Research Paper

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Health Benefits of Spices (Review)

CHEMISTRY

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ABSTRACT

The spices and condiments are natural plant or vegetable products, used for imparting flavor, aroma and piquancy to foods and also for seasoning of foods, beverages like soups. Usually spices are used during preparation of dish and condiments are used at the serving table to enhance the taste. Spices have ability to change and enhance the character of food. Spices and condiments have a special significance in various ways in human life because of its specific flavours, taste, and aroma. Spices and condiments were some of the most valuable items of trade in the ancient and medieval world. India is one of the major spice producing and exporting countries. Also used in traditional medicines, these have been a part of healing remedies for centuries. Modern medicines too have begun to study the power of these herbs and spices and validated several usefulness in heart health include coriander seeds,turmeric,black peeper,cinnamon,fenugreek seeds, black cumin seeds ,ginger and garlic.Spices are also used to create health promoting products. The active components in the spices phthalides, polyacetylenes, phenolic acids, flavanoids, coumarines, triterpenoids, serols and monoterpenes are powerful tools for promoting physical and emotional wellness.

Food is needed for human survival (Tull,1995).It provides energy and nutrients for proper nourishment of the body, maintains the body, repairs worn-out tissues and promotes growth of the body (Fife, 2005). The absence of food or inadequacy of certain nutrients, results in nutrient- related diseases (Ahmed et al., 2007).

Preference for a given food is mainly inspired by cultural values, sensory qualities such as taste, texture, palatability, mouth feel and even physical appearance to individuals. Food service professionals therefore use spices and condiments to enhance the flavour of natural foods(NIIR 2006). Numerous new dishes have been made possible because of these aromatic and pungent spices (Farrell, 1998). Also used in traditional medicines, these have been a part of healing remedies for centuries. Modern medicines too have begun to study the power of these herbs and spices and validated several usefulness in heart health include coriander seeds,turmeric,black peeper,cinnamon,fenugreek seeds, black cumin seeds ,ginger and garlic.Spices are used to create health promoting products. The active components in the spices phthalides, polyacetylenes, phenolic acids, flavanoids, coumarines, triterpenoids, serols and monoterpenes are powerful tools for promoting physical and emotional wellness. Currently, there is an increased use of spices in many countries because of their health benefits.

Turmeric (haldi); it is used for coloring and flavoring food, for cosmetic purposes and has properties dates back to the ancient Vedic culture of India. Used in almost all Indian curries, this spice has (1 tablespoon = 24 calories) and zero cholesterol. It is rich in dietary fiber, iron, potassium, magnesium and vitamin B6. It has curcumin an active ingredient which has antioxidantive,ant-clotting,anti-inflammatory and anti-polyferative properties. Curcumin helps to prevent cardiovascular complications among diabetics and also decreases blood cholesterol

Coriander seeds (Dhania); it is rich in two compounds linaloon and decanoic acid. Coriander seeds are at their best when used fresh. Often, it is dry roasted and ground before being added to a dish.Coriander seeds have many medicinal uses they can be used for clearing colds and coughs,clear flatulence. Coriander seeds boiled in water to make coriander tea and mixed with honey, eases constipation, clear toxins from the body, and prevent indigestion. Its antioxidant properties make it excellent for preventing free radical damage. For the same reason, coriander seeds are beneficial to skin as helps detoxify the skin and can also be used to treat fungal infections. Also it lowers LDL cholesterol(bad cholesterol),increases HDL(good cholesterol) and protect against colon cancer. Coriander seeds are rich in essential minerals such as copper, magnesium, iron, potassium, manganese, and zinc. Coriander is an effective antiseptic as it contains citronelol, which helps in healing mouth ulcers. It can also be used as a remedy against bad breath. Its antibacterial property helps it fight chicken pox.

Black pepper; the chemical piperine is present in black pepper it causes the spiciness.The health benefits of black pepper include relief from respiratory disorders, coughs, the common cold,indigestion, anemia, impotency, muscular strains, dental disease, constipation and heart disease.

Cinnamone;it fight against bacterial and fungal infections, reduces serum glucose, triglyceride, LDL cholestrol, and total cholesterol,reduces blood sugar levels,prevents Alzheimer's disease, Lower the negative effects of high fat meals.

Ginger; The root or underground stem (rhizome) of the ginger plant can be consumed fresh, powdered, dried as a spice, in oil form or as juice. The bioactive compound in ginger includes gingerol and several other phenolic compounds.it is believed to relax blood vessels, stimulate blood flow and relieves pain. Many studies have suggested that ginger decreases the risk of heart diseases, obesity, diabetes, promotes a healthy complexion and hair, increased energy and overall lowers weight.it also helpful in ailments like sore throat, cramps, indigestion, vomiting and high blood pressure.

Garlic ; Ancient Greek physician Hippocrates, known today as "the father of Western medicine", and the first Indian physician Charak known as "Father of ayurvedic medicines"prescribed garlic for a wide range of conditions and illnesses. It contain a sulphur compound Allicin,this compound is known for cholesterol lowering,anti clotting and blood pressure lowering properties.

Garlic is also used for several conditions linked to the blood system and heart, coronary heart disease, hypertension and for prevention of various types of cancers. In addition, garlic has been shown to possess antithrombotic (Srivastava and Tyagi 1993), antiplatelet aggregation and antioxidative properties (Kiesewetter et al. 1993, Sendl et al. 1992, Yamasaki et al. 1994)

The beneficial activities of garlic are lost when it is heated to higher temperatures because at high temperature the enzyme allinase responsible for converting alliin (S-allyl cysteine sulphoxide) to allicin is inactivated by heat.

CONCLUSION; Spices are not only used to enhance taste, improve nutritional content, improve colour, texture or shelf life of foods and beverages but also have diverse health benefits.Some also perform antioxidant, antimicrobial, nutritional and medicinal functions and are traditionally credited with a wide range of

pharmacological and preservative properties. These are certainly valuable additions for healthy diet, if taken prudently.

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