International Journal of Home Science 2017; 3(3): 222-225

International Journal of Home Science

ISSN: 2395-7476
IJHS 2017; 3(3): 222-225

www.homesciencejournal.com
Received: 07-07-2017
Accepted: 08-08-2017

Rashmee Yadav
Chandra Shekhar Azad University of Agriculture and Technology, Kanpur, Uttar Pradesh, India

Amisha Kumari
Chandra Shekhar Azad University of Agriculture and Technology, Kanpur, Uttar Pradesh, India

Neelma Kunwar
Chandra Shekhar Azad University of Agriculture and Technology, Kanpur, Uttar Pradesh, India

Correspondence
Rashmee Yadav
Chandra Shekhar Azad University of Agriculture and Technology, Kanpur, Uttar Pradesh, India

Knowledge of farm women about nutritive value of potato, health benefits and myths

Rashmee Yadav, Amisha Kumari and Neelma Kunwar

Abstract
Agricultural technologies that can produce nutritious and marketable food in agro-ecologies and socio-economic contexts are urgently needed. Potato offers strategic opportunities to improve nutrition and rural incomes in several countries and regions affected by micronutrient deficiency. It is already an important component of the cropping systems in India because of its robustness to produce under difficult conditions. It will become more important in the face of a changing climate. In many settings, it is also considered a "women's crop" reflecting the relatively strong control women have in decision making in production and marketing. While this often provides particular opportunities to use potato as an entry point to strengthen nutrition and economic outcomes for women and their children, cultural and gender-defined roles need to be addressed to improve outcomes at household and community levels. Potato is among the fastest expanding crops in India, measured by area under cultivation. Reasons for this development include the resilience of the crop that continues to yield reliably high harvests under variable climatic conditions, provides better food and income opportunities with decreasing landholding sizes than most other staples in rural areas and the fast increasing demand from urban centres. The private sector's continued investment in seed potato production is increasing due to high demand for seed and opportunities along the seed value chain. But this involvement is still minimal and seed systems, if they are to be sustainable, need the private sector to become more involved.

Keywords: Nutritive value, constraints, marketing

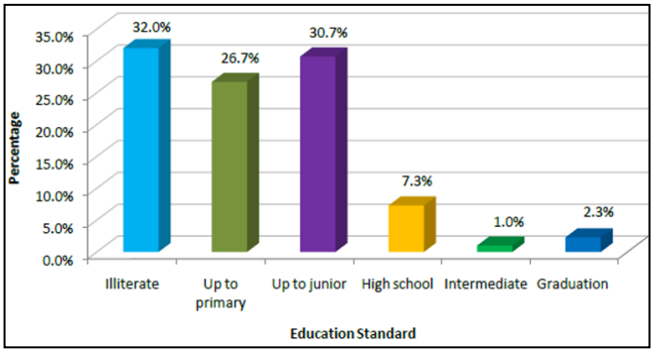
Introduction
In many developing countries and especially in urban areas, rising levels of income are driving a nutrition transition towards more energy dense foods and prepared food products. As part of that transition, demand for potato is increasing. In South Africa, potato consumption has been growing in urban areas, while in rural areas maize is still the staple. In China, higher income and increased urbanization have led to increased demand for processed potatoes. Thus, the potato already plays a role in diet diversification in many countries. However, where other staple crops are available to meet energy requirements, potato should not replace them but rather supplement the diet with its vitamins and mineral content and high quality protein. Potatoes can be important staple foods, but balanced diets need to include other vegetables and whole grain foods.

Research Methodology
The study was conducted in Kannauj district. Two blocks Kannauj and Chhibramau were selected in this study. Ten villages were selected out of both selected blocks Total 300 farm women were selected. Dependent and independent variables such as age, education, caste, land holding and milch animals were selected. The statistical tools such as mean, rank, Fisher 't' test, Cr were used.

Results

Table 1: Distribution of farm women according to education

Sl. No.	Education	Frequency	Percent
1.	Illiterate	96	32.0
2.	Up to Primary	80	26.7
3.	Up to Middle	92	30.7
4.	High School	22	7.3
5.	Intermediate	3	1.0
6.	Graduation	7	2.3
	Total	300	100.0

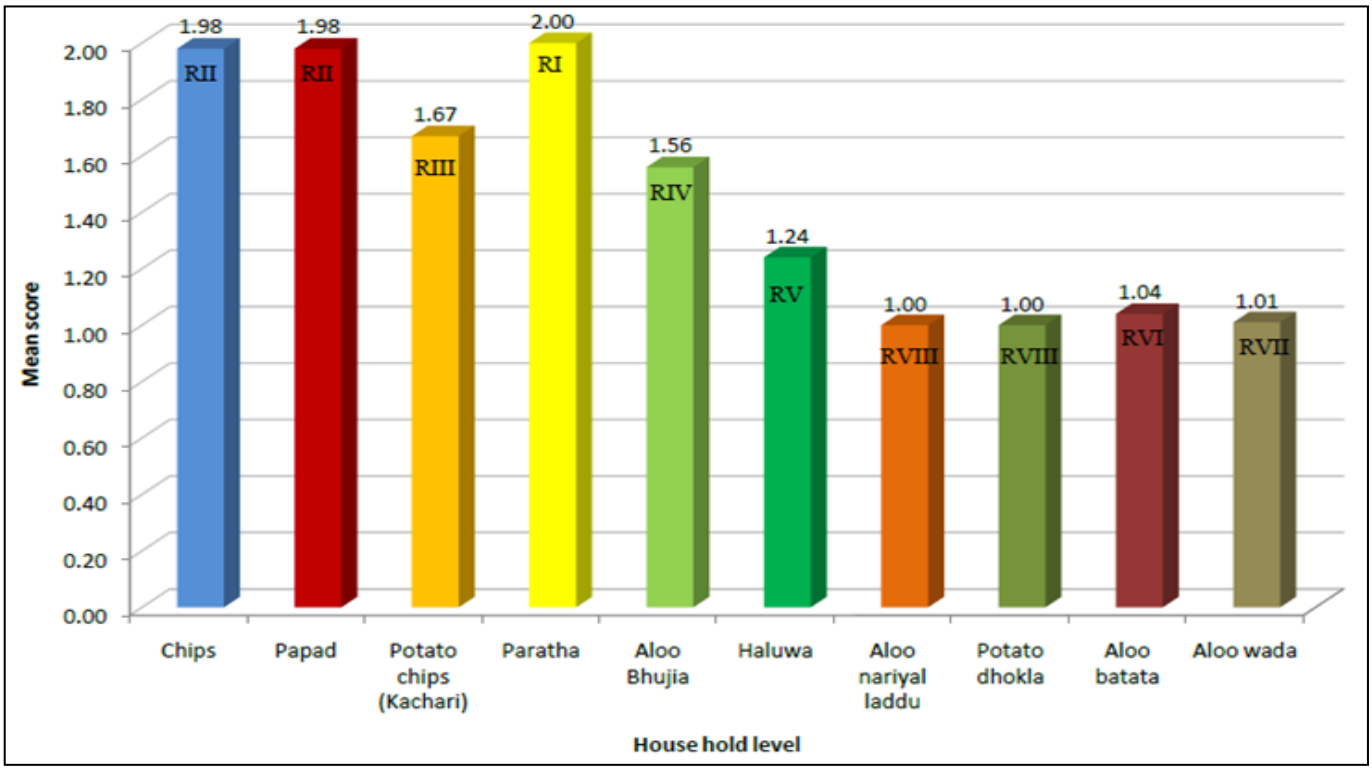


Moreover, women who were educated and skilled experienced improvements in their agricultural productivity and incomes. Women who participate in the literacy trainings adopted almost all the agricultural practices taught to them. Some confident women became lead farmers, teaching good agricultural practices to others.

Table 2: Role of women in potato processing at household level

Sl. No.	Processing item	Yes	No	Mean score	Rank
1.	Chips	295(98.3)	5(1.7)	1.98	II
2.	Papad	295(98.3)	5(1.7)	1.98	II
3.	Potato strips (Kachari)	200(66.7)	100(33.3)	1.67	III
4.	Paratha	300(100.0)	-	2.00	I
5.	Aloo Bhujia dry (sev)	169(56.3)	131(43.7)	1.56	IV
6.	Halwa	71(23.7)	229(76.3)	1.24	V
7.	Aloo Nariyal Laddu	-	300(100.0)	1.00	VIII
8.	Potato Dhokla	-	300(100.0)	1.00	VIII
9.	Aloo Batata	12(4.0)	288(96.0)	1.04	VI
10.	Aloo wadi	4(1.3)	296(98.7)	1.01	VII

(Figures in parentheses denote the percentage of respective values)



Potato is considered to be one of the traditional food items of India. It is very popular all over the country and there are many food preparations where potato is an important ingredient. With high percentage of water content, its quality is adversely affected with the passage of time. Dehydration process reduces the water contents substantially resulting in enhanced shelf life. In most Indian households, potatoes are used for many purposes round the year. Women generally make dehydrated potato products like potato cubes, sticks, slices, powder, chips, papad, dry aloo bhujia, potato Dhokla, aloo nariyal ladoo, etc. Indian women generally do this during Holi festival for the purpose of storing potato products for consumption throughout the year. These products do not get spoilt only that these need to be sun dried from time to time to reduce the moisture content. Dehydration imparts higher shelf life and also reduces size as well as weight resulting in savings in transportation costs. This also enables the consumers to use potatoes during off-season when fresh-ones are either not easily available or they are costly.

Table 3: Knowledge about nutrients of potato

Sl. No.	Nutrients	Yes	No	Mean score	Rank
1.	Energy	32 (10.7)	268 (89.3)	1.11	IV
2.	Carbohydrates	232 (77.3)	68 (22.7)	1.77	I
3.	Dietary fibre	11 (3.7)	289 (96.3)	1.04	VI
4.	Fat	222 (74.0)	78 (26.0)	1.74	II
5.	Protein	-	300 (100.0)	-	-
6.	Vitamins and minerals	-	300 (100.0)	-	-
	(a) Thiamine (B_1)	-	300 (100.0)	-	-
	(b) Riboflavin (B_2)	-	300 (100.0)	-	-
	(c) Niacin (B_3)	-	300 (100.0)	-	-
	(d) Vitamin (B_6)	-	300 (100.0)	-	-
	(e) Folate (B_9)	-	300 (100.0)	-	-
	(f) Vitamin C	-	300 (100.0)	-	-
	(g) Vitamin E	-	300 (100.0)	-	-
	(h) Vitamin K	-	300 (100.0)	-	-
	(i) Calcium	5 (1.7)	295 (98.3)	1.02	-
	(j) Iron	20 (6.7)	280 (93.3)	1.07	V
	(k) Magnesium	-	300 (100.0)	-	-
	(l) Manganese	-	300 (100.0)	-	-
	(m) Phosphorus	-	300 (100.0)	-	-
	(n) Potassium	6 (2.0)	294 (98.0)	1.02	VIII
	(o) Sodium	8 (2.7)	292 (97.3)	1.03	VII
	(p) Zinc	-	300 (100.0)	-	-
	(q) Water	50 (16.7)	250 (83.3)	1.17	III

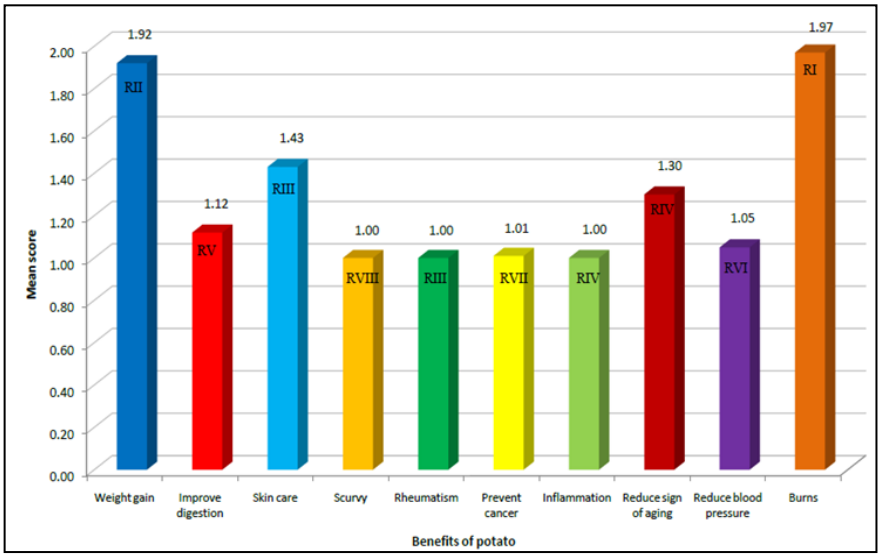
(Figures in parentheses denote the percentage of respective values)

Potatoes are a very popular food source. Unfortunately, most people eat potatoes in the form of greasy French fries or potato chips, and even baked potatoes are typically loaded down with fats such as butter, sour cream, melted cheese and bacon bits. Such cooking method can make even baked potatoes a potential contributor to a heart attack. But take away the extra fat and deep frying, and a baked potato is an exceptionally healthful low calorie, high fibre food that offers significant protection against cardiovascular disease and cancer. Our food ranking system qualified potatoes as a very good source of Vitamin B6 and a good source of potassium, copper, Vitamin C, manganese, phosphorus, niacin, dietary fibre and pantothenic acid. Potatoes also contain a variety of phytonutrients that have antioxidant activity. Among these important health-promoting compounds are carotenoids, flavonoids, and caffeic acid, as well as unique tuber storage proteins, such as patatin, which exhibit activity against free radicals. Potato is one of the rich natural sources of Vitamin C or ascorbic acid as it contains 30 mg or more of ascorbic acid per 100 g tuber. Potatoes have high quantities of Vitamin C than other vegetables like carrots, onion and pumpkin. When consumed in sufficient quantity, potato itself can meet all the Vitamin C requirements of an individual.

Table 4: Health benefits of potato

Sl. No.	Benefits	Yes	No	Mean score	Rank
1.	Weight gain	276 (92.0)	24 (8.0)	1.92	II
2.	Improve digestion	35 (11.7)	265 (88.3)	1.12	V
3.	Skin care	129 (43.0)	171 (57.0)	1.43	III
4.	Scurvy	-	300 (100.0)	1.00	VIII
5.	Rheumatism	-	300 (100.0)	1.00	VIII
6.	Prevent cancer	2 (0.7)	298 (99.3)	1.01	VII
7.	Inflammation	-	300 (100.0)	1.00	VIII
8.	Reduce signs of aging	89 (29.7)	211 (70.3)	1.30	IV
9.	Reduce blood pressure	15 (5.0)	285 (95.0)	1.05	VI
10.	Burns	291 (97.0)	09 (3.0)	1.97	I

(Figures in parentheses denotes the percentage of respective values)

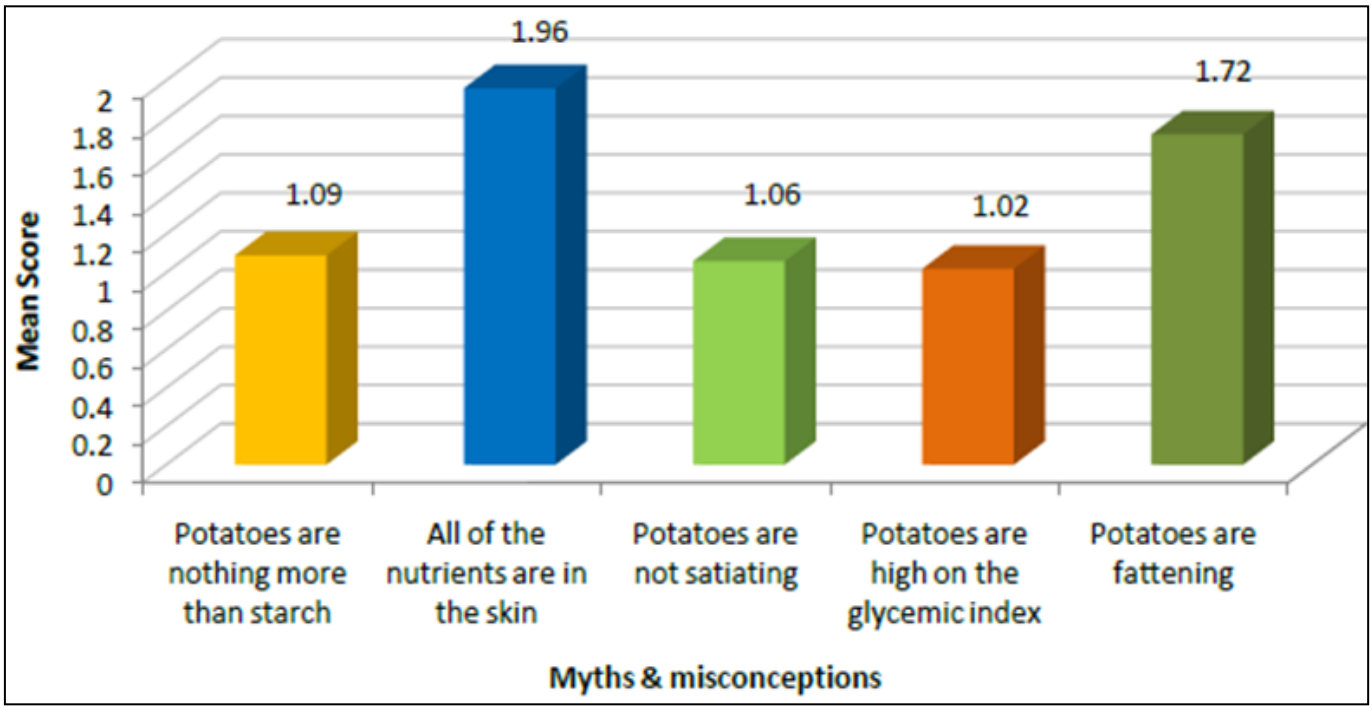


The potato's fibre, potassium, Vitamin C and Vitamin B_6 content, coupled with its lack of cholesterol, all support heart health. Potatoes contain significant amounts of fibre, which helps lower the total amount of cholesterol in the blood, thereby decreasing the risk of heart disease. In this study, those who consumed 4069 mg of potassium per day had a 49 percent lower risk of death from ischemic heart disease compared to those who consumed less potassium (about 1000 mg per day). Vitamin B_6 prevents the buildup of a compound known as homocysteine. When excessive amounts of homocysteine accumulate in the body, it can damage blood vessels and lead to heart problems.

Table 5: Myths and misconceptions about potatoes

Sl. No.	Myths	Yes	No	Mean score	Rank
1.	Potatoes are nothing more than starch	29 (9.7)	271 (90.3)	1.09	III
2.	All of the nutrients are in the skin	289 (96.3)	11 (3.7)	1.96	I
3.	Potatoes are not satiating	19 (6.3)	281 (93.7)	1.06	IV
4.	Potatoes are high on the glycemic index (GI)	5 (1.7)	295 (98.3)	1.02	V
5.	Potatoes are fattening	215 (71.7)	85 (28.3)	1.72	II

(Figures in parentheses denote the percentage of respective values)



Fact is, some clinical studies show there is no association between potato consumption and obesity. These are not some fat-laden, processed food. They are a nutrient rich vegetable that has carbohydrates, but that does not mean they'll up the number on our bathroom scale. Potatoes can actually be a fantastic addition to any weight management program as they are highly satisfying and jam-packed with nutrients and filling fibre.

Conclusion

Potatoes are a very popular food and consumed frequently in several forms all over the world like fried, boiled, baked or as an ingredient in many dishes. They are generally regarded as a typical weight-gain food; but on the contrary, when they are prepared healthily, they are a highly nutritious vegetable with abundant health benefits. Even though potato enjoys its popularity, the flip side is that often it is scoffed at by health conscious people. The biggest myth that surrounds potato is that consuming it leads to weight gain. However, contrary to it the culprit is the preparation method rather than the potato itself. When cooked in the right manner along with right ingredients, it is possible to enjoy its nutritive value.

Recommendations

1. Development of hybrid varieties.
2. Value addition and processing

References

1. Decker EA, Ferruzzi MG. Innovations in Food Chemistry and Processing to Enhance the Nutrient Profile of the White Potato in All Forms. Advances in Nutrition. 2013; 4:345S-350S.
2. Gibson S, Kurilich AC. The nutritional value of potatoes and potato products in the UK diet. 2013; 38(4):389-39.
3. Patel BM, Patel JK, Badhe DK, Gulkari KD. Knowledge of the potato grower's pertaining to recommended potato production technology. International Journal of Forestry and Crop Improvement. 2012; 3(1):27-29.