

THE HEALING POWERS OF TURMERIC

*How to use the golden
spice for your wellness*



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Introduction

Turmeric as a spice is queen in the kitchen. As a beauty aid, it banishes blemishes and makes skin glow. As a healing herb, it has properties that can undo health problems of more than 30 deadly diseases, including Alzheimer's and Crohn's. Many of its magnificent curative properties are proved true through conclusive modern scientific research.

Turmeric! Truly one ingredient that creates magic everywhere: in food, health and beauty.

Turmeric the all-rounder spice

Today's world knows about turmeric in a way it has never known before, which includes the manifold uses the golden spice bestows upon health and well-being. It is that ubiquitous Indian spice that keeps spicing up myriads of dishes, from curries to fries to lentils to broths, delighting palates of every kind. Indian brides (grooms too) ritually apply turmeric paste to glow with flawless, golden skin before their great day. For over four millennia turmeric has been a major component in Indian Ayurveda. For centuries the herb has been used in Chinese Traditional Medicine and indigenous medicines of the tribes. And do you know more and more astounding revelations are still emerging from the scientific fraternity that goes on confirming turmeric's age-old therapeutic prowess?

What is turmeric? It is that [perennial herbaceous plant](#)¹ that grows underground, of which the root, or rhizome, is the part that we generally consumed or use. It belongs to the plant family [Zingiberaceae](#),² the same family ginger belongs to, carrying the botanical name *Curcuma longa* Linnaeus. Scientists say there are as many as 133 known species of turmeric!

Turmeric got its name from the Latin **terra merita**, which means meritorious earth. That's the colour the rhizome takes when grounded. In French, it is **terre merite** or **Safran des Indes**, or **Indian Saffron** in English. In Chinese one of its names is **Yu chin**, and in Italian it is **Curcuma**.

In India its common name is '**haldi**' in Hindi, '**halodia**' in Assamese, '**holud**' in Bengali, and '**Manjal**' in Malayalam and Tamil. Sanskrit has 53 interesting and descriptive names for turmeric, of which '**Haridra**' is one, meaning beloved of Lord Krishna (Hari). '**Vishagni**' is another name, meaning killer of poison. In Meghalaya, the Khasi people call it '**shynrai**' or '**shyrmitt**'. Elsewhere people simply call it **yellow root**.

Whatever the names, turmeric's manifold uses extend to condiments, cosmetics, medicines and natural dyes. In India, it also assumes great significance in religious ceremonies and [festivals](#).³



Turmeric grows best in tropical climates. The plant can grow to heights of over one metre. It is covered in foliage of large, oblong leaves that taper at both ends. The ideal temperature is between 15°C to 30°C with plentiful rainfall, averaging 500 mm across the entire growing period. The planting season starts in March-April. By August it starts flowering and by November-December the leaves begin to wither, indicating that the crop is ready for harvest.

The rhizomes are then dug out from the ground and gathered for post-harvest processing, i.e. grading, curing, sun drying and polishing. The next step can involve steaming or boiling in fresh and clean water for about two hours, which also removes the raw odour. Many prefer not boiling the rhizome and immediately move to the next step, which is draining and sun-drying for 10-15 days to 'cure', i.e., reduce the moisture content to no more than 8 to 10 per cent.

Cured rhizomes produce a metallic sound when broken, after which they are ready for 'polishing'. In some places the rhizomes are sliced before sun-drying. The polished rhizomes are then powdered into the fine dust, the flavour and taste of which we are familiar with – acrid and mildly aromatic; bitter-sweet, earthy and pungent with hints of ginger and orange.

So what makes turmeric tick, you ask? What has it got that makes the press, the medical fraternity, the scientific community swear by its [therapeutic efficacy](#)?⁴ More important, what can it do for you, your health, your wellbeing, apart from spicing up your culinary creations?

Scientists have discovered over 300 components in turmeric, many of them valuable in varieties of ways. The components include bioactive phytochemical compounds and usual nutrients such as proteins, fats, carbohydrates, vitamins, dietary fibre and minerals. The plant is also a good source of omega-3 and omega-6 fatty acids. It also has oleoresins turmerone, arturmerone and zingiberene, which give turmeric its characteristic aroma.

However, turmeric's incredible curative power lay in its bioactive phytochemical components. These include polysaccharides, curcuminoids and essential oils like curcumol and curdione. The most well-known and active curcuminoid is **Curcumin**, that gives turmeric its bright yellow hue and wide-spectrum of medicinal properties.

Curcumin content determines the value of turmeric. A lot of research has gone into the study of curcumin and now there is no doubt about its role in the treatment and prevention of various diseases, some of them serious.

Levels of curcumin vary with different species and growth regions. Most turmeric plants yield an average of 3% curcumin. But turmeric with the highest curcumin content is the Lakadong variety from Jaintia Hills District, Meghalaya, India. Its average yield is 7.5% and is the best turmeric in the world, credited with a Geographical Indication tag.

We hope this eBook will provide you with an eye-opening insight into why turmeric is ideal for health, beauty and wellbeing, both in body and mind. It will work for you as a structured guide with tips and pointers, gleaned from the experience of healers from both the traditional and modern health systems.

In this present world engulfed in a heavily polluted and noxious environment, where illnesses - new and evolving- seem to elude treatment, there is perhaps no better and cheaper solution than to allow Mother Nature to take over the reins once again.

Turmeric is Mother Nature's one gift that has worked for thousands of years without fail and will continue to work. Read on and discover for yourself how to use turmeric as the one solution you are looking for to truly help you enjoy a healthy and happy life.

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Chapter 1 - Golden Spice Power

What Ayurveda has known and practised since 3000 BC, modern medicine has come to know only the other day. The efficacy and varied uses of turmeric and many other herbs was common knowledge in traditional and indigenous medicine since time immemorial. Among all herbs turmeric has the distinction of being the most multifaceted plant growing on earth. Its history is as ancient as it is glorious. As food, cosmetic and colourant turmeric counts among the top rankers. As a medicinal plant, it has no rival.

How so? It is because of its constituents, such as the **curcuminoids**, **oleoresins**, **essential oils** and the all-important **curcumin**, or **diferuloylmethane**, turmeric's bioactive hydrophobic polyphenolic substance.

Turmeric no doubt adds colour to an otherwise bland looking food. It adds flavour too, we all agree. What we don't realise is that it adds medicinal value to diet as well. Look at the array of medicinal properties it has:

- Antibiotic
- Antiseptic
- Anti-flatulent
- Antitumour
- Anti-inflammatory
- Anti-bacterial
- Anti-viral
- Anti-fungal
- Anti-allergic
- Anti-spasmodic
- Anti-carcinogenic
- Anti-oxidant
- Anti-mutagenic
- Cholagogue (helps discharge of bile from the system)
- Digestive
- Diuretic
- Hepato-protective
- Immune system boosting
- Neuro health building
- Stimulant
- Wound healing

The above list is of course inconclusive.

Now see what illnesses and health problems turmeric can tackle:

- Common colds, fevers, hay fever, headache
- Bronchitis, lung infections, fibromyalgia
- Multiple sclerosis, atherosclerosis, STDs, genital herpes
- Dyspepsia, stomach infection, stomach bloating
- Loss of appetite, diarrhoea, dysentery, ulcerative colitis
- Gastro-intestinal gas, Irritable bowel syndrome, stomach ulcers
- Stomach ulcers, H.pylori infection, intestinal worms
- Rheumatoid arthritis, joint pain, gallbladder problems
- Liver problems, jaundice, kidney problems, urinary bladder inflammation
- Crohn's disease, Alzheimer's disease, SLE (lupus - an autoimmune disease)
- High cholesterol, diabetes, tuberculosis, conjunctivitis, bursitis
- Recovery after bypass and other surgery, haemorrhage, menstrual problems
- Skin problems like lichen planus, itchy skin, eczema, skin sores, acne, ringworm
- Insect bites and stings, cuts and wounds, sprains, mouth problems, gingivitis
- Depression, heart problems, colon cancer and other cancers

Again, the list is not conclusive.

Most researched and most number of cures

Ethnobotanist and 'Medicine Hunter' Chris Kilham declared turmeric as one of the greatest and beneficial plants in the world. It is also among the [most researched](#).¹ According to Curcumin Resource Database (CRDB), as of July 2015, there are 9,075 peer-reviewed publications on curcumin, besides other [relevant data](#).²

[Research findings](#)¹ revealed that turmeric exerts curative effect over 581 diseases with curcumin alone impacting over 560 diseases! Curcumin has at least 20 molecules that are antibiotic, 14 that are anti-cancer and 12 that are anti-tumour.

Powerful antioxidant

One effective way turmeric helps maintain health is by neutralizing free radicals that destroy cells and alter DNA. Curcumin stimulates the body to produce its own antioxidant enzymes.

Cancer suppressant

Curcumin suppresses cancer by inhibiting the growth of cancer cells, scientists have found out. It may also prevent cancer by not allowing metastases to occur at all in many types of cancer including breast cancer.

Alzheimer's sufferers' hope

Turmeric is great for persons with Alzheimer's disease where losses of cognitive functions are pronounced. A [study](#)³ of two elderly Singaporeans with neurological disorders who ate curry spiced with turmeric confirmed this. They had better cognitive functions than their peers who did not eat turmeric-spiced curry. This is probably the reason Indians have the lowest rate of Alzheimer's disease sufferers in the world. Indian foods are heavily spiced with turmeric.

Combating depression

Turmeric has long been used in China to treat depression. [Tests](#) conducted in vivo on mice revealed that curcumin was significantly more effective than the anti-depressant drug fluoxetine in regulating levels of neurotransmitters in the brain.

Low-toxicity

One beneficial aspect of turmeric is its low-toxicity. Because of its low-bio-availability turmeric is difficult to get metabolised. If ingested directly it will likely pass out through the gut. That may be the reason why even high doses are not toxic. The active component curcumin is termed as GRAS (generally regarded as safe) by the Federal Drug Administration.

One last question arises. If turmeric is so good, how do I consume it to reap its benefits? The best way is to use it in your diet. Add it to your food in the way you want. The later chapters will let you peep into some recipes although you can let your innovative imagination run wild on this. For specific ailments, specific amounts may be taken. This will also be dealt with in the later chapters.

You may like to know if there are any restrictions on the consumption of turmeric. Consuming turmeric as a spice in powdered form has no constraints but if consumed in the form of curcumin supplements the following should be noted:

Who may be careful while consuming turmeric

1. Person taking blood thinning medication – turmeric is a known blood thinner and may react with the drugs.
2. Person suffering from hypertension – turmeric reduces blood pressure, so it may lead to adverse effects.
3. Pregnant and lactating women – curcumin may affect fertility.
4. Person with gallstones – curcumin prevents gallstone formation by contracting the gallbladder. If you already have gallstones this will be painful.
5. Person with kidney stones – the oxalate in curcumin can bind with calcium resulting in calculi formation.

Dosage

1. Powdered form - ¼ to 1 teaspoon per day.
2. Turmeric slices – 3 to 6 grams per day.
3. Curcumin extracts or tablets – 1000 to 1500 mg per day (for adults).

Please note: Powdered turmeric will be more readily bio-available if mixed with black pepper powder and coconut oil or raw honey.

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Chapter 2 – What Can Turmeric Do for Your Health

Much has advanced in the world of medicine today. Yet, illnesses are not on the wane. Instead, new diseases continue to emerge. The antibiotics which worked before are no longer effective because the organisms against which they were used have become immune to them and mutated to new strains. Newer drugs must be developed to combat them.

Another problem of modern medicine is the question of side effects. If one disease gets cured another strike. A never-ending cycle, with no real or permanent solution in sight.

Turmeric, a Hero Among Medicinal Plants

This is where traditional systems score over medicine. They base their cures mostly on remedies derived from plant sources, using them in a holistic manner. The medical and scientific community has now acknowledged the efficacy of such traditional cures and have increasingly begun approaching the subject through precision and empirical evaluations and testing.

Intense researches have finally yielded results, with the outcome that now over 50% of modern drugs are plant-derived, including cancer drugs. The one major difference is that modern medicine tends to isolate the compound from the source (like curcumin from turmeric) while traditional medicine makes use of the entire gamut of compounds.

Of the over 30,000 plant species, turmeric has emerged a hero. The reason is the curcumin in turmeric that exhibits all the properties and benefits mentioned in the previous chapter.

Let us now try and understand what some of the terms really mean, how important they are, and how we can take advantage of turmeric's immense therapeutic properties.

Powerful Antioxidant – Turmeric's Primary Mechanism in Preventing Disease.

The antioxidant activity of curcumin is turmeric's efficacy and can control a disease before it occurs. The principal cause of most diseases is because of the free radical molecules which cause the process of oxidation that damage our bodies' healthy cells. Curcumin halts oxidation by increasing the activities of other antioxidants, or by scavenging specific types of free radicals, or by regulating the activities of enzymes that neutralize free radicals. This antioxidant activity thus saves us from various illnesses including cancer, depression, and intestinal disorders, keeping us healthy.

Natural Anti-inflammatory Agent – Stops Inflammation Response.

Inflammation is the body's natural response to disease, which manifests as aches and pains, causing us extreme stress at times. Turmeric has proven to be very effective in inflammatory disease conditions like rheumatoid arthritis, Crohn's disease, Alzheimer's, and cancers like colon, stomach and breast cancers. Anti-inflammatory action by turmeric can give us dramatic relief, enabling us to live a life free from pain.

Natural Enemy of Harmful Microorganisms

Turmeric is a natural antibiotic. It targets harmful microorganisms – viruses, bacteria, parasites and fungus – that cause our bodies harm, without disrupting the balance of good microbes in our system. We can say turmeric is an intelligent agent that seek, kill and deactivate only those organisms that harm, leaving the good ones to thrive. We are thus aided not only in avoiding illnesses but also in strengthening our immune system.

Protects the Heart

Heart diseases are silent killers. Turmeric has proven effective in the treatment of such heart ailments like atherosclerosis and hypercholesterolemia. It improves function of the lining of the blood vessels, the endothelium, thus helping to prevent many heart diseases. It protects the heart from cardiac injury; prevents strokes, cerebral attacks and vascular inflammation. Consumption of even small amounts of curcumin daily significantly improves lipid profiles, stabilises cholesterol levels and other chemicals that contribute to overall heart health.

Improves Brain Function

Among the most disruptive diseases are those of the brain, neurodegenerative disorders such as Alzheimer's disease, Parkinson's disease, epilepsy, schizophrenia, depression and neuralgic pain. However, curcumin is found to be effective in slowing down progression of these conditions. Not only that, it is found to be effective in improving brain function and preventing many other diseased psychiatric conditions as well.

Wards-off Cancer

Extensive studies have revealed and demonstrated turmeric's vast potential in the treatment and prevention of cancer. Turmeric's curcumin can inhibit the growth of cancer cells from many vital organs such as brain, colon, liver, pancreas, prostate and skin. In fact turmeric can help prevent cancer of any form.

Fights Diabetes

Curcumin alleviates hyperglycaemia and relieves inflammatory stress in the blood vessels. By improving insulin and blood sugar levels it also helps avoid other consequences of diabetes like diabetic cataract, kidney dysfunction and other associated problems diabetics face.

For a Healthy Skin

With its natural anti-inflammatory, anti-bacterial and anti-fungal properties turmeric is great for maintaining healthy skin. It improves skin texture, removes acne, skin blemishes and other skin diseases like eczema and acts as exfoliator.

A wealth of research has gone into turmeric, especially its most visible constituent curcumin. In traditional medicine practice however multiple components play a bigger role. Curcumin is only one of [200+ constituents of turmeric](#).¹ Therefore, taking turmeric in the form of the whole root or powdered form would render it more effective in terms of bioavailability.

Other valuable phytochemicals of turmeric are [phenolic compounds](#)² like the sesquiterpenes that help promote oxygen into the brain and regulate hormone balance. They are also antiseptic and anti-inflammatory. Some major sesquiterpenes are the tumerones such as the ar-tumerones, the α - tumerones and the β -tumerones.

Turmeric oil is another way of use. Obtained through the process of steam distillation turmeric oil has the same properties as the root and powder but is more concentrated in form. Turmeric oil has the same Phenolic compounds that are also powerful [anti-microbial agents](#)³ against strains like staphylococcus aureus, pseudomonas aeruginosa and candida albicans.

Make turmeric an ingredient in your daily diet. It will certainly work wonders for your health and well-being. It's easy to obtain and easy to use, be it as powder, whole root, slices, and oil or curcumin tablets. It can save your life and remain a faithful companion on your way to great health.

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Chapter 3 – Keep Depression at Bay

There is a mental state people are in that leaves them feeling low, low down. Although a whole range of symptoms can occur that vary from person to person this negative mental state is often loosely described as depression. Some degree of depression is not at all uncommon simply because life itself is intrinsically dynamic, constantly bombarded on all sides by vagaries.

While most sufferers will get past depression with the right support or treatment, severe depression can destroy lives. Therefore being wise and on our guard is the best way to thwart this silent intruder as it sneaks into our psyche. Tackle the problem head-on once you notice the symptoms.

Life is a Dark Night

Have you ever felt that life's not worth the living? Or that life's unfair to you? Or that your life is nothing but a maze of confusing thoughts with no beginning and no end?

One moment you bubble with extreme euphoria only to plummet into deep melancholia the next moment.

You are thrown into a tunnel, long and dark; there's no light at the end of it.

No one understands you; no one even wants to talk to you. If they do, it is with pointed fingers, pointing at you.

Neither do you understand yourself, or others.

Suddenly life is not at all a path you read in fairy tales. The dreams, the aspirations have suddenly ended for you. You have no past, no future, and the present is just a blur.

You can't concentrate, you can't decide, and you can't sleep. You are hopeless, guilty, and suicidal. You are irritable and restless.

You've run into a void; a black hole now engulfs your soul. Haunting thoughts, loneliness, and terrors of the night stifle you. One moment you fear changes, the next moment you fear that things will remain the same.

You realize you have to change for the better. You promise yourself you will. But time and again, you slip by back into that terrifying comatose state, running about in circles.

Your condition is not an isolated case.

This state of mind is becoming more common. In some people it is intense and unbearable; in others, it is milder. But if left untreated it will lead to what psychiatrists call Bipolar Disorder.

In simple terms this is [Depression](#)¹. It depresses the sufferer and confounds the caregivers around.

And when it strikes, it aims to kill the soul, slowly. You desperately need help.

Depression: Cause and Effects

Can you avoid depression totally? Probably not, because life's such that at times you'll face some low moments. But when depression becomes severe you have what is called MDD or Major Depressive Disorder. That's when you should seek medical help.

Stressful experiences are often the cause of depression. The brain takes stock of these events and decides to respond accordingly. It actually is trying to help the person deal with dangerous situations by supplying extra energy in the form of the increased brain chemical, cortisol. However, when cortisol levels stay high problems such as depression become the effect.

There is increasing evidence that stress leads to depression. This again leads to changes in the brain's structure. Three parts of the brain exhibit changes that have a role play in MDD:

- a) The hippocampus – Located in mid-brain, it stores memories and regulates cortisol production in times of stress. The hippocampus also produces brain cells, neurons. When too much cortisol is released, the neuron production slows down and causes memory problems.
- b) Pre-frontal cortex – located in front-brain, it regulates mood, memory and decision-making processes. More cortisol production shrinks the pre-frontal cortex, affecting the functions.
- c) Amygdala - Located close to the hippocampus, it facilitates responses of pain, pleasure, sadness, joy, fear etc. High cortisol levels enlarge the amygdala, leading to sleep and other activity disorders. It can also lead to the release of irregular amounts of other hormones with more complications as a consequence.

Another cause of depression may also be hereditary or hormonal changes.

What is heartening is that these structural changes can be prevented, even reversed, with medications such as mood stabilizers or inhibitors and antidepressants that correct the imbalance in the brain's chemicals. Prozac, Tofranil and Bupropion are some popular medications. The downside of such medications is undesirable side-effects like nausea, stomach bleeding, breathing problems and even suicidal tendencies.

Other treatments include passing electrical currents (Electroconvulsive therapy – ECT) and sending electrical pulses (Transcranial magnetic stimulation – TMS) into the brain cells. They are aimed at boosting communication and regulate mood.

When, Depression Strikes, Relax, Help's at Hand

One fact remains. Depression of any severity may strike you at any point of your life, without you being aware. If it does, you'll want to be ready to deal with it.

Why not protect before depression creeps in. What you can do now is protect yourself with Mother Nature's own drug: turmeric.



Kelly Brogan, MD Tells Us Why

[Science suggests Turmeric benefits depression](#). Turmeric's bioactive substance curcumin can help balance the brain chemicals, namely, serotonin, dopamine, glutamate and noradrenaline. It can also enhance the production of an essential antioxidant for brain health, glutathione. Moreover, curcumin helps:

- a) Functioning of the HPA (hypothalamus-pituitary-adrenal) axis
- b) Protect oxidative and nitrosative damage
- c) Negate mitochondrial disturbances
- d) Reduce inflammation
- e) Reduce the progression of neuropsychiatric disorders
- f) Boost focus and cognitive abilities

How to protect yourself against depression with turmeric?

It is amazing how easy it is to use turmeric in a health drink. One way: Add a teaspoon of turmeric powder (make sure it's grown without pesticides) to a cup of tea, milk, coconut milk or plain water. Spice with a dash of black pepper powder, ginger powder and cinnamon powder. Sweeten with raw honey. Another way to drink is as our [golden milk](#)³, which is a mix of [Lakadong turmeric](#)⁴ and other spices such as black pepper, long pepper, cinnamon, cardamom and [medicinal ginger](#).

Turmeric is among the most researched and well-referenced spices, having so many peer reviews. In the end, turmeric will not only protect from depression but from other diseases as well. Who wouldn't want to fight disease naturally?

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Chapter 4 – Dementia and Alzheimer’s Disease: When the Brain Degenerates

The adult brain weighs only 1.4 kg. But in complexity and function, it is awesome. It is the control centre for all the body’s involuntary and voluntary functions. The brain has three distinct regions: brainstem, cerebellum and cerebrum. There are over ten thousand million neurons or brain cells populating these regions. All complexities of thought, action, memory, emotion and language are the brain’s. Its cognitive capabilities allow us to carry on all our daily activities without botheration.

Sometimes people experience a decline in mental capability or lose cognition, a condition broadly termed [Dementia](#)¹. Sufferers are said to have BPSD (Behavioural and Psychological Symptoms of Dementia).

Dementia is not a specific disease but a syndrome or a group of symptoms. It disrupts normal mental functioning and interferes with daily life. Persons with BPSD gradually lose the ability to perform ordinary brain tasks. Remembering or reasoning becomes a problem. Dementia can occur due to various conditions and its severity can range from mild to serious.

Dementia, a Serious Neurological Problem

If you have family members with dementia you will understand the frustrating situation. More so in severe cases where the sufferers have to depend upon caregivers. They need help even for the most basic of tasks of self-management. Impairment can become so bad they have no control over their emotions. They cannot focus on anything. They cannot remember names or neighborhoods. They miss appointments and fail to do even simple jobs unassisted. Their language becomes unintelligible; their reasoning and problem-solving skills reduce to zero.

Alzheimer's Disease, the Most Common Form of Dementia and Its Impact

Dementia is not related to ageing, as was earlier thought. It can occur at any age, progress and worsen with time and is irreversible. It can strike as vascular dementia after a stroke, or as Parkinson's disease. [Other forms of dementia](#)² are Pick's disease, Lewy Body dementia, Creutzfeldt-Jakob disease or Mixed Dementia.

The most common form of Dementia is [Alzheimer's disease \(AD\)](#)³ which accounts for 60% of the cases. According to [statistics](#),⁴ an estimated 44 million people worldwide are afflicted with Alzheimer's disease; 5.5 million are in the U.S. alone! Two-thirds of the sufferers are women while about 200,000 are younger people. Alzheimer's is the 6th leading cause of death in the U.S. and the current economic burden is a staggering \$279 billion.

Causes and Signs of Alzheimer's Disease

Age is the principal factor in AD, with people over 65 being more likely to suffer from it. But the onset can happen earlier, even in the twenties. However, age is not the only factor that contributes to neuron impairment. Neuron damage can also occur through stress, disease, or heredity.

Alzheimer's disease starts off as abnormal behavioural and psychological symptoms: irritability, anxiety and depressed moods, a sign of communication breakdown between neurons. This may later advance to feelings of anger and aggressiveness. Emotional stress and physical outbursts are not uncommon; the sufferers get restless, pace about and shred things. Other associated problems may be sleeping disorders, apathy, hallucinations and delusions.

The gradual decline in short-term memory renders performance of routine tasks problematic. As the disease progresses, judgement capabilities worsen. Sufferers get more agitated and emotional as they lose the use of language. They say and do abnormal things, are lost and disoriented. Finally, they become incapable even to feed, take care of themselves, recognize people or control bodily functions. The situation is very depressing for patients and caregivers alike.

What Happens Inside the Brain When AD Strikes?

A characteristic feature in Alzheimer's disease is the accumulation of amyloid plaques or abnormal tau proteins between the neurons. This results in the ultimate collapse of microtubules, neuro-fibres that transport nutrients. Oxidative stress and inflammation then predominate, making it difficult for the neurons to send nerve impulses to each other. As the disease progresses the cortex and the hippocampus (the region associated with memory) shrink, while the ventricles enlarge.

Finally, the total brain functions collapse, leading to even death. AD sufferers don't live beyond eight years but sometimes the condition stretches to twenty years.

And so far there is no permanent cure for Alzheimer's disease in modern medicine.

Turmeric to the Aid of Prevention

The incidence of Alzheimer's disease In India and other Asian countries is rarer than what is prevalent in the West. One reason could be the wide use of turmeric in their everyday diet: something like 1-2 grams per day per average household.

Ayurveda and other traditional systems of medicine have always advocated the use of turmeric to stave off many kinds of diseases including inflammatory and oxidative diseases. Curcumin and other biologically active ingredients in turmeric have neuro-protective properties that reduce oxidative damage and inflammation as well as the accumulation of amyloid plaques between the neurons.

Curcumin modulates levels of neurotransmitters – the brain chemicals dopamine, serotonin and norepinephrine. It inhibits the action of enzymes that decompose these chemicals, significantly reducing symptoms and alleviating neurotransmitter dysfunction.

Studies of AD-induced mice treated with curcumin came out with the following results:

- Neuronal damage in the brain is prevented.
- Aggregation and formation of neurofibrils are blocked.
- The Incidence of oxidized proteins and pro-inflammatory cytokines are lowered
- Protein plaque burden is significantly reduced by 45-50%.

Recent [tests](#)⁵ conducted on three elderly Japanese people with AD and BPSD using turmeric for treatment. The study confirmed a significant reduction of symptoms of AD such as depression, delusions, hallucinations, irritableness, anxiety, apathy, agitation and euphoria in all the three aged patients. The gradual improvement came 12 weeks into the treatment, concluding it to be effective and safe. It enhanced the patients' quality of life (QOL) and activities of daily living (ADL) and relieved the caregivers from associated distress.

Turmeric, the Ultimate Panacea for BPSD and AD

What the ancients and indigenous folks have known all along modern tests have now confirmed. Treatment with turmeric is not only effective but safe too. Therefore, rather than fall into the cycle of disease and disability, wouldn't it be better to take pre-emptive action and keep all diseases at bay?

Turmeric, with its wide-ranging therapeutic properties, is the perfect remedy to save you from the anguish of the dreaded and depressive Alzheimer's disease and other BPSD conditions. It only takes a little turmeric combined with your daily diet. Or take it as a [refreshing turmeric tea](#) or [milk](#) to fortify you for the whole day.

Only make sure the turmeric (or curcumin supplement) you buy is the genuine, organic kind sourced from [genuine](#) sellers.

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Chapter 5 – When Inflammation Goes Awry

The complex and extraordinary process of the human body system is amazing. From birth till death the body systems that people take for granted function non-stop. People stay healthy because of the body's own defence system - the immune system – keeps them so.

The immune system is like a country's well-trained armed forces. It defends the body from invasion by viruses, bacteria, cancer cells, toxins, injuries, and foreign bodies. The antibodies produced by the body's [immune cells](#)¹ - the leucocytes or white blood cells– help the body fend off these antigens and foreign invaders. Leucocytes are of several types, the most dominant among which are the neutrophils - killer cells with small sacs containing enzymes to eat and digest pathogens. This is one way the immune system fights against infections and other harmful invaders to keep people from falling sick.

What is an Inflammation and is It Good or Bad?

The moment the immune system senses an invasion or attack it signals for more immune cells to the site of danger and activates proteins to protect cells and tissues. In response, parts of the body or the whole of it show signs of [inflammation](#)² -- redness, aches and pains, swellings or fever. Once threats are overcome, the inflammation subsides. In fact, without inflammatory response wounds and tissue damage would not heal. Under such circumstances, inflammation is a good thing.

On the other hand, the immune system goes on overdrive. It reacts where not required, or continues its action even when the threat is overcome. This results in inflammatory diseases such as autoimmune diseases, psoriatic arthritis, rheumatoid arthritis, gout and lupus. In such circumstances inflammation becomes harmful.

Mechanism of Inflammation

The body under attack releases different immune cells with different inflammatory mediators. Some mediators such as tissue hormones and mucous membranes cause tissues to expand, narrow blood vessels to dilate, and mucosal fluids to increase. This is to form a barrier for trapping pathogens and facilitate leucocyte infiltration into the affected regions.

Leucocytes then set out to destroy the pathogens or to inhibit them. The body gets inflamed even if there may not be an infection, though all infections result in inflammation.

Inflammation may be acute or chronic. Acute inflammation is quick to start and increase in severity. It is often caused by viruses, or bacteria or open injuries, and sprains. Symptoms may remain for a few days or a few weeks. For example, cuts and wounds, colds and flu, sinusitis, meningitis and acute bronchitis. If neglected the inflammation may turn chronic.

Chronic inflammation results from harmful pathogens such as stubborn strains of viruses, splinters embedded inside tissues, or because of autoimmune deficiency. Chronic inflammation can lead to tissue death or deformity.

Bad Effects of Inflammation

When the body's own immune system fights against itself we have inflammatory conditions, which are not beneficial. A good number of diseases are inflammatory in nature. The following are common examples:

- Autoimmune diseases
- Asthma
- Allergies
- Inflammatory bowel disease (Crohn's disease)
- Coeliac diseases
- Diabetes
- Nephritis
- Hepatitis
- Ulcerative colitis
- Psoriasis
- Atopic dermatitis
- Autoinflammatory syndrome
- Rheumatoid arthritis
- Atherosclerosis
- Connective tissue disorders
- Transplant rejection
- AIDS

These diseases and many others are life-disturbing and can last a lifetime. They can be mild or severe, but one common problem is that they cause a good degree of discomfort and misery besides imposing an economic burden.

Enter Turmeric, Saviour Against Inflammation

We now see that inflammation is one major reason people suffer from debilitating diseases like the above. In every disease, one common factor is oxidative stress, caused by the unstable free radical molecules cascading pro-inflammatory conditions. Free radicals multiply because of environmental pollution, sugary foods, and stress, besides pathogens. These and other factors upset the balance between the free radicals themselves and reactive oxygen and nitrogen molecules, giving the immune system the reason to get into offensive.

Statistics indicate³ that 5 to 7 % of western society suffers from some form of inflammatory disease or the other, incurring billions of dollars in healthcare expenditure. Chronic inflammatory disease patients also risk contracting another inflammatory disease while chronic inflammation often leads to multiple chronic diseases, including certain types of cancer.

Common drugs prescribed for inflammation are the NSAIDs⁴ (non-steroidal anti-inflammatory drugs), DMARDs⁵ (disease modifying anti-rheumatic drugs), painkillers and corticosteroids. But these medicines come with undesirable side-effects⁴ such as bleeding, allergies, stomach ulcers and pain, headaches, nausea and even weight gain.

The multi-dimensional turmeric,⁶ however, has been used in Ayurveda and other traditional medicine systems for thousands of years to treat inflammatory and other conditions. In inflamed conditions, the curcumin in turmeric blocks pro-inflammatory cytokines and enzymes, stimuli known to activate inflammation. Turmeric is safe to use, with no question of having too much of it, and no accompanying side-effects.

As an anti-inflammatory agent turmeric not only prevents, reduce, or relieve inflammation, it also eliminates the danger of side effects. And the costs involved are a fraction of what one would otherwise have to cough up.

So if inflammatory conditions such as the following, to name a few, are a bother:

- rheumatoid arthritis
- chronic pulmonary obstructive disease
- inflammatory bowel disease
- psoriatic arthritis

think turmeric. It may save you from many other diseases as well.
And save a lot of money too.

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Chapter 6 – Let Turmeric Take Care of Your Heart

According to the World Health Organisation, CAD or coronary artery disease (or simply heart disease) is the world's deadliest. It is also called ischemic heart disease and, along with stroke, it accounted for 15 million of the 57 million¹ deaths in the world in 2016. In the USA², one out of every four deaths is because of heart disease.

CAD occurs when the arteries are narrowed down, or damaged, by the build-up of plaque - fat, cholesterol, calcium, and other deposits. The clogged arteries restrict the flow of oxygenated blood to the heart which leads to chest pain, and blood clots which make up the most common cause of heart attack.

For a fist-sized organ, the heart is an amazing powerhouse of the cardiovascular system. It beats 100,000 times a day, each minute pumping 5 to 6 litres of blood, to supply nutrient-rich blood non-stop to every part of the body and back. Any small aberration in its functioning can cause untold problems.

Different types of heart problems³ come under the big umbrella of cardiovascular diseases, which include all diseases of the heart and blood vessels. Physicians may identify a heart problem when there are signs of:

- Hardening of arteries – atherosclerosis
- Abnormal heartbeats – arrhythmia
- Hardening or weakening of the heart's muscles – cardiomyopathy
- Heart irregularities from birth – congenital heart defects
- Clogged arteries or build-up of plaque – CAD or ischemic heart disease
- Heart infections – endocarditis or myocarditis
- Blockage or bleeding of arteries leading to the brain - stroke

Diagnosis and Treatment

The doctors will diagnose and confirm what type of heart disease the patient has. Diagnoses usually consist of Electrocardiogram (ECG), Echocardiogram, Stress Test, CT scan and MRI, Holter monitoring, and cardiac catheterization.

Treatment depends upon the condition of the patient. Heart patients have to undergo massive changes in food (diet) and lifestyle (exercise) and other possible habit changes such as: no smoking or drinking. Then there are the medications and surgical procedures.

There are so many restrictions that enjoying life to the fullest becomes difficult. Once a person turns a heart patient, he or she remains a heart patient. Life no longer remains the same.

Modern Drugs and Their Side Effects

In spite of all advancement in modern medicine, heart disease continues to be the number one killer in the world today. There are inhibitors, blockers, and cholesterol-lowering drugs. People with high cholesterol may be given statins, and those with weakened heart muscles, Digoxin.

Some medicines are diuretic to get rid of unwanted water. Others are electrolytic supplements of potassium and magnesium; vasodilators to relax blood vessels, and Warfarin to prevent clots.

Each medication has side effects. They include itches and rashes; abdominal and chest pain; headaches and muscle aches. Dizziness, drowsiness, low blood pressure and light-headedness are not uncommon. Blurred vision, fatigue, nausea and vomiting etc can make for an uncomfortable life.

The medication is life-long and the financial burden staggering. On top of that, life will hardly be any easier, not only for the patient but the entire household.

Fortunately, There is Turmeric

This is where the common Indian kitchen spice, turmeric, comes to the rescue. Turmeric improves the function of the lining of the blood vessels (endothelium) and so helps regulate blood flow and pressure. The cardioprotective properties of turmeric come from the anti-inflammatory actions of curcumin, its most bioactive ingredient. Tests on animals confirm it protects the heart from various types of heart damage.

More than 200 studies have investigated the effects of turmeric on diseased heart conditions. Turmeric protects the heart and blocks factors that may contribute to the development of heart disease. Its antioxidant properties help lower cholesterol and inhibit the oxidation of LDL cholesterol that clogs arteries thus preventing atherosclerosis.

Turmeric also helps prevent heart attacks and strokes by inhibiting the build-up of platelets on the walls of injured blood vessels preventing blood clots and artery blockage.

What else does turmeric [do for the heart](#)?⁴

- It protects the heart muscles (myocardium) from ischaemic damage (restricted blood supply) by inhibiting ROS generating pathways and creating other pathways to detoxify the free radicals.
- It suppresses the production and up-regulation of the pro-inflammatory genes and cytokines and protects from ischemia-reperfusion injury (IRI) during **Cardiopulmonary bypass (CPB)** surgery.
- It prevents hypertrophy (enlargement of the heart), cardiac fibrosis (thickening of the walls of the heart), and inflammation
- It has the potential to prevent strokes and alleviate inflammation
- It helps prevent arrhythmia through its anti-inflammatory properties.

Never Ending Health Benefits of Turmeric

As research advances on turmeric's awesome properties the debates centre on whether it should be taken as curcumin supplement or as a root, or powder. The choice depends on the person consuming it. However, curcumin extract might be fast working (containing 95% curcumin as compared to 3% in raw), the benefits of raw turmeric (powder or root) are too many to ignore.

Powder allows sprinkling on foods and drinks and gives you the advantage of savouring its culinary flavour as well. It is less expensive too.

Now do your heart a favour, get turmeric with its great anti-inflammatory, anti-oxidant and cardio-protective properties now. But then again, you'll have to maintain a healthy lifestyle too, with plenty of exercises and a healthy turmeric-spiced diet.

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Chapter 7 – You Can Beat Cancer with Turmeric

The second biggest leading cause of death by disease worldwide is cancer. In 2018 9.6 million people will die of cancer, according to a [World Health Organisation report \(WHO\) factsheet](#)¹, compared to 8.8 million deaths in 2015. This means for every 6 deaths, 1 is of cancer.

The financial burden in 2010 was 1.16 trillion US dollars. That figure will be higher now.

Cancer affects everyone: young or old, male or female, humans or animals and it evokes paralysing fear. Both sufferer and caregiver get traumatised. The pain and torture of cancer are tremendous and unbearable in every way – whether physical, psychological and financial.

70% of the deaths occur in poorer countries where the inaccessibility to treatment is low. Lower medical facilities, high costs, and poor cancer policies of governments are also contributing factors.

Still, nearly 30 to 50% of cancer cases are preventable, says WHO.

Cancer – the Disease, Types and Causes

It is a disease caused by the rapid and uncontrolled division of mutated or abnormal cells in the body. Unlike normal cells, cancer cells cannot repair themselves; they keep multiplying and turn to tumours.

Cancer is of many types, more than 100. They are also known as malignant growths, tumours, or neoplasms. When cancer cells spread and invade other parts of the body they are 'metastasizing'. The most deaths from cancer are because of metastases. Therefore to prevent the spread of cancer early detection is of prime importance.

The most common forms of cancer according to WHO are:

- Lung cancer
- Breast cancer
- Stomach cancer
- Colorectal cancer
- Skin cancer
- Prostate cancer

Tobacco causes 22% of cancer deaths, the highest cancer risk. Lifestyle and dietary behaviours (sedentary lifestyle and unhealthy diet) are responsible for about 1/3rd of the deaths.

Other causes are through [carcinogens](#)² which may be items of everyday use and can be:

- Physical – Ultraviolet, Gamma Rays, Ion radiation
- Chemical – Asbestos, Benzene, Arsenic, Food Contaminants or Aflatoxins
- Biological – Viruses, Bacteria, Parasites

Treatment

Modern [cancer treatment](#)³ is intensive, complex and prohibitively expensive. It may include surgery and therapy by chemicals, radiation, or hormones. Other therapies are immunotherapy and synthetic lethality.

Treatment is long and cumbersome, and a strain on the entire family. Though the goal is to root out the disease and prevent metastasis, often that is not achieved even after prolonged treatment. The patient is sometimes brought to the chronic disease state and treated for the remainder of life through palliative care, which only relieves pain.

[Side effects](#)⁴ is another dark and equally dreaded side of cancer therapies. Those who have experienced it, either in themselves or in their families can tell how frustrating this can be. Hair loss, memory loss, fatigue, urinary problems and a host of other side effects keep bothering the patient.

There is Hope in Turmeric

On the other hand, the ubiquitous Indian spice turmeric offers an amazing, cheap and easy solution for all your cancer problems. There are over than 800 published reports that indicate the vast anti-cancer potential of turmeric. The studies include both laboratory and live examples. All pointers are towards the effectiveness of turmeric's bioactive phyto-compound, curcumin, in inhibiting the growth and division of cancer cells. Clinical trials use the affected cells from liver, pancreas, prostate, brain, breast, skin and other parts of the body. They all show positive response and promise with regard to the prevention of malignancies and metastases.

One great use of turmeric is that it augments other conventional treatment besides being the effective medication itself. Modern cancer medicine targets pathways of the disease and the problem are that there are too many pathways. Curcumin in turmeric has the ability to target multiple pathways without the unpleasant side effects.

Some Cases

In a study of 85 men with high levels of prostate antigens, the men were given curcumin and flavonoids supplements. Six months later their prostate-specific antigen (PSA) levels decreased to safe levels.

In another study of 22 men, it also decreases urinary mutagens (agents that cause changes in DNA).

Curcumin is a well-tolerated substance in patients of multiple myeloma (a type of blood cancer). A [67-year-old woman](#)⁵ who was dying from myeloma surprised her doctors when she survived after taking curcumin for five years.

[Colorectal cancer](#)⁶ is a wide occurrence in the West, possible reason being lifestyle and diet. In Asian countries where turmeric consumption is normal the incidence of colorectal cancer is lower.

Recent studies on colorectal cancer indicate a relationship between cancer stem cells and stroma fibroblasts (epithelial or connective tissue cells), where the former releases massive amounts of pro-inflammatory cytokines that initiate cancer formation. Treatment with curcumin, either as augmentation or by itself, significantly reduced the cancer stem cells.

Turmeric's anti-inflammatory and anti-oxidant properties may be helping in inhibiting the growth and metastases of colorectal and other cancers, thus preventing its onset in the first place.

Before, or When, Cancer Strikes

Turmeric is well-known in India, China and South Asian countries for centuries. But the therapeutic benefits of turmeric have only been recognized by the modern medical and scientific fraternity only in recent years. And findings of every research continue to astound.

When you look at the astonishing properties turmeric exhibits against cancer, it makes complete sense to take full advantage of this wonderful root to completely root out cancer from our bodies.

Look anew at turmeric. Not as just a spice to flavour and season your curries and sauces, but as a spice that heals as well.

Keep cancer (and other diseases) at bay with turmeric. But only use the best, organic and pure, from reliable sources.

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Chapter 8 – Farewell Diabetes

If there is a disease that is more the result of lifestyle, growing hand in hand with rising per capita income, it is diabetes. And it is rising to epidemic proportions.

The [WHO data on diabetes](#)¹ is chilling. There were 108 million sufferers in 1980; that number has become 422 million in 2015 - four times more. 1.6 million people died of diabetes that year, and now the disease is the 7th leading cause of death. The [cost](#)² of managing diabetes is also a staggering 825 billion dollars.

In 2015, 30.3 million people (9.4%) in the USA had diabetes. Another 84.1 million had pre-diabetes.

In 2017, India reported 72.9 million (8.8%) diabetes cases while China had 114.1 million cases. Overall, the South East Asian region has more incidences of diabetes than Europe or America.

According to [reports](#)³, half of the adults with diabetes mellitus live in five countries: the USA, China, India, Brazil and Indonesia. This is not comfortable to learn.

How Does Diabetes Come About?

The sugar and starch (carbohydrates) we consume break down into glucose, which makes the body's energy supply. The glucose reaches the body's cells with the help of insulin, a protein hormone produced by the pancreas. The problem starts when the pancreas cannot produce insulin or it produces too little of it. This results in the sugars accumulating in the blood and tissues, causing defects in various parts of the body.

This condition is called diabetes mellitus, to distinguish it from another disorder, diabetes insipidus.

There are four types of diabetes:

1. Prediabetes - when the blood sugar levels are high but not high enough to full-blown status.
2. Type 1 - The pancreas does not produce any insulin. 10% of the diabetics have this condition. They have to take insulin injections or medications lifelong.
3. Type 2 - The pancreas does not produce sufficient insulin, or the body cells are unable to make effective use of the insulin produced. 90% are Type 2 diabetics.
4. Gestational diabetes - It occurs in expectant mothers. Either their pancreas cannot make insulin or their bodies use it effectively.

Symptoms

The first symptoms are abnormal thirst and urination. Because of large amounts of sugars in the blood, the kidneys produce huge amounts of urine.

Another symptom is the loss of weight because of fluid loss and the body's inability to use carbohydrates. Diabetics also experience:

- Blurred vision
- Fatigue
- Irritability
- Itching of the penis and vulva
- Tendency of boils and skin infections
- Ulcers on the feet
- Pins and needles in the hands and feet
- Numbness

If untreated diabetes may lead to:

- Cardiovascular diseases, angina, breathlessness
- Stroke
- Kidney blockage and failure
- Nerve damage, swelling of the legs, foot ulcers
- Cataract, blindness, retinopathy

Diabetes, therefore, needs proper treatment, else it can kill, maim or blind. Three things are important for a diabetic to observe:

1. Proper diet – with less sugar-containing foods
2. Weight control
3. Insulin medications

All diabetics experience hypoglycaemia at times, due to excess insulin. They feel sweaty, faint, and unsteady. Their behaviour and movement become disturbed and disoriented, like a drunken person. In such times they must have some sugary foods, such as a chocolate bar or something sweet.

Diabetes is tough but it needn't be so. Since it has something to do with lifestyle and diet, diabetics need to remind themselves that they cannot overindulge. Walking is one easy and excellent exercise.

Diabetes can be hereditary. If someone in the family has it, chances are the progeny might also get it.

Though diabetes is still incurable it is very much controllable and should not be left untreated. One can lead a normal life with the disease, with some discomfort.

What Other Hope is There for Diabetics?

Whatever modern medical knowledge may say about diabetes, there is hope in treatment by natural and alternative means using turmeric and its amazing anti-inflammatory and antioxidant ingredient, curcumin.

The phenolic compound curcumin in turmeric has been a subject of over 800 researches and still counting. Not surprisingly, it exhibits phenomenal properties that help prevent or treat a host of diseases. Studies of the action of curcumin in turmeric reveal the important role it also plays in alleviating diabetes and its associated complications.

In diabetes, especially the type 2 kind, inflammation plays a big role. The cytokines that help the immune system respond to diseases can turn bad and pro-inflammatory.

They team up with the transcription factors and enzymes and cause insulin resistance. Curcumin, however, is found to effectively counter such and other anomalies.

Many [studies](#)⁴ have found that curcumin in turmeric:

- Modulates blood sugar levels and improves metabolic status in diabetic conditions.
- Modulates blood sugar levels and raises the antioxidant status of the pancreatic cells.
- Raises plasma insulin with a significant reduction in serum and liver cholesterol, blood triglyceride, free fatty acids and phospholipids through its antioxidant and free radical scavenging properties.
- In combination with insulin, it alleviates neuropathic pain which is one of the most difficult types of pains to treat.
- Reduces renal dysfunction in nephropathy of the kidneys
- Reduces oxidative stress and improve functions of the liver
- Reduces total protein-albumin-globulin and albumin-globulin ratio, levels of urea, uric acid and creatinine.
- Prevents development of type 1 diabetes
- Improves cognitive deficits in strokes and other neuropsychiatric deficits and thus helps prevent oxidative stress in brains

Altogether, turmeric is capable of improving the effects of diabetic medications and help in controlling the disease. What's more important it reduces the risks of developing insulin resistance, a physiological condition that induces cells not to respond to the normal actions of the insulin hormone.

What You Can Do

Whether you are diabetic or not, let turmeric enter your daily diet. If you are diabetic it will help you control the condition better, maybe even reverse it. If you are not diabetic, you can prevent it (and many other diseases) from happening.

But whatever you do look out for the [best turmeric](#), natural and organic stuff to get the best results. Soon you might even say, farewell to diabetes.

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Chapter 9 – Lose Weight Naturally with Turmeric

The Truth About Obesity

It kills.

That's a pretty blunt way of saying, but it's true.

Of course, not everyone dies of obesity. But at least 2.8 million people die each year because of the problem of weight, says the [WHO report](#)¹. In fact, obesity is the fifth biggest cause of death worldwide. By 2025 nearly 18% of the world's male population and 21% of the female population will become overweight. In the USA alone right now 68% of the population is already overweight.

That's pretty grim news, at any rate.

Even if it doesn't kill, obesity is acutely discomforting. It leads to other health problems and risks, and entails adverse metabolic effects. Risk of other health complications includes:

- High blood pressure
- High cholesterol
- Type 2 diabetes
- Coronary arterial disease
- Stroke
- Gallbladder disease
- Arthritis
- Sleep apnea
- Some cancers such as uterine, breast, and colon
- Hip and joint problems

Ideal BMI

Those among us who have the problem of being overweight understand the odds we have to deal with every day.

So what does one do if weight becomes a problem?

There is hope aplenty and there's nothing to worry much, provided we maintain a healthy lifestyle.

What must be remembered is to keep the BMI – the body mass index- in check. The ideal BMI is between 18.5 to 24.9 kg/metre² for adults. BMI is the relation of body weight to height. Higher BMI would increase the risks from moderate to high.

To calculate your BMI use the formula in this [link](#)².

To lose or not to lose weight

Much of the losing weight regimens concentrate on lower calorie intake. But that's like moving in the wrong direction. Research has shown that counting calories alone does not work. The body, scientists have found out, tends to balance energy intake and expenditure. Caloric restriction must couple with adequate and regular physical activity to maintain the ideal weight. Moreover, healthier food choice needs conscious consideration:

- Low on calories – fats and sugars, and processed foods
- Low in salt and rich in micronutrients – more fruits and nuts, vegetables, legumes, and whole grains.

So the secret to weight loss is eating good food. That is, balanced and right food in every way, and the right number of calories. Adding some turmeric in your food helps a great deal.

Turmeric and Weight Loss: The Studies

Turmeric, the ubiquitous golden spice of Indian kitchens and curries is also famous as a healing spice. The main component responsible is curcumin, a phenolic phytochemical with incredible health benefits.

Research [studies](#)³ conclude that mice fed with calorie restricted diet lost weight and reduced belly fats. However, mice fed with curcumin-supplemented diet got the benefit of the compound's anti-oxidant and anti-inflammatory activities. That is to say, caloric restriction cuts weight and fat, and curcumin in the diet help curb oxidative stress and systemic inflammation. Thus both regimens together contribute to weight loss and reduction of other diseases linked with obesity.

So, turmeric 'trains' the body to lose weight. By breaking the chain of oxidation, inflammation and impaired metabolism. These actions remove conditions contributing to obesity. The body then moves toward ideal weight state through good metabolic functioning and hormone balance.

In the above studies, the mice fed with dietary curcumin had higher food intake but did not lose or gain weight. The scientists said that this may be due to higher energy expenditure because of the activation of the 'master switch' enzyme, AMP Kinase. This enzyme influences cellular energy processing and regulates body fat composition. At the same time, curcumin deactivated the enzyme Acetyl CoA carboxylase, which regulates fatty acid synthesis and degradation.

Another [study](#)⁴ at Tufts University found that curcumin suppressed density of microvessels (smallest blood vessels) in adipose (fat) tissue in mice. This was through suppression of angiogenesis (formation of new blood vessels) that resulted in less expansion of fat. They also found that livers of those mice had lower blood cholesterol and fat. Later studies also found that curcumin inhibits angiogenesis in humans.

Other [studies](#)⁵ found that curcumin intervention in high-fat diets of mice increased their energy expenditure and raised body temperature (thermogenesis). This reduced white fat while the brown fat increased.

Another [interesting finding](#)⁶ showed significant weight loss, reduced waist and hip circumference in human subjects supplemented with curcumin, piperine and phosphatidylserine.

Yet, more research is needed to establish curcumin's direct effect on obesity in humans, but no doubt remains that it aids weight loss through the mechanism of inflammation reduction.

The Bottom-line

The news for those who struggle with weight is encouraging. Turmeric is at hand to help you in every way. It burns waist fat, it fights inflammation, and its antioxidant properties help keep other complications off. Of course, you have to do your bit by eating the right calories and exercise more. And leave the rest to turmeric.

And be sure to get only the [world's best turmeric](#).

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Chapter 10 – Turmeric for Healthful Skin and Beauty

Beauty is skin deep they say. This may be true considering that the skin forms the largest organ of the body, covering about 1.9 metres square. The *skin*¹ is also the fastest growing organ, making up an approximate 16% of body weight.

It is undoubtedly the most visible part of the body, the very identity of the person. We notice flawless and beautiful skin in an instant as we would skin blemishes.

The skin is the body's first line of defence against elements and harmful microorganisms. It protects the internal organs from the extreme climate and environment. It is impervious to water, shields the body from infections and produces proteins and vitamin D essential for skin health. There are three layers of skin:

1. The epidermis, the outermost layer, protects you from the elements and gives you your skin tone and texture. It produces the protein keratin and the skin pigment melanin. The Langerhans cells of the epidermis protect your skin from microbial attacks.
2. The dermis, the middle layer houses collagen, sweat and oil glands, and hair follicles. The proteins collagen and elastin, essential for skin support, health and elasticity, are synthesised here. You feel pain and touch through the dermis's receptors.
3. The hypodermis or subcutaneous layer is made up of fatty and connective tissue. It conserves body heat and protects inner organs. Once this reduces the skin sags.

Diseased Skin Conditions

The skin keeps bearing the brunt of many environmental attacks. It can develop adverse conditions if we don't take care:

- Rashes and abscesses
- Dermatitis
- Eczema and ringworm
- Psoriasis
- Pimples and acne
- Cancers – melanoma, basal carcinoma, squamous carcinoma
- Photo-damage
- Herpes and hives
- Shingles and scabies
- Actinic keratosis
- Sunburn
- Wounds

Daily Skincare

When you know the importance of the skin you must have the good habits nourish it with the daily routines of:

1. Eating a balanced diet and drinking plenty of fluids
2. Cleaning and moisturizing
3. Protecting skin from harmful rays of the sun

You have to be aware of your skin type, inspecting every part of it, for precision care. Cancer of the skin is the most common type of cancer and so you have to look out for unusual changes that crop up, like discolourations, patches, or moles that should not have been there.

What Treatments Are There for Skin Issues?

Major skin problems require proper tests which, once confirmed, require drugs and, often, surgery. The skincare industry, both pharmaceutical and cosmetological, is an enormous multi-billion dollar business today. Skin treatment with corticosteroids, antibiotics, anti-fungal and anti-viral drugs is commonplace. Then there are antihistamines, immune modulators and moisturizers. Though this costs money the guarantee of a total cure is still uncertain.

With Turmeric's Great Properties, Healing Speeds Up

Since over 4,000 years ago Indian Ayurveda has known the beneficial effects of turmeric on the skin. That is why it plays such an important role even in social functions like marriages. Turmeric paste is smeared over the bodies of the bride and groom for flawless skin.

As spice turmeric is commonplace in Indian and Asian kitchens. It is also catching up in the west. The excellent and powerful anti-oxidant, anti-inflammatory and antiseptic properties of the rhizome are now well-known. But there is growing evidence about its dermatological uses.

Turmeric medications, either ingested or topically applied, have indicated effectiveness in producing favourable results. Conditions include acne, alopecia, atopic dermatitis, facial photo ageing, oral lichen planus, pruritus, psoriasis, radiodermatitis, and vitiligo.

According to the [International Journal of Dermatology and Clinical Research](#)² topical curcumin to be more effective in conditions of injury or inflammation. One reason could be the low-bioavailability rate of ingested curcumin as compared to topically applied turmeric which bypasses gastrointestinal routes. The topical application renders better absorption through the skin.

The anti-inflammatory properties of curcumin inhibit phosphorylase kinase, the enzyme responsible for the breakdown of glycogen. This later down-regulates other pro-inflammatory reactions and modulates the inflammatory response.

Curcumin induces apoptosis (natural cell death) in damaged cells, like in sunburn and burns. This elicits rapid formation of replacement cells, speeds up the healing process, and rules out malignant cell transformation.

Curcumin in Acute Injuries

Among the most common injuries are cuts, wounds, and burns. These affect any part of the body especially the most exposed parts. Topical application with turmeric paste heals the conditions, leaving no scars.

Knife wounds, even where gashes are deep and portions severed will heal without loss of sensation. Crush fingers, like when slammed by a door, would incur unbearable pain. This would be resolved within a few hours' time with topical turmeric application. Similarly, scars resulting from stitches are effectively removed.

Curcumin in Inflammatory Skin Conditions

Many inflammatory skin conditions such as **Rosacea** (severe redness of the skin linked to several autoimmune diseases) are dramatically improved with the application of turmeric.

Acne and Pimple conditions also do not stand a chance with turmeric combined with appropriate, vitamin A rich balanced diet.

Psoriasis is an autoimmune deficiency disease with genetic origins. Other factors like injury, stress, and pollution can exacerbate the condition. Phosphorylase kinase enzyme is the main culprit. Turmeric's anti-inflammatory properties are found to cure the condition when combined with other regimens like proper diet and avoidance of polluting elements.

Turmeric, the world's first cosmetic

Indians have used turmeric as cosmetic for millennia. It improves complexion, removes blemishes and facial hair, and does away with pimples and acne.

As an anti-fungal and anti-bacterial agent, it is an excellent remedy. It inhibits infections by bacteria and yeasts and fungi that cause cellulitis, dermatitis, and eczema. Unlike most antibiotics, curcumin displays a wide spectrum of action against many species of bacteria.

Benefits of turmeric are plenty and amazing. It calms irritations, reduces redness, banishes blackheads and scars left by acne. It clears away suntan and other photo-damaged conditions.

Turmeric the Versatile Spice

With over 300 components in its composition, the turmeric plant has tremendous versatility, suitable for multiple applications. It has the skin-repairing capability that helps build collagen and maintain tautness and elasticity. It helps keeps wrinkles away and the skin stays moisturised, youthful and radiant. It makes sense to stay healthful with turmeric.

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Chapter 11– Staying Ahead in Health and Wellbeing with Turmeric Milk

When Health is Not an Issue for You

You are a blessed one. You are young, hale and hearty. No health issues. No visits to the doctor. No fat medical bills. No cares. No worries.

Fantastic!

Some other people are not so blessed.

Really! What with the hectic life we have today; the rat race; the dog-eat-dog culture; the deadlines to meet...

Life's tough.

And the Lifestyle?

Well, truth be told, we are - many of us - unwitting (mostly choiceless) partners to a fast-paced, health- unfriendly lifestyle.

Can't blame ourselves. That's the way the world's turned. And it affects, with undesirable consequences, every facet of our short lives.

In the end we end up with problems – physical, emotional, mental...and other associated problems (financial is among them).

But you know what? The good news is: all that's avoidable. In toto. If only there's someone to guide, someone to show the way, with the plan.

It's simple, really. All you need is a drink.

A drink?

A drink. A turmeric-blended drink.

In the previous chapters we spoke about the many amazing properties and benefits of turmeric and the many illnesses it can help prevent or treat.

So if you are healthy (or not as healthy as you ought to be) you can still get a head start towards health and wellbeing with the great habit of including turmeric in your diet plan.

Your Health, Our Concern

Now your health is also our concern and we want to show you how uncomplicated it is to achieve and maintain good health. Besides a healthy lifestyle regimen, a little tweak here or there in your diet plan is all you need.

Lifestyle is decidedly your personal concern which you alone can regulate according to your own sensibilities. What we can guide you with is a diet plan.

In India they have a great drink called '**Haldi doodh**', turmeric golden milk. What they do is boil some milk and add turmeric (some add other spices too) to it. They drink it at bedtime.

This takes care of most health issues. It keeps the gut healthy, it flushes toxins, it strengthens the immune system.

It makes the skin glow and improves your hair.

In fact, it shines out the real you inside you.

Before we start off with 'turmeric golden milk' let us remind you that turmeric has curcumin, which is the ingredient with mighty properties – antiseptic, antibiotic, antioxidant, antidiabetic, antifatulent and more.

The problem with curcumin is that it is a hydrophobic crystalline substance that is not easily absorbed into the system. That is, it gets metabolized and eliminated rapidly. It passes out straight through the gut. (Some scientists believe this may be one of the reasons for turmeric's low toxicity)

That renders it pretty useless you might think and you may not be so off the mark. That's why turmeric is to be combined with other ingredients (except when you take curcumin supplements in concentrate, or tablet, form). This makes the curcumin latch on to the ingredients and gets absorbed into the system. That is, making turmeric more bio-available.

Black pepper is one among such ingredients that makes the turmeric [more bio-available by 2000%!¹](#)

That's why our wise grandma used to give us cough and cold mixtures of turmeric, pepper, mustard oil and honey. Turmeric alone is not very effective, she taught us.

And Now for Haldi Doodh.

Put in half a litre of milk on the boil. Add a teaspoonful of turmeric and stir. The milk will assume a deep golden colour. When boiled take the liquid off the stove and let it cool off. Pour into tumblers. Put sugar if you wish. Honey is more preferable. But sprinkle some ground peppercorns from the mill and stir thoroughly before you swig it down. A warm sensation will flow down your gut and you will have a beautiful, settled and soothing feeling. And you will sleep like a baby!

That's turmeric milk. Make it a nightly habit that'll turn your health on its head and let you sail through life with nary a worry!

Now, you have a problem. You are not lacto-tolerant. Milk is a no-no for you.

No sweat. Substitute milk with anything else. Tea, coconut milk, lemon water... there are ways and more ways. Your imagination is the limit.

We don't need to remind the importance of using only authentic ingredients, obtained from reliable sources. Organic is always better too.

However, to Make It Easy We Have a Suggestion

In our product line we have 4 golden milk blends with a turmeric at its core:

1. [Lakadong Ker](#) – a classic golden milk
2. [Kids Lakadong](#) - a mild golden milk for kids
3. [Lakadong Mirch – a spicy golden tea made with bhut jolokia](#)
4. Lakadong [Gold](#) – a power punch turmeric ginger shot.

Lakadong is the turmeric with the highest curcumin content. It's organic too and the [best in the world](#).

In the golden blends you will discover other great ingredients:

- Ing Makhir, the medicinal ginger
- Black pepper
- Long pepper
- Cinnamon
- Black cardamom
- Stevia
- Bhut Jolokia (the world hottest chilli)
- Szechwan pepper

The other ingredients have great medicinal properties in their own right. Black pepper, with its piperine, help increase curcumin absorption into the system.

What's in Store for You?

When you follow this regimen to a tee you'll discover soon enough you have fewer health issues.

You'll improve your gut health. Beneficial gut flora will flourish that will aid your digestion immensely. And when your digestive system functions superbly the other systems will have less difficulty in following suit.

You'll clear your air passages

Second, you'll build immunity that will be protection from future health problems.

Finally, life will never be the same, health-wise, both mental and physical. It will be better than you hoped. Your heart, liver, skin, brain, joints...every part of your body will be great. You'll save money too.

So why not take a chance with turmeric, starting with turmeric golden milk, today?

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Chapter 12 – Wish Away Your Common Blues with Turmeric

The previous chapters have spoken a lot about big diseases and how turmeric can help alleviate them. But what about common blues like cuts and bruises, rashes and skin problems that keep cropping up every now and then?

In Indian Ayurveda and other established systems of traditional medicine, structured methods of dispensing already exist.

But we are talking about sudden emergencies here, which demands immediate action. There is no time or opportunity to go to a practitioner, which costs money, with still no guarantee of resolution of the problem.

Well, we can follow the simple folks' style, folks who are removed from mainstream communities. Like that of the Khasi tribespeople of [Meghalaya](#)¹. They have their own ingenious ways of healing with herbs. Turmeric included.

Here's what they do in exigencies.

These folks from deep villages don't normally go far from their own kitchens. This is not surprising. The ingredients they use in cooking also very often double up as the very ingredients for healing. Let us learn from these folks how to do away with very common health problems using turmeric as the main component.

Coughs, Sore Throats and Colds

You will need:

1. One level teaspoon of turmeric powder or dried slices or one-inch piece of fresh root
2. One teaspoon ginger extract - from about an inch piece of ginger (you can also use the entire pounded ginger)
3. 10-15 black peppercorns – crushed to fine powder
4. One teaspoon oil (mustard/coconut/olive)
5. One dessertspoon honey

Mix all the ingredients thoroughly in a mortar using a pestle. Add a little boiling water for volume. Take a teaspoon of the mixture three to four times a day. You should be okay within two days.

Wounds, Cuts, Bruises and Burns

You will need:

1. A level teaspoon of turmeric powder or a piece of the raw root, or slices
2. A teaspoon of oil (coconut/mustard) to give viscosity

Mix thoroughly and apply over the area. The application will stop any bleeding, reduce pain and halt infection. But make sure you bandage properly otherwise the turmeric will stain your clothes permanently!

In case of burns use a little honey as well.

You should be okay in a day or two.

For Insect Bites:

You will need:

Turmeric root/slices/powder – according to the size of the wound

Make a paste with a little water and apply over the bite area. This will stop any bleeding and burning (from the poison). Inflammation and infection will stop.

For Digestive and Stomach Problems:

You will need:

1. One level teaspoon turmeric powder
2. One dessertspoon honey (or a teaspoon of sugar)
3. Pepper powder from 6-8 black peppercorns
4. Half a cup boiling water

Mix all the ingredients thoroughly and drink. Take this concoction 2-3 times a day. Your condition should improve within two days. This mixture is also effective against ulcers, gas and acidity.

For Eczema in the Toes of the Feet

You will need:

1. Turmeric powder/slices/root
2. Lemon juice

Make a paste of the ingredients and apply on the affected area. Bandage properly to avoid staining. This is effective for healing infections of the nails too.

For Pimples and Acne:

You will need:

1. Turmeric powder/slices/root
2. Lemon juice
3. A little honey

Make a paste of the ingredients and apply on the affected areas of the face, after washing and drying it. Leave for a few hours and wash thoroughly with warm water followed by cold water.

(It will give faster relief if you can leave it overnight if you can cover your face with some cloth to avoid staining the pillow and bed sheets).

For Mouth Ulcers and Mouth Wounds

You will need:

1. A level teaspoon of turmeric powder
2. A glass of hot water

Mix the turmeric powder in the hot water and gargle (when a little cooled).

(Tip: turmeric also adds sparkle to your teeth and heals your gums. With your finger, apply a little powder and massage. Then rinse).

For Asthma Attacks:

You will need:

1. A level teaspoon of turmeric powder
2. half a teaspoon of pepper powder added to
3. one cup hot water or soup

Mix thoroughly and sip slowly. This will give some relief.

There's Much More You Can Do With Turmeric

The number of problems you can solve with turmeric is mind boggling. There are over [560 diseases²](#) that turmeric is found to be effective against. This is mainly because of the mighty anti-oxidant and anti-inflammatory properties especially of its main ingredient, curcumin. So, making turmeric a daily dietary habit makes a lot of sense. It will spare you from a host of nagging health problems, solve beauty issues, save you money and above all, allow you to enjoy life as you should.

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Chapter 13 Ways to Use Turmeric in Food

So far we have been talking about how turmeric helps when we are sick. Talking about sickness alone can be pretty depressing.

Life would be an unexciting existence if there's no colour and taste. Not to fret. Turmeric is there to change all that. Let's see how we can use this versatile turmeric as the spice to liven up our every-day otherwise mundane food and drink.

Rustle Up Some Kitchen Magic With Turmeric

Many of us love rice. But don't we sometimes get tired to see the same staid white stuff on our plates? Well, maybe some turmeric would add spice to it (pun intended), besides great colour. Half a teaspoon is often all it takes to do the trick. And if you want a better job, there's a great recipe [here](#). Vegans will love it too.

You'll love Turmeric Fused Cider Tonic, Vegan Creamy Turmeric Cauliflower Soup and Turmeric Breakfast Pancakes. Or maybe you'll love to butter your assorted breads with turmeric flavoured butter? Get to know how to make these [here](#).

And if baking is your forte why not use a dash of turmeric on your creations? That would certainly add to the brightness besides pep up the bakes with delicate hints of earthy flavours. Colour is good. [Colour stimulates our appetites](#)¹, scientists say. It heightens flavours. Definitely worth to find out!

Well, there are ways and more ways to put turmeric to work in our foods and beverages. Add some to smoothies, fruit juices and shakes. Put some into teas (sans milk is best) along with ginger and pepper (you'll sing better they say, and your tummy will move as smooth as silk!). Or, make a coffee latte, a-la the guys at Starbucks. Use the imagination. Do more with turmeric.

Adding turmeric to your veggies is one great way of enhancing tastes. One way is to add it towards the end of the cooking, minutes before you take it off the stove (as in the spicy potatoes below). The raw aroma lingers, heady and rich. A sense of healing seeps through you as you eat your invention. Why not try these two very simple recipes today? You'll love them. One is with okra (bhindi or ladies finger) and the other with the humble baby potatoes. The ingredients are so minimal but the tastes are divine.

Crispy Okra

(Preparation time 10 minutes; cooking time 20 to 30 minutes)

Ingredients:

1. 500 grams okra
2. 1 teaspoon cumin seeds
3. 2 dried red chillies, broken into smaller pieces
4. 4 dessertspoons oil
5. 1 teaspoon turmeric powder
6. Salt to taste

Method:

1. Wash, dry and cut the okra into either ½ inch or 1-inch sizes
2. Heat the frying pan on high flame. Pour the oil and heat it till it smokes
3. Reduce the flame to low and put in chillies, cumin and stir a bit
4. Put in the okra and stir well so the oil coats it thoroughly
5. Raise the flame to medium. Continue frying for 5 minutes, stirring occasionally so the veggies don't burn
6. After 5 minutes put in one teaspoon of turmeric and salt to taste. Stir or toss to mix well. Toss, rather than stir, to avoid breaking the pieces. Continue frying for the next 15 minutes, using a flat spoon to spread the okra all over the pan.
7. At this point, you will notice the okra has reduced in size and the oil is visible at the bottom. The okra is now done. If you want more crispiness fry for some more time.
8. Tilt the pan on one side using a cup as a prop. This will let the oil flow to one side. Use this oil for another frying.
9. Now spoon the crispy okra onto a serving dish and serve with rice or flatbread.

Spicy and Sour Baby Potatoes

(Preparation time 5 minutes; cooking time 25 minutes)

Ingredients

1. 500 grams baby potatoes (if you use larger potatoes cut into 1-inch cubes)
2. 1 teaspoon cumin seeds (roasted and powdered)
3. 1 ½ teaspoon coriander seeds (roasted and powdered-optional)
4. 1 teaspoon turmeric powder
5. ½ teaspoon black pepper powder, freshly milled
6. ½ teaspoon (more if you want) chilli powder
7. 2 dessertspoons oil for frying
8. Juice of one lemon or a ball of tamarind
9. Salt to taste

Method

1. Wash the baby potatoes thoroughly and boil them in a pan with salted water
2. When about three-fourths done (about 15 minutes) remove, drain off the boiling water and allow the potatoes to cool. When cooled, peel the jackets off.
When using baby potatoes you have the option of not peeling off the jackets.
3. Meanwhile mix all the spices, including the turmeric, and keep them ready
4. Squeeze the juice of one lemon or place a ball of tamarind in hot water and squeeze off the juice
5. On high flame heat, the oil in a frying pan till it smokes
6. Put the baby potatoes in and stir, ensuring they are thoroughly coated with oil
7. Reduce flame to medium and continue to fry till they are browned, stirring or tossing occasionally so they brown evenly
8. Prick the potatoes with a fork to feel if they are almost done (they should remain whole and not break)
9. Pour in the spice mix and continue stirring till all potatoes are coated.
10. Sprinkle the lime or tamarind juice
11. Let them cook for about 2 minutes more. Toss occasionally for even browning.
12. Remove from fire and serve.

(Tip: if you want some more flavour you can sprinkle in herbs like chopped coriander leaves, chopped parsley or chopped dill).

Well, there's more to turmeric's colour than meets the eye (and the taste buds) we are sure. But whatever you do get the best turmeric, from reliable stores. You'll ensure for yourself colour, taste and health. And an experience hard to forget.

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Chapter 14 – The Afterword - Revive and Regenerate with Turmeric

A plethora of health foods and drinks crowd the market these days. You are faced with another problem, that of choice.

Many products promise elixirs of life, as if by magic all of life's health problems can be wished away.

But is reality that simple? Perhaps no. Or, it could be yes, with a little help from turmeric.

True, difficult diseases cannot be played with. They need every serious consideration and the best treatment medicine can offer.

But does one need to slip into ill-health in the first place to warrant such a predicament of massive health issues?

Absolutely not! There are strategies galore, turmeric apart, that enable living a happy life of optimum health and wellbeing.

The Regular Regimen

We are all aware of the requisite regimen: right food, right habits and the right lifestyle. Unfortunately, these things are not easy to achieve and maintain these days. Why?

Because the fast pace the world moves with now is unprecedented. Is there no hope then but to fall into that same vicious cycle: fall sick, go to the hospital, cough up the money (without question) and suffer the stress? Then, repeat!

There is hope. Here's what you do.

Use Turmeric, Revive and Regenerate

Before that, let's be clear about one thing. There are no two ways about exercise and lifestyle. We consider this to be the foremost step anybody must take to be healthy and stay healthy.

Next, ready yourself to experience and reap the incredible health benefits of turmeric. Turmeric, the wonderful root (it's a rhizome actually, an underground stem) is increasingly being rediscovered and relied upon for its vast health-giving properties. What ancient traditional knowledge has always believed is now confirmed by science.

As a spice, it has the versatility of a virtuoso. Its mild and earthy flavour add a fragrance that is subtle and full-bodied. Use it raw or curry it, or let it sizzle on meats and fries, it will lend an aroma that lingers on the palate. As turmeric fulfils a meal it completes its job to heal.

With more revelations pouring in from more research turmeric continues to attain importance and demand. In India and the South Asian countries, it is not a problem to get turmeric in powdered, dried slices or raw form. The problem is that there are many varieties of the plant and choosing the best might be a tough job.

In addition, there are now any number of turmeric (particularly curcumin) supplements to choose from, including turmeric essential oils. Still, nothing compares to the powder or root itself which carries all the goodness of turmeric. This implies purchasing from the right source is the most important thing to do if you desire a product with the most curcumin content.

Most turmeric (powders and roots) have curcumin contents in amounts of 2-3%, which will suffice if you use it for culinary purposes. Even then that's not quite okay because if you want more colour or flavour you will have to add more of the stuff. But if more potency is what you want then only the best product will do.

Lakadong Turmeric, The World's Best Turmeric

Among all turmeric specimens tested so far the Lakadong variety that grows only in Meghalaya's East Jaintia Hills district has the highest curcumin content of 7.4%. [Megha-1](#), a clone of Lakadong, developed by the Indian Council of Agricultural Research (ICAR) in 2014 came a close second with curcumin content of 7%. Other farmers have tried growing it elsewhere using the same root-stock but the outcome was not with high curcumin. Soil and other climatic conditions may be responsible.

Recently, Lakadong turmeric got the Geographical Indication Tag for its unique properties. The special feature of Lakadong turmeric is that it is still grown in the traditional and organic way without the use of fertilizers. The end-product has a deeper orange hue than other varieties. Its aroma is more flavourful and only a small quantity is required to lend colour and taste to the dishes it spices. Once you get the taste of Lakadong, the other turmeric varieties pale in comparison, literally.

Getting Lakadong turmeric is not that easy. Sown area is small and production is low. Seeing the high demand, has resulted in unscrupulous sellers mixing other varieties into it and pass it off as the number one. The problem the consumer faces is that he has no way of finding out the genuineness.

Getting the Best

Only growers and sellers from the source will be able to provide the real Lakadong. If you're ready to get genuine Lakadong turmeric go to [Zizira](#). You will find what you are looking for. The store has varieties: powders, dried root slices and blends made from the stock obtained straight from the farmers themselves. What's more, the stocks are as fresh as they are pure. You will be satisfied and rest assured that it has 0% adulteration.

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