

Triphala: A Versatile Counteractive Assortment of Ailments

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ABSTRACT

The three fruits of Triphala (*Harada*, *Aaonla* and *Bihara*) each correspond to the "three humours" or "tridosha" of Indian Ayurvedic medicine. According to Ayurvedic theory, the body is composed of three doshas or humours. Vata is sometimes translated as "wind" which corresponds to the mind and nervous system. Its nature is dry, cold, light and activating. The second is pitta which is also translated as "fire" or "bile." It is responsible for all metabolic transformations including the digestion and assimilation of food as well as assimilation and clarity of thought and understanding. The nature of pitta is primarily hot, moist and light. Kapha is sometimes translated as the "water" or "mucus" humour and is responsible for all anabolic or building functions such as the development of muscle and bone tissue. Its nature is cool, moist and heavy. *Harada*, having a bitter flavor, is associated with the vata humour and with elements of well air and space. It treats imbalances and diseases of the vata humour. *Harada* possesses laxative, astringent, lubricant, antiparasitical, alterative, antispasmodic and nervine properties. It is therefore used to treat acute and chronic constipation, nervousness, anxiety and feelings of physical heaviness. Among Tibetans, *Harada* is so highly revered for its purifying attributes that it is the small fruit that is depicted in the hands of the "medicine Buddha" in their sacred paintings or *tankas*. Of the three fruits, *Harada* is the most laxative and contains anthroquinones similar to those found in rhubarb and cascara. *Aaonla* has a sour flavor and corresponds to the pitta humour and the fire element in Ayurvedic medicine. It is a cooling tonic, astringent, mildly laxative, alterative, antipyretic. It is used to treat fire imbalances that include ulcers, inflammation of the stomach and intestines, constipation, diarrhea, liver congestion, eruptions, infections and burning feelings throughout the body. In various studies, *Aaonla* has been shown to have mild anti-bacterial properties, as well as pronounced expectorant, anti-viral and cardiogenic activity. *Aaonla* is the highest natural known source of vitamin C, having 20 times the vitamin C content of an orange. The vitamin C in *Aaonla* is also uniquely heat stable. Even when subjected to prolonged high heat, as in the making of the Ayurvedic tonic formula called *Chyavanprash* (*Aaonla*, as the primary herb comprises 50% of the formula), it loses hardly any of the vitamin C that was present when it was freshly harvested off the tree. The same is true of *Aaonla* that has been dried and kept for up to a year. This age and heat stable form of vitamin C that *Aaonla* possesses is due to the presence of certain tannins that bind and inhibit its dissipation. *Bihara* is astringent, tonic, digestive and anti-spasmodic. Its primary flavor is astringent and the secondary is sweet, bitter and pungent. It targets imbalances associated with the kapha or mucus humour, corresponding to the earth and water elements in Ayurvedic medicine. Specifically *Bihara* purifies and balances excess mucus, treats asthma, bronchiole conditions, allergies and hiccoughs. In this article various meaningful applications of triphala are delineated precisely.

Keywords: Linoleic acid; Terminalia chebula; Emblica officinalis; Terminalia bellerica.

INTRODUCTION

Triphala is a botanical preparation comprised of equal parts of three herbal fruits: Harada (*Terminalia chebula*, black

myrobalan, The Buddha's Chosen Herb), Aaonla (*Emblica officinalis* or Indian gooseberry), and Bihara (*Terminalia bellerica*).

Harada (*Terminalia chebula*) According to the renowned herbalist, Dr. Michael Tierra, Tibetans so revere Harada that the fruit is depicted in the hand of the "Medicine Buddha" in sacred paintings¹. Numerous studies have found that *Terminalia chebula* (TC) supports digestion and aids in treating both acute and chronic constipation.

Aaonla (*Emblica officinalis*) is the edible fruit from a small tree native to India. As with *Terminalia chebula*, EO has been shown to increase gastric emptying and to possess a broad spectrum of antimicrobial activity against a number of test bacteria².

Bihara (*Terminalia bellerica*) is rich in protein (40 percent) and oils (35 percent), and is particularly high in the omega 3 essential fatty acid, linoleic acid.



Harada



Aaonla



Bihara

Triphala, as it is called, is the most popular Ayurvedic herbal formula of India, since it is an effective laxative that also supports the body's strength. The constitution of vegetarian Hindus cannot tolerate harsh laxatives anymore than vegetarians in other countries. Because of its high nutritional value, *Triphala* uniquely cleanses and detoxifies at the deepest organic levels without depleting the body's reserves. This makes it one of the most valuable herbal preparations in the world. How is *Triphala* different from other kinds of laxatives? There are two primary types of herbal laxatives. One is called a purgative and includes herbs such as senna, rhubarb, leptandra, buckthorne and cascara. These often contain bitter principles in the form of anthroquinones that work by stimulating the peristaltic action of the intestinal lining, either directly or by promoting the secretion of bile through the liver and gall bladder. The second type of laxative is a lubricating bulk laxative, including demulcent herbs such as psyllium and flax seed. This is more nutritional and usually does not have any significant direct effect on either the liver or the gall bladder. Instead, these work like a sponge by swelling and absorbing fluid, thus acting as an intestinal broom. The most popular herbal remedies in the health food industry are those that promote bowel movement. The reason is quite simple since a very common problem for so many individuals is constipation and bowel irregularity. Consider how tremendously valuable a formula is that not only regulates bowel movement but at the same time does the following:

- Improves digestion,
- Reduces serum cholesterol,
- Improves circulation (potentiates adrenergic function),
- Contains 31% linoleic acid,
- Exerts a marked cardio-protective effect,
- Reduces high blood pressure,
- Improves liver function,
- Has proven anti-inflammatory and anti-viral properties,
- Expectorant, hypotensive.

Triphala combines both nutritional as well as blood and liver cleansing actions. It has little function as a demulcent or lubricating laxative, however. It possesses some anthroquinones that help to stimulate bile flow and peristalsis. The nutritional aspect is in the form of its high vitamin C content, and the presence of linoleic oil and other important nutrients that make it more of a tonic. People who are in need of purgatives are those whose bowel irregularity is caused by liver and gall bladder congestion, usually accompanied, to some degree, by blood toxins. Those in need of demulcent laxatives are those with intestinal dryness caused by a variety of metabolic factors including a nutritional deficiency as well as a condition of excess hypermetabolic energy. Triphala will prove useful for all kinds of constipation except that caused by a lack of vital energy or chi. Even for the latter type, it will not further deplete such an individual and can be made to work well if it is combined with other chi, blood or yang-warming tonic herbs such as ginseng for chi tonification, *tang kuei* for blood tonification and prepared aconite for yang tonification. Herbal healing is largely a matter of strategy. One approach may emphasize tonification while another emphasizes elimination. The problem with overemphasizing tonification is that it can lead to further stagnation and congestion in an excess condition. Emphasizing elimination through the overuse of purgatives in an already deficient individual can further deplete the body's store of minerals and essential B vitamins and can also cause an imbalance of beneficial intestinal microorganisms. The result is weakness with a likely tendency towards chronic fatigue and anaemia. Since the body is always simultaneously involved with maintaining and gaining strength through good nutrition as well as eliminating waste, Triphala is unique in that it is naturally able to support both vital processes simultaneously. Because of its high nutritional content, Ayurvedic doctors generally do not regard Triphala as a mere laxative. Some of the scientific research and practical experience of people who have used it down through the ages has demonstrated

that Triphala is an effective blood purifier that stimulates bile secretion as it detoxifies the liver, helps digestion and assimilation, and significantly reduces serum cholesterol and lipid levels throughout the body. As a result, it is regarded as a kind of universal panacea and is the most commonly prescribed herbal formula.

A popular folk saying in India is: "No mother? Do not worry so long as you have Triphala." The reason is that Indian people believe that Triphala is able to care for the internal organs of the body as a mother cares for her children. Each of the three herbal fruits of Triphala takes care of the body by gently promoting internal cleansing of all conditions of stagnation and excess while at the same time it improves digestion and assimilation.

We herbalists believe that the longevity and innate power of herbs such as those of Triphala are, when ingested, energetically absorbed and imparted to our reserves. This belief exists with herbs such as wild ginseng, where specimens that have "weathered" decades of climatic stress have been found to contain the highest concentration of ginsenosides. The Ginkgo tree is another of those long lived plants whose evolution extends back over millennia to the time of the dinosaurs. *Ama* is a term denoting a substance associated in Ayurveda with chronic disease patterns and symptoms of aging. It is described as a kind of sticky build up of material that clogs the circulatory channels. In many ways it is nearly identical to the accumulation of excess cholesterol and blood lipids described in the West. Both conditions seem to contribute to a wide variety of circulatory disorders ranging from senility to rheumatic conditions, cancer and heart disease. It is interesting that in Traditional Chinese Medicine there is also a pathological condition associated with the heart called "invisible mucus" that is similar to the descriptions of both excess cholesterol in the West, and *ama* in Ayurveda.

One of the body's reactions to coping with stress is to increase the production of corticosteroids. The accumulation of these stress hormones can also contribute to the

formation of cholesterol. Internal stress and the resultant buildup of cholesterol can be caused by the abuse of stimulants, spicy, hot foods such as garlic and cayenne, excessive aerobic exercise and repression of the emotions. It is interesting that some of the very substances and activities that can lower cholesterol in some, when not utilized in a holistic, balanced manner, can act as a stimulant and add further stress that would precipitate the further accumulation of cholesterol. Triphala is one of two Ayurvedic formulations that are specific for eliminating *Ama* and cholesterol from the body. Triphala is a completely balanced energetic formula, being neither too cold, nor too hot. When taken regularly over a long period, it gently effects the elimination and purification of *Ama* from the tissues of the entire body. The three fruits have been scientifically studied and confirm some of its known traditional benefits. These include the lowering of cholesterol, reducing high blood pressure, benefiting circulation, improving digestion and regulating elimination without causing any laxative dependency.

One Indian study demonstrated the enormous value and effectiveness of *Aaonla*, in reducing serum, aortic and hepatic cholesterol in rabbits. In another study, extracts of *Aaonla* fruit were found to decrease serum free fatty acids and increase cardiac glycogen. This helps to prevent heart attacks by providing significantly greater protection and nourishment to the heart muscle. Studies of the fruit of *Bihara* found that it contains up to 35% oil and 40% protein. The oil is used in soap making and by the poorer classes, as a substitute cooking oil for ghee. The sweet smelling oil is 35% palmitic, 24% oleic and 31% linoleic. Linoleic oil is an essential fatty acid important for increasing HDL cholesterol, associated with a healthy state and reducing LDL cholesterol, considered to indicate a higher-than-average risk for developing coronary-heart disease. One of numerous studies of *Harada* demonstrated its anti-vata or anti-spasmodic properties by the reduction of abnormal blood pressure as well as intestinal spasms. This confirms its

traditional usefulness for heart conditions, spastic colon and other intestinal disorders. With all the virtues of the three individual herbs, Triphala has many wide and varied uses as a therapeutic herbal food. Before considering pathological indications for which Triphala would be appropriate, we should never ignore the value of taking it on some regular basis whether once daily or once or twice a week simply for health maintenance. Triphala, having great nutritional properties, will help to prevent sickness.

It's an instance meeting a yogic master who was in his late eighties and staying in Santa Cruz for a few months. Being clear of mind and body, he could out walk anyone, both in terms of speed and distance. Besides his practice of meditation, he considered the fact that his remarkable fitness and health was primarily due to the fact that his diet consisted primarily of Kichari (mung beans, rice, ghee and spices, i.e., cumin, coriander, turmeric and salt) and a daily dose of Triphala as the primary herbal tonic. There are numerous reports of individuals with chronic constipative tendencies who were able to regulate their bowels with the use of Triphala. One patient with a history of bowel irregularity was suffering from pyorrhea. After taking Triphala twice a day for three months, she was completely cured. Another patient who was at least 40 pounds overweight began taking Triphala and lost 20 pounds in a month with hardly any modifications in her diet. The reason is that because such severe obesity is usually accompanied by congestion of the internal organs of elimination, including the liver and bowels. As a result, digestion is compromised with the poorly assimilated food contributing to the organ congestion. For such conditions, Triphala can be highly effective in removing stagnation of both the liver and intestines. Regardless of any other herbs being used, Triphala can be prescribed singly or adjunctively whenever there are symptoms of inflammation, heat, infection, obesity and other conditions of excess. Because of its combined tonic and eliminative properties, it is generally quite safe to give even for deficiency diseases including anemia, fatigue, candida, poor

digestion and assimilation. Unlike other eliminative and cleansing herbs, Triphala may be safely taken for symptoms of wasting heat that frequently accompanies diseases such as tuberculosis, pneumonia and AIDS. There are two ways to take Triphala, as a powder or tablet. Traditionally Triphala is taken as a *churna* or powder. One would stir in two or three grams of the powder with warm water and consume the entire amount each evening or divided into three doses throughout the day. Since for most it does not possess a flavor that one would look forward to experiencing, it is convenient that Triphala is available in tablet or capsule form. Generally the dose is from two tablets 1-3 times daily or four to six tablets one time daily. Children may only require one or two tablets in the evening.

The larger dose is more laxative while the smaller dose tends to be more gradually blood purifying. A smaller dose might be one or two tablets three times daily. One should increase or decrease the dose according to one's bowel movements. Since there are no problems in using Triphala, the dose can be adjusted upwards from the suggested amount. Triphala is also widely taken for all eye diseases including the treatment of conjunctivitis, progressive myopia, the early stages of glaucoma and cataracts. For these conditions, it is taken daily both internally as described above, as well as externally as an eye wash. Steep one tablespoonful of the powder or six tablets in an 8 ounce glass of water overnight. In the morning, strain the infusion through a clean cloth. The resultant tea is used to sprinkle over the eyes or used in an eyewash with an eyecup that can be readily purchased at most drug stores. One can drink the remainder in one or two doses, morning and evening. Taken in this way for at least three months, Triphala becomes an herbal eye tonic. As stated, there can be different reactions to the same dose of triphala. For some it causes too loose bowels while in others it may have little or no effect. As a result, it may take two or three days to regulate the dose that is best. After the constipative tendencies are removed, usually within 15

days of daily application, it will no longer cause loose bowels.

Presently Triphala is distributed and available in the US from a few different sources. The powder can be purchased in most Indian food import stores in larger cities. Tablets are currently manufactured and distributed by Planetary Herb Formulas as well as a few other companies. I have used Triphala as a regular part of my clinical practice for at least ten years. I know that other Ayurvedic doctors both here and in India also regularly prescribe Triphala for most of their patients to be taken at least once each evening. For centuries, Triphala has been known and used as a standard household health supplement much as vitamins are in the West. In many households, Triphala is taken on a weekly basis by all family members to prevent disease and maintain health. In India, Triphala is considered the greatest and most versatile of all herbal formulations. With the presence of such a vitamin C rich herbal food as *Aaonla*, it possesses unique nutritive tonic and eliminative properties. Both the public and therapists of all disciplines should be able to benefit from its unique therapeutic virtues. Planetary Products was the first to introduce Triphala to the US herb market. It is no wonder that it is one of the best selling formulas in the entire line. Triphala is traditionally taken and works best when taken as a powder. The average dose is from one to two teaspoons of the powder in a little water once in the evening or three times daily for blood and general body purification. It can also be taken regularly once a week with great benefit since it promotes balanced cleansing and detoxification. The tablets are for convenience since many find the powder too have too unpleasant a flavor for the more spoiled tastes of Westerners. Triphala has been found to be very effective for helping to control weight gain, chronic constipation and as an adjunctive treatment for many chronic degenerative conditions. Ayurveda is a 5,000 year-old healing tradition rooted in ancient Indian culture. This vast body of healing knowledge – sometimes referred to as the "Mother of All Healing" – has recently

come to the attention of Western medical researchers seeking novel therapeutic compounds. While screening a number of traditional Vedic formulas scientists discovered that one of the most revered of all Ayurvedic compounds – Triphala – exhibits a number of health benefits, including:

- Exhibits antioxidant activity
- Lowers cholesterol
- Normalizes blood pressure
- Inhibits HIV
- Reduces tumors in animals, and
- Protects and improves liver function

THERAPEUTIC APPLICATIONS

Gastrointestinal Motility

Healthy digestion requires the coordination of a complex pattern of contracting and relaxing muscles in the stomach and intestines (gastric motility) for proper digestion and absorption of nutrients. Gastrointestinal motility is disrupted when the nerves and muscles of the GI tract fail to function in a strong or coordinated fashion. Motility can be disrupted by stress, inflammation (i.e. Crohn's disease), disease (i.e. muscular dystrophy, systemic sclerosis and amyloidosis) and from use of over-the-counter and prescription medications. Symptoms of motility disorder range from mild cases of heartburn and constipation to more severe problems, such as chronic vomiting, nausea, cramping, bloating, abdominal distention and diarrhea after eating. The most prevalent form of motility disturbance is Irritable Bowel Syndrome (IBS), which fully accounts for 50 percent of all patients who go to a GI specialist³.

Safe Alternative to Prokinetic Drugs

To increase GI muscle contractions and improve gastric emptying, Western doctors often prescribe prokinetic drugs such as Metoclopramide or Bethanechol. When researchers compared the Triphala herb Harada (*Terminalia chebula*) to prokinetic drugs they found that *Terminalia chebula* increased gastric emptying by 86 percent, compared to 76 percent for metoclopramide. Since *Terminalia* is free of side effects, the herb may be a useful

alternative to the prokinetic drugs currently available⁴.

Antibacterial Effects

Recently published studies report that *Terminalia* exhibits antibacterial activity against a number of bacterial species⁵. One group of researchers found that *Terminalia* is effective in inhibiting the urease activity of *Helicobacter pylori* (*H. pylori*), a ubiquitous bacterium implicated in the development of gastritis, ulcers and stomach cancers⁶. Another research team has shown that extracts of *Terminalia chebula* strongly inhibit the growth and adherence of *Streptococcus* (*S. mutans*), a virulent cavity-inducing organism. Oral rinsing with an extract of *Terminalia chebula* was found to significantly reduce both total bacterial counts and streptococcal counts in saliva samples. The protective effect lasted for up to 3 hours after rinsing, demonstrating a potential role for TC in the prevention of dental caries⁷.

Antiviral Effects

Terminalia has been found to possess antiviral activity. Researchers have reported that *Terminalia* protects epithelial cells against influenza A virus, supporting the traditional use of *Terminalia* for aiding in recovery from acute respiratory infections⁸. *Terminalia* has also demonstrated therapeutic activity against herpes simplex virus (HSV) in in vivo tests⁹. These findings prompted a team of Japanese researchers to investigate *Terminalia*'s effects on human cytomegalovirus (CMV). They found that *Terminalia* was effective in inhibiting the replication of human cytomegalovirus (CMV) in vitro and in immunosuppressed mice. Stating that "*Terminalia chebula* significantly suppressed MCMV (murine CMV) yields in lungs of treated mice," the researchers concluded that *Terminalia* may be beneficial for the prevention of CMV diseases in immunocompromised patients¹⁰.

Adaptogenic Benefits

Animal studies show that when extracts of *Terminalia* were administered following induction of anaphylactic shock, serum

histamine levels were reduced, indicating that Terminalia may possess a strong anti-anaphylactic action¹¹. Indian researchers have also shown that Aaonla (*Emblica officinalis*) protected experimental animals when exposed to a variety of biological, physical and chemical stressors. Oral *Emblica* was shown to normalize phagocytic activity, fitting within the definition of an adaptogen. *Emblica* was also found to protect tissues from stress-induced free radical damage, with a strong affinity for cells involved in prostaglandin synthesis¹².

Antioxidant Effects

Because *Emblica officinalis* fruit (commonly known as aaonla) is the world's richest source of natural vitamin C, researchers have attributed many of its traditional benefits to its antioxidant properties¹³. In one study aaonla was found to be more effective than vitamin C in improving lipoprotein values and glucose tolerance. Volunteers given aaonla were compared to controls receiving 500 mg/day of vitamin C. After 8 weeks the aaonla group showed significant improvements in lipoprotein serum profiles, including increased HDL, decreased LDL, and lower total cholesterol levels¹⁴. In addition to vitamin C, researchers at the Bose Institute in Calcutta, India have also isolated a number of tannins in aaonla that exhibit potent antioxidant activity. The antioxidant effects of aaonla were measured on the basis of their effects on rat brain concentrations of the oxidative free radical scavenging enzymes, superoxide dismutase (SOD), catalase (CAT) and glutathione peroxidase (GPX) and lipid peroxidation. The results were compared with effects induced by deprenyl, a selective mono-amine oxidase (MAO) B inhibitor with well documented antioxidant activity. Aaonla and deprenyl both effectively increased SOD, CAT and GPX activity, with concomitant decreases in lipid peroxidation when administered once daily for seven days. These results indicate that the antioxidant activity of aaonla may derive from the tannoids of the fruits of the plant, which have vitamin

C-like properties, rather than vitamin C itself¹⁵.

Antitumor Effects

Indian researchers have shown that extracts of aaonla exhibit antitumor activity. Solid tumors induced by DLA (Dalton's lymphoma ascites) cells were reduced significantly when mice were fed either aaonla or an herbal preparation containing 50% aaonla. Aaonla extract was also shown to increase the life span of tumor bearing animals by up to 60%. The researchers theorize that the antitumor activity of aaonla may partially be due to its interaction with cell cycle regulation¹⁶.

Lipid Lowering and Antiatherosclerotic Effects

In addition to the previously reported effects of aaonla on normalizing lipid profiles, Indian scientists have reported that flavonoids extracted from aaonla exert highly potent hypolipidemic and hypoglycemic activities. Moreover these flavonoids were effective in raising the hemoglobin levels in rats¹⁷. Aaonla has also been shown to possess potent antiatherosclerotic effects. Researchers evaluated the lipid lowering effects of aaonla in rabbits fed a cholesterol-rich diet to induce hyperlipidemia. Following 60 days of supplementation with aaonla, serum cholesterol, triglyceride, phospholipid and LDL levels were lowered by 82%, 66%, 77% and 90%, respectively. The researchers also reported a significant reduction in aortic plaque deposits in rabbits treated with aaonla, leading researchers to conclude that aaonla is "an effective hypolipidemic agent and can be used as a pharmaceutical tool in hyperlipidemic subjects"¹⁸.

CONCLUSION

It is important for those of us who are schooled in western medicine to recognize that many of the ancient Chinese and Ayurvedic formulas contain healing potentials that are often qualitatively different from the simple sum of each individual ingredient. Triphala has shown itself to be one such herbal combination. This herbal combination can have

profound healing benefits in complex, multi-organ systems. Its role in preventive medicine cannot be minimized.

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