

DEVELOPMENT OF SOYA TECHNOLOGY FOR ENTREPRENEURSHIP AND HEALTH BENEFITS

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ABSTRACT

Soyabean is a legume produces in abundance in Rajasthan and it is rich of protein & a cash crop of Hadoti region. Soya foods are considered as nutritious, economic and health promoting for children and elderly people. Therefore numbers of women empowerment trainings are conducted through Krishi Vigyan Kendra Kota district of Rajasthan to make people aware for its nutritional value and entrepreneurship developments. It is mainly popularized among pregnant and lactating women, adolescent girls, body builders, infants and diabetic patients. The present study was conducted to know the knowledge gain about soyanean products through trainings & to study the entrepreneurship development in production and promotion of soya based food products. This study was conducted in the year 2001-2002 on 29 participants of women training program conducted by Krishi Vigyan Kendra Kota. For the interpretation of the data mean and standard deviation were calculated to assess the extent of knowledge gain among the women for different soya technologies and byproducts. It was found out that after the training their knowledge related to soyabean production, its utility for health, processing of soyabean, protein contain etc. were reached up to great extent (82.7 %). It can be due to their curiosity to know more about soyabean and its products, since it is a main cash crop of Hadoti region, it is rich source of protein where as people are suffering with malnutrition. Knowledge of women was tremendously improved after the training regarding soyabean contains less cholesterol, it contain dietary protein in abundance compared to other food products and it was useful for pregnant & lactating women respectively. They tested their products and found it appropriate to sell it in the market. 89.6% women become confident in preparing soya biscuit & sattu independently. It might be due to more technology and appropriateness required for preparing such products.

Key words : Soyabean; Nutritional value; Entrepreneurship developments; Pregnant and lactating women; Adolescent girls; Body builders; infants and diabetic patients;

Soyabean is a legume and it is grown all over the world for its rich protein and oil contents. India produces about 5.5 million tones of soyabean each year. It contains 40% protein, 23% carbohydrates, 20% oil and reasonable amount of minerals and vitamins. After Madhya pradesh Rajasthan is the second largest producer of soyabean. It produces in abundance at Hadoti region. It is considered as a main cash crop of this region. Soya foods are considered as nutritious, economic and health promoting for children and elderly people. Singh & Yadav (2005) concluded in his study that an alternative extension approach is the most effective and stronger method for dissemination of agricultural technologies and upliftment of social economic status of the farmers. Similarly Singh Neeraj, Vijayaragavan and Sinha B. P. (2001)

concluded that impact of the training continued even after the training course, which could positively affect the work. The present study was conducted to assess the gain in knowledge among rural women about economic benefits of soyabean, nutritional health and its products as a common source of dietary protein in India. Another reason was to study the entrepreneurship development in production and promotion of soya based food products.

METHODOLOGY

This study was conducted in the year 2001-2002 on 29 participants of women training program conducted by Krishi Vigyan Kendra Kota. Test retest method was used to judge the gain in knowledge of the women after completion of the training. Structured interview schedule

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was applied to the women before the starting of training and after the training programme. The information relating to extent of learning & perfection in preparing soya products was recorded on 3 points continuum scale i.e. Great extent, Moderate extent and Little extent. For the interpretation of the data mean and standard deviation were calculated to assess the extent of knowledge gain among the women for different soya technologies and by products.

RESULTS AND DISCUSSION

Although women were having very little knowledge about soyabean but they were curious to know more about its utility for the health and the technology applied to make it more palatable and digestible.

Table 1: Improvement in Knowledge of the women for processing of soyabean and its products (n = 29)

Categories	Initial Knowledge	Improvement in the knowledge
Great extent	7(24.1)	24(82.7)
Moderate extent	10(34.4)	4(13.8)
Little extent	12(41.3)	1(3.4)

Figure in parenthesis indicate percentage.

Table 1. indicates that initially rural women were having moderate knowledge (34.4 %) about soyabean and its products that too through the exhibitions, kisan melas, radio talk and off campus visit of KVK scientists. After the training their knowledge related to soyabean production, its utility for health, processing, protein contain etc. were reached up to great extent (82.7 %). It can be

due to their curiosity to know more about soyabean and its products, since it is a main cash crop of Hadoti region, it is rich source of protein and people are suffering with malnutrition.

Table 2 reveals that initially majority of women were having little extent of knowledge about the health benefits of soyabean. They were unknown about its daily intake, although 62 per cent of them knew that it is a rich source of protein. More than half of rural women 65.5 per cent of & 58.6 per cent of were not at all knew that soyabean reduces the problems of menopause among women, it helps in preventing breast cancer and it is helpful for growing children. Knowledge of women was tremendously improved 100 per cent of 96.5 per cent of & 93.1 per cent of after the training, that it contains less cholesterol, dietary protein in abundance compared to other food products and useful for pregnant & lactating women respectively.

Table 3 shows that 100 per cent of women were become expert in doing processing of soyabean and preparing dairy products viz. milk, curd, srikhand, paneer etc. it might be due to their interest for selling soya products in the market. 93.1 per cent of them well learned the preparation of soya laddoo, gulabjamun, barfi, halwa & poradge. Few snacks were also taught to them as soya puri, vegetable, nuts and pakodi. They tested their products and found it appropriate to sell it in the market. 89.6 per cent of women become confident in preparing soya biscuit & sattu independently. It might be due to more technology and appropriateness required for preparing such products.

Table 2: Improvement in the knowledge regarding health benefits of soyabean.

Benefits of soyabean	Initial Greater	Knowledge Greater Extent	Little extent Extent	Improved Moderate	Knowledge Moderate Extent	Little extent Extent
Reduces risk of heart disease	11(37.9)	7(24.0)	11(37.9)	24(82.7)	5(17.2)	0(0)
Prevent breast cancer	08(27.5)	4(13.7)	17(58.6)	25(86.2)	4(13.7)	0(0)
Useful in diabetes	07(24.1)	9(31.0)	13(44.8)	25(86.2)	4(13.7)	0(0)
Contain less cholesterol	11(37.9)	6(20.6)	12(41.3)	28(96.5)	1(3.4)	0(0)
Reduces problems of menopause	06(20.6)	4(13.7)	19(65.5)	23(79.3)	6(20.6)	0(0)
Useful for adolescents	00(0)	2(6.8)	27(93.1)	24(82.7)	5(17.2)	0(0)
Common source of dietary protein	18(62.0)	7(24.1)	4(13.8)	29(100)	0(100)	0(0)
Useful during pregnancy and lactation	14(48.2)	9(31.0)	6(20.7)	27(93.1)	2(6.8)	0(0)
Helpful for growing children	07(24.1)	5(17.2)	17(58.6)	23(79.3)	6(20.6)	0(0)

Figure in parenthesis indicate percentage.

Table 3: Entrepreneurship development in production and promotion of soya based food products.

Area of Entrepreneurship	Extent of perfection		
	Greater Extent	Moderate Extent	Little Extent
Processing of soyabean	29 (100)	0 (0)	0 (0)
Dairy products	27 (93.1)	2 (6.9)	0 (0)
Soya protein rich sweets	26 (89.6)	2 (6.9)	1 (3.5)
Bakery products of soyabean	26 (89.6)	2 (6.9)	1 (3.5)
Soya sattu	29 (100)	0 (0)	0 (0)

Figure in parenthesis indicate percentage.

CONCLUSION

It can be inferred from the above study that very few women were knowing about protein rich soyabean, its products, nutrients, economic and health benefits, therefore to develop more awareness and popularity of soyabean among Indians, number of camps, exhibitions, trainings, field days & doctors visits might be arranged to make people healthy and happy at an affordable price.

Number of trainings of repeated topics related to soya products promotion and entrepreneurship development can be organized to enhance utilization of soyabean at domestic level and creation of entrepreneur of soyabased foods.

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