RELATED BEHAVIOUR:

Exposure to new information or services, which is thought to result in knowledge acquisition, may not result in a change in attitudes or dietary behaviours. Literacy level, socio-economic factors and food belief systems may influence individuals' behaviours. The approach used most often in health and nutrition education programs is top-down, with planners designing the media material to provide information to the community from a central point, without taking into consideration regional and socio-cultural differences within the population. These efforts are usually based on the assumption that people lack nutritional knowledge, and when people appropriately learn about nutrition, they will act according to their knowledge. Messages are usually medically oriented and mainly address nutritional diseases and how to prevent them. The information provided is what the

A VIDEOTAPED FOLK DANCE-BASED NUTRITION EDUCATION MODULE DEVELOPED BY NIN



policymakers, program planners, and other implementers perceive as important for the community to know. In most cases, inter-personal communication is the main channel for nutrition education and those trained in basic nutrition without proper media materials, are the key communicators. Such an approach could well be the reason for the limited success of intervention programs to make measurable impacts.

## NUTRITION EDUCATION, COMMUNICATION, AND PROMOTION

The Changing Phase: 'Nutrition education', 'nutrition communication', 'nutrition promotion', and 'information, education, and communication (IEC)' are some distinct approaches. The traditional definition of nutrition education is that it is a process of giving the wisdom of how to acquire, prepare, and consume foods that are good to eat<sup>10</sup>. There has been a growing recognition that health and health-related behaviours of individuals are products of individual interaction with their environment. This includes family, peers, community, culture, social structure and physical environment<sup>11</sup>. Currently, the concept of communicating nutrition has been introduced in the field of nutrition education. This allows for broader consideration of people as individuals in communities, not as students in a classroom or robots who act on an external message stimulus.

Communication should be continuous and reiterative as behaviour change is a difficult and slow process that requires many messages over a long period of time. It should be phased over a period of time, as people move through stages of behaviour change - unaware, aware, concerned, knowledgeable, skilled, motivated-to-change, trial, and sustained behaviour change. The creation of an enabling environment is among the major factors necessary to bring about positive behaviour change.

## APPROACHES TO NUTRITION COMMUNICATION:

Countries such as India have a wide array of nutritional problems and a mixture of difficulties. Directing nutrition communication interventions precisely at specific target groups is thus a real challenge. Several approaches to nutrition education have been developed and

applied effectively. These include social marketing, social mobilisation, and development-support communication. There are some common threads among these approaches. These core elements are:

## NUTRITION EDUCATION AND COMMUNICATION RESEARCH IN INDIA

In proposing his nutrition research plan in India in the 1900s, Sir Robert McCarrison, the first director of Nutrition Research Labs (now known as the National Institute of Nutrition), included community nutrition education as one of the activities. To this end, he prepared popular-level books and

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pamphlets. Providing textual materials was continued by his successor, Dr. Wallace R. Aykroyd. Although there were many such scattered efforts, there was hardly any concerted strategy for education<sup>12</sup>.

There is evidence that individual nutrition scientists considered developing "appropriate" methods of nutrition education consistent with the socio-economic and cultural background of the population<sup>13</sup>. In the early 1960s, many studies carried out by the scientists of NIN emphasised nutrition education for school children. Studies examined various aspects of the possibilities. They looked at the idea of a nutrition component in school syllabi and teaching nutrition in schools<sup>14-16</sup>. In 1970s, studies looked for effective media that could carry the message of nutrition to various groups of people<sup>17</sup>. Nutrition counseling was studied for use as a tool to disseminate nutrition information<sup>18</sup>.

Berg (1970) wrote that the Indian preference was to approach nutrition education, not so much as a nutrition problem, but more as a communication problem. Earnest efforts were made through the mass media and by commercial advertising agencies to go beyond the "four food groups" clichés of standard nutrition posters<sup>19</sup>.

Hardly any studies evaluated this communication drive. Some 1980s studies looked into the use and relative effectiveness of mass media for disseminating nutrition messages<sup>20, 21</sup>. Studies conducted by Parvati Rau (1991, 1994) proved that folk art forms could also be used as effective media for nutrition education<sup>22,23</sup>. During the 1980s, the Indian Council of Medical Research (ICMR) funded a string of projects on nutrition education<sup>13</sup>. Most of them aimed at providing nutrition education interventions and assessing incremental changes in knowledge.

The studies concluded that, due to economic factors, people were unable to put knowledge to use. In this connection, there are lessons to be learned from the Tamil Nadu Integrated Nutrition Program (TINP), in operation since the 1980s. TINP made integrated health and nutrition interventions that included a major communication component. The communication strategy segmented the audience into primary and secondary targets. Strategies were carefully planned for both. Two-pronged communication was used for the primary target group and one-way communication for the secondary audience. The primary target group was mothers, mothers-in-law, and fathers. Counselling was used, supported by flip charts and flash cards. The secondary target group was the rest of the population. Films incorporating popular film tunes, filmstrips, and slides were used for this wider audience. Pamphlets were available for the literate and the popular folk medium, villupattu (a traditional form of musical story-telling where narration is interspersed with music), was used. Although no separate evaluation of the communication strategy was conducted, it was well accepted that a major contribution of the communication strategy was to increase the community's use of services. It was emphasised that communication activities should be supported by other services and strategies that make it possible to act on the messages<sup>24</sup>.

Studies by NIN have also used social marketing techniques for imparting nutrition education <sup>4</sup>. In studies conducted over the past decade, internationally accepted school-based education modules, computer-mediated education tools, and small media, such as skits, plays, and folk media, have also been used for nutrition education <sup>25-28</sup>.

### NUTRITION EDUCATION/ COMMUNICATION - A MULTI-PRONGED APPROACH

Today, nutrition education and communication are regarded more broadly as a mechanism for interaction among participants and as a resource, applying a coordinated, multi-sectoral, and interdisciplinary effort. Nutrition communication is now an umbrella for a wide range of education and other approaches that aim to influence nutritional status<sup>5</sup>. Social marketing, advocacy, participatory communication, “edutainment” using information and communication technology, and using food labels for nutrition communication have been tried experimentally.

**SOCIAL MARKETING** has become popular in recent years for nutrition communication, where the goal is to facilitate change in nutrition-related practices and status. Social marketing uses business marketing principles to advance a social cause or idea. As a social change management technology, it involves the design, implementation, and control of programs. These programs are aimed at increasing the acceptability of a social idea or practice in one or more target groups<sup>29</sup>. The strategy adopts the four “Ps” of marketing—product, price, place, and promotion. In the 1990s,

this strategy was successfully used in Thailand to promote Vitamin A rich foods <sup>5</sup>. In India, this strategy also was successfully used to promote Vitamin A rich foods among rural households in the south Indian state of Andhra Pradesh <sup>4</sup>. Elsewhere, many examples can be found of the social marketing of breast-feeding, weaning foods, oral rehydration salts, and immunization<sup>30</sup>. Social Marketing also increased awareness and better practices of including nutritious foods in daily diets.

**ADVOCACY** is a planned communication effort to persuade decision makers at policy, planning, and management levels to adopt necessary policies and allocate resources for a cause. In the Indian context, such international organisations as WHO and the United Nations Children’s Fund (UNICEF) have been using this strategy to encourage various stakeholders from different sectors of government to realise their role in implementing food and nutrition plans and policies. Workshops for representatives from seven Southeast Asian countries advocated for multi-sectoral collaboration to promote nutrition in India and other Southeast Asian Countries<sup>31, 32</sup>. Other efforts involve mobilising support for policy makers by depicting the effects of malnutrition as functional and economic consequences. International organisations like CARE-India, with the support of WHO, prepared advocacy material based on the PROFILES program, developed by the Academy for Education Development in the U.S. These materials show the cost-benefit ratio of investments needed to save a country from impending economic losses due to less productive malnourished manpower<sup>33</sup>.

**PARTICIPATORY COMMUNICATION** enhances the likelihood of program success by stimulating two-way communication in the program. It involves people in dialogue, collaboration, and decision making, while considering them to be the ultimate and most important beneficiaries of development. As a result, such a communications process can address a whole range of social, cultural, political, economic, and environmental issues affecting people’s nutrition and health. Experience has shown that when a community is involved in designing, implementing, monitoring, and evaluating, nutrition and other development projects

are more likely to be effective and sustainable. Such participatory efforts more often meet the real needs of the people in the community and achieve results that can be continued with minimal external inputs <sup>34</sup>. An innovative approach to participatory community learning was “Positive Deviance.” This phenomenon exists in many resource-poor communities. A few individuals and families employ uncommon, beneficial practices that allow them and their children to have better health as compared to their similarly impoverished neighbours. Learning through experience sharing with such individuals and families, as well as incorporating these practices in planning and implementing some of the nutrition supplementation programs in India was extremely beneficial, especially in the northern states of India <sup>35-37</sup>.

### EDUTAINMENT USING INFORMATION AND COMMUNICATION TECHNOLOGIES (ICTS)

This is an increasingly important approach. While the multimedia CD-ROM market is exploding with programs for children, there are only a few nutrition education programs. Although the ability of multimedia programs to capture children’s attention, increase their knowledge, and change behaviour is widely documented in the developed world, very few studies have compared the efficacy of teaching tools in experimental designs. Some studies in the West concluded that using computer-based nutritional teaching methods at school provides an additional support to conventional teaching. In the Indian context, Vijayapushpam et. al. (2003) documented that CD-ROM-based intervention brought about significant improvement in the knowledge of school children <sup>26</sup>. Contrary to this observation, a study by Rao et al. (2007) countered that the CD-ROM intervention did not show more value than classroom-based intervention. It has also been observed that a majority of a studied group of adolescent girls paid attention to the classroom lecture of a science teacher who used folders, slides, and charts, and they interacted more with the teacher. When they used audio-visual CDs, the girls mostly viewed computers as entertainment devices, rather than educational devices <sup>27</sup>.

**FOOD LABELLING FOR NUTRITION COMMUNICATION** has become standard in the West as important modes of communication. This is one potentially



EDUTAINMENT – NUTRITION EDUCATION USING CHILDREN’S SKIT



FOOD LABELS CAN BE EFFECTIVE MEANS OF CONVEYING NUTRITION INFORMATION

powerful tool of communication not often considered when traditional channels are discussed<sup>38</sup>. In addition to the ingredients list, the nutrition-labelling panel gives important information about nutrient content, enabling the consumers to make healthy choices. This is important in the Indian context where over 59 percent of households buy packed foods at some point<sup>39</sup>. Studies in other parts of the world have reported that about 40 percent of the studied consumers did not check the food labels<sup>40, 41</sup>. However, women, especially those with higher educational levels, have been observed to be more likely to check food labels than men<sup>41</sup>. In studies conducted in India<sup>42-44</sup>, literate persons generally were more likely to check label information. The study concluded that efforts can be intensified to familiarise quality symbols on food labels, which can even be identified by illiterates in India.

**THE INSTITUTIONAL APPROACHES TO NUTRITION COMMUNICATION:** Taking a macro perspective, Gavaravarapu and

Pavarala (2013) have critically examined how various organisations that are engaged in nutrition communication in India perceive, develop, and implement communicative processes. Through case studies of organisations from government, voluntary, and research sectors, they have concluded that nutrition communication programs are usually top-down, expert-driven and often lacking in planning, evaluation, or adequate financial allocation. They suggest that perceptions of the key communicators, their motivation levels and personal biases also affect the design and implementation of nutrition communication programs. Examining the context in which the organisations function, the authors conclude that the framework for communicative processes for government and research organizations, is created by the centres of authority, such as the state, UN agencies, or funding agencies. These centres often define nutrition priorities and frame solutions. The institutions, operating in tandem with the priorities set by the state or other centres of authority, invariably have

to work in a predetermined framework. Juxtaposing these top-down programs with participatory approaches adopted by some voluntary organisations, they find that the participatory communicative processes are designed based on articulations that emerge from within the context of the audience. The authors suggest that, in efforts related to promoting nutrition, communication's role should be seen as going beyond the production of materials for information dissemination or as one option. Communication should become a fundamental component of all health and nutrition programs, with appropriate provision for budget and a strong evaluation component, incorporated at the planning stage<sup>45</sup>.

## THE WAY FORWARD

As the National Nutrition Policy of the government of India recognises that "Nutrition affects development as much as development affects nutrition . . ." (FNB, 1993:2), nutritional concerns are being integrated into various developmental

policies and programs being taken up at various levels by the government. Non-governmental organisations (NGOs) and international organisations such as WHO, UNICEF, and FAO are also exerting effort to take the message of nutrition to the community. In some cases, government, voluntary, and international organisations are working together. All are emphasising the need to involve the beneficiaries in the process of developing and implementing programs. However, it is quite exasperating to note that the impact evaluations have in retrospect looked at nutrition education and communication component as the area that needed more attention. There is even a dearth of published literature regarding the scattered studies and smaller experiments conducted by NGOs and University Departments and Students. Systematic documentation of all nutrition education and communication programs is certainly needed.

The Indian experience clearly indicates that multiple, integrated strategies can work. A combination of different actions is widely seen as responsible for the success of communication strategies. However, a strategy that works in one context may not be successful in others. Communication strategies that aim to mobilise communities for the cause of nutrition must adopt different characteristics in different circumstances, based on the context and felt needs. Therefore, nutrition education/communication is a necessary but not a sufficient condition for bringing about the desired behaviour change. Hence, emphasis should be laid on creating an enabling environment for adapting and maintaining positive change.

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GRANT MEDICAL COLLEGE, MUMBAI.

## COMMUNICATION IS THE KEY TO SUCCESS

**E**ducation is different from communication. Education attempts to present information that helps in ideal application while communication is intended to change the behaviour to make information more effective. It is important to assess the final outcome of education. Education does not turn into knowledge and knowledge does not translate into desirable outcome unless well-communicated and further monitored. This is true, especially in the field of nutrition. Nutrition communication should be an integral part of nutrition programmes to improve nutritional status of the community. In this issue of In-Touch, readers will find interesting articles on importance of communication in nutritional management.

## MESSAGE FROM THE MANAGING EDITOR

**In Touch** will soon be entering the 16th year of publication, without a break from the next issue. Since it will be the Platinum Jubilee edition, we want it to reach as many readers as possible. But the cost of paper and printing is becoming increasingly expensive to print additional copies for free distribution. Therefore, it is our polite request, to our readers, to share their email IDs, so that you can receive the issue through email, which does not incur additional cost for 'The Foundation'. The email ID of the managing editor to whom you should forward your mail ID is [p.jagannivas@in.hjheinz.com](mailto:p.jagannivas@in.hjheinz.com). We would like to reach all institutes particularly Medical College libraries, Nutrition Institute libraries and general libraries.

**In Touch** is also available on our web-site [www.hnfi.org](http://www.hnfi.org).

We take this opportunity to publish the feedback of appreciation from our readers in the next issue, if it reaches us before 31st March 2014, depending upon the space available. Kindly ensure the word count is not more than hundred words. Do include your photograph (300 dpi), qualifications, designation and address.



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