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NUTRITIONAL VALUE OF SOME DIETARY HERBS COMMONLY USED IN AYURVEDA FOR THEIR MEDICINAL VALUE

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ABSTRACT

Many herbs known for their therapeutics importance also used as dietary food material due to their nutrient properties these herbs contributed as ayurvedic remedies for many diseases and also served as nutrient food for body; as per Ayurveda, therapeutic actions are maximally effective only appropriate dietary measures are taken to support the restoration of physiological balance. Furthermore, some ayurvedic herbs themselves constitute an integral part of dietary food since they are rich in their nutrient contents i.e; *Curcuma longa* L., *Psidium guajava* Linn., Ginger, *Moringaoleifera* Lam. *Zanthoxylmannaturu*, *Sesarnum indicun1* L., Rice, Honey etc. This article reviews the dietary applications and nutrient contents of some herbs used in ayurveda as drugs, which enable researchers to correlate medicinal and nutrient balances of herbs and boost the concept of dietary uses of medicinal herbs.

KEY WORDS

Dietary food, nutrient herbs, Turmeric, Guava, Ginger and *Moringaoleifera* Lam.

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INTRODUCTION

Indian traditional medicine has incorporated various explanations regarding herbs as vital pillar of life. The transforming unit from herbs into nutrition is termed as 'Agni' or digestive fire. *Agni* transforms food so that nutrients can be optimally utilized. Having right material of proper nutritional value is the initial step towards achieving healthy life. But just having right nutrient from food is not enough; these all can be served by herbs also which generally used for their therapeutics importance. There are

many herbs which solve this purpose immensely. some ayurvedic herbs of drugs known for their medicinal value but also rich in nutritional value and used or can be used as regular dietary material. The science of Ayurveda teaches that right diet which balances the Doshas is the foundation of healing[1].

This article here describing nutrient importance or value of some dietary herbs also used in ayurveda for treating many diseases, the nutritional contribution of these medicinal herbs strongly support their use in ayurveda as well as in food.

Turmeric *(Curcuma longa* L.)

Turmeric (Figure No.1) is a perennial herb that measures up to one meter high with a short stem and tufted leaves. Parts used are the rhizomes, which are ovate, oblong or cylindrical and often short branched. They are yellow to yellowish-brown in color. The powdered rhizome is considered to be stimulating, carminative, purifying, anti-inflammatory and anthelmintic.

Nutrient Value

It is very rich source of many essential vitamins such as pyridoxine (vitamin B6), choline, niacin, and riboflavin, etc (Table No.1). Fresh root contains very good levels of vitamin-C. Turmeric also contains very good amounts of minerals like calcium, iron, potassium, manganese, copper, zinc, and magnesium[2, 3].

Guava (*Psidium guajava* Linn.)

Guava (Figure No.2) is a small tropical tree that grows up to 35 feet tall; it is widely grown for its fruit in tropics. It is a member of the Myrtaceae family. The leaves and bark of *P. guajava* tree have a long history of medicinal uses that are still employed today.

Nutritional value

Guavas contain both carotenoids and polyphenols – the major classes of antioxidant pigments giving them relatively high potential antioxidant value among plant foods. Guavas rich in nutrient value as mentioned in Table No.2. Guavas contain dietary fiber, vitamins A and C, folic acid and the dietary minerals, potassium, copper and manganese, etc[4].

Ginger (*Zingiber officinale* Roscoe, *Zingiberacae*)

Ginger (Figure No.3) is a medicinal plant is widely used around the world in foods as a spice. It has been an important ingredient in ayurvedic herbal medicines for the treatment of catarrh, rheumatism, This review article provides a brief summation of nervous diseases, gingivitis, toothache, asthma, stroke, constipation and diabetes.

Nutritional value of Ginger

The volatile oil which yields from 1% to 3%. Also contains monoterpenoids. Ginger contains material of high nutrient value as described in Table No.3. It is also a good source of Vitamin C, Magnesium, Potassium, Copper and Manganese[5,6].

***Moringa oleifera* Lam.**

Moringa oleifera Lam. (Figure No.4) is a small size tree with approximately 5 to 10 m height. It is also reported as anti-inflammatory, antimicrobial, antioxidant, anticancer, cardiovascular, hepatoprotective, anti-ulcer, diuretic, antiurolithiatic and antihelmintic. Its multiple pharmaceutical effects are capitalized as therapeutic remedy for various diseases in traditional medicinal system.

Nutritional value of *Moringa oleifera* Lam.

Moringa a good source of protein, vitamins, oils, fatty acids, micro-macro minerals elements. Its leaves have the calcium, vitamin C, potassium and vitamin A, *Moringa* also contains high amount of Mg, Mn, Zn, Na, Cu and Fe (Table No.4). Although, minerals content of Moringa shows variation in composition with changes in location[7].

Table No.1: Nutritional value of Turmeric

S.No	Energy	354 Kcal	Folates	39 µg
1	Carbohydrates	64.9 g	Niacin	5.140 mg
2	Protein	7.83 g	Pyridoxine	1.80 mg
3	Riboflavin	0.233 mg	Vitamin A	0 IU
4	Dietary Fiber	21 g	Vitamin C	25.9 mg
5	Iron	41.42 mg	Vitamin E	3.10 mg
6	Magnesium	193 mg	Vitamin K	13.4 µg
7	Calcium	183 mg	Phosphorus	268 mg
8	Copper	603 µg	Zinc	4.35 mg

Table No.2: Nutritional value of Guava

S.No	Calories	77-86g
1	Crude fiber	0.9-1.0g
2	Protein	0.1-0.5
3	Carbohydrate	9.1-17mg
4	Calcium	17.8-30mg
5	Iron	200-400 I.U.
6	Carotene	(Vitamin A) 0.046mg
7	Thiamin	0.03-0.04mg
8	Riboflavin	0.6-1.068mg
9	Niacin	40 .U.

Table No.3: Nutritional value of Ginger

S.No	Nutritional value of Ginger			
1	Energy	333 kJ (80 kcal)	Vitamin E	0.26 mg (2%)
2	Carbohydrates	17.77 g	Calcium	16 mg (2%)
3	Sugars	1.7 g	Iron	0.6 mg (5%)
4	Dietary fiber	2 g	Magnesium	43 mg (12%)
5	Fat	0.75 g	Manganese	0.229 mg (11%)
6	Protein	1.82 g	Phosphorus	34 mg (5%)
7	Thiamine (vit. B_1)	0.025 mg (2%)	Potassium	415 mg (9%)
8	Riboflavin (vit. B_2)	0.034 mg (3%)	Sodium	13 mg (1%)
9	Niacin (vit. B_3)	0.75 mg (5%)	Zinc	0.34 mg (4%)
10	Pantothenic acid (B_5)	0.203 mg (4%)	Folate (vit. B_9)	11 µg (3%)
11	Vitamin B_6	0.16 mg (12%)	Vitamin C	5 mg (6%)

Table No.4: Nutritional value of *Moringa*

S.No	Nutritional value of *Moringa*			
1	Energy	37 Kcal (2%)	Riboflavin	0.074 mg (6%)
2	Carbohydrates	8.53 g (6.5%)	Thiamin	0.053 mg (4.5%)
3	Protein	2.10 g (4%)	Vitamin A	74 IU (2.5%)
4	Total Fat	0.20 g (1%)	Vitamin C	141mg (235%)
5	Cholesterol	0 mg (0%)	Sodium	42 mg (3%)
6	Dietary Fiber	3.2 g (8%)	Potassium	461 mg (10%)
7	Folates	44 µg (11%)	Iron	0.36 mg (4.5%)
8	Niacin	0.680 mg (4%)	Magnesium	45 mg (11%)
9	Pyridoxine	0.120 mg (9%)	Zinc	0.45 mg (4%)

Figure No.1: Turmeric Plant

Figure No.2: Guava Plant

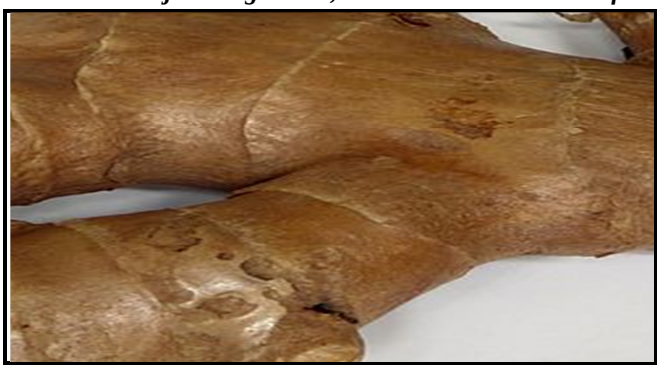

Figure No.3: Ginger rhizome

Figure No.4: *Moringaoleifera* Plant

CONCLUSION

This review work is useful for future development research work.

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