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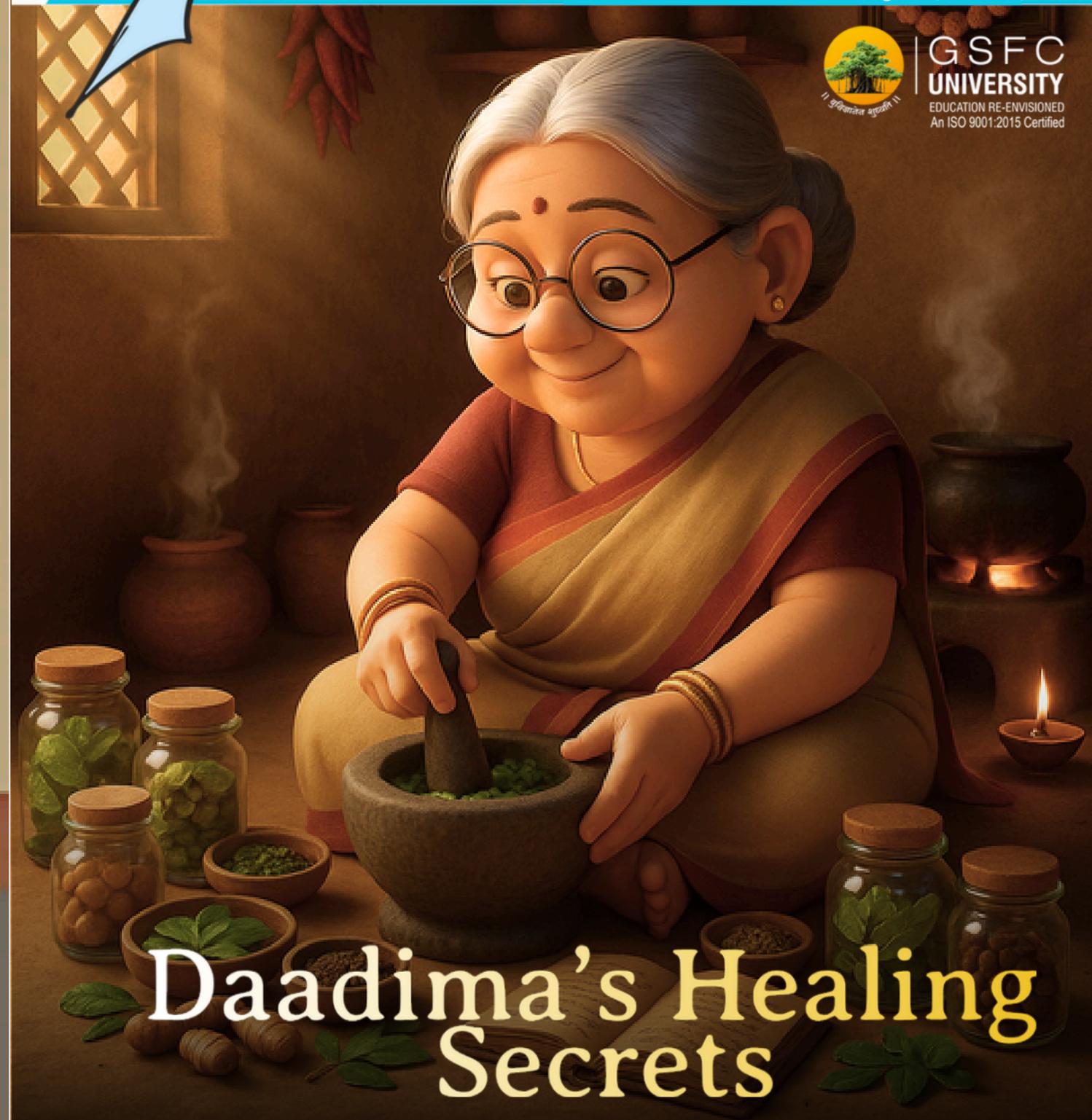
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Daadima's Healing Secrets



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MESSAGE FROM EDITOR'S DESK

With immense pride and excitement, we bring to you the 13th edition of Science View Magazine, a special issue dedicated to the intriguing theme, "The Science Behind Dadi ke Nuske." This edition takes you on a nostalgic yet intellectually stimulating journey, where the everyday remedies and rituals handed down by our grandmothers are re-examined through the lens of modern science. In a world increasingly driven by clinical trials and evidence-based research, we often overlook the deep-rooted logic and scientific potential hidden within traditional wisdom. It also explores how simple routines like consuming soaked almonds and warm milk or placing wet towels during summer aren't just cultural habits but actions backed by neuroscience, thermoregulation, and nutrition science. Our talented contributors from GSFC University have seamlessly blended storytelling with scientific analysis, making this edition a unique intersection of memory, culture, and academic curiosity. Their articles reflect not just research but reverence for the knowledge systems that have shaped our households and health in quiet yet powerful ways. As always, we are grateful to our student designers and writers for their passion and dedication, and to our readers for continuing to journey with us through diverse scientific narratives. We hope this edition not only enlightens but also encourages you to look at your family traditions with fresh eyes as sources of inspiration, inquiry, and perhaps even innovation.

*-Dr. Aditya Puranik,
Sr. Assistant Professor,
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WHAT LABS CONFIRM, DADI ALREADY KNEW BY HEART

-Dr. Priya Goel and Mistry Foram

Have you ever paused to think about the warmth of mustard oil on a winter morning, the sharp sting of kala namak on raw mangoes, or the bitter comfort of kadha during a cold? As children, we often wrinkled our noses at these homemade concoctions, unaware that we were sipping on centuries of inherited science crafted without clinical trials, peer-reviewed journals, or laboratories. In our rush to modernize, to digitize, to globalize we left behind something more precious than we realized: the everyday wisdom of our ancestors. They didn't need food pyramids or calorie counters. Their science was wrapped in banana leaves, served in brass thalis, and passed down in quiet instructions "chew slowly," "eat with your hands," "don't drink cold water after curd." Yet today, after roaming the world in search of wellness chasing keto, paleo, gluten-free, low-carb, high-protein trends we're slowly coming full circle. Why? Because what we are discovering in laboratories today was already practiced in our kitchens decades ago by people who had never seen a microscope. urmeric, now labelled a global 'superfood', was once just something our grandmother added to our milk when we coughed during winter or having some injuries. Ghee, now glorified by dieticians across continents, was always her golden rule for immunity and strength. Even jeera pani, recently rebranded as a "natural detox", was her go-to answer to bloating long before influencers sold it in mason jars. And let's not forget kacchi haldi with honey, methi seeds soaked overnight, hing for colic, neem for skin, and Tulsi leaves under the tongue every one of these practices rooted not in trend, but tradition. What we called "Dadi ke nuske" were actually micro lessons in biochemistry, gut health, and natural medicine. And yet, modernity made us trade wisdom for convenience. We welcomed processed syrups over hand-pounded herbs, swapped fermented achar for packaged preservatives, and mocked herbal cures until they came back with Western branding and a hefty price tag. But now, in the name of science, we are rediscovering what we had all along. The irony is loud multinational companies are bottling what our grandmothers gave us for free. So, have we truly progressed, or just lost our way and circled back? So, the real question is: in a world obsessed with innovation, can we finally learn to value intuition? Can we respect the legacy of those who practiced science without needing to prove it because it simply worked?

And just as this question lingered in the air like the scent of roasted spices, its answer came walking in, quietly, wrapped in the folds of a cotton saree and carrying a plate of warm "Sing ke Laddo". It was this very legacy that came alive one monsoon evening in a bustling home in Ahmedabad, where three cousins; Meera, Naina, and Kabir were unknowingly living examples of modern missteps. Meera, deep into her Gauri Vrat, had traded traditional nourishment for flashy vrat snacks and Instagram able smoothies. Naina, pregnant and proudly independent, popped prenatal pills and sipped fancy protein shakes, ignoring every homemade tip passed down from generations. And Kabir, the gym-addicted cousin, fuelled his body with imported powders and diet bars, dismissing everything local as "too oily" or "too old-fashioned." But their bodies told a different story. Meera collapsed from weakness one morning at college her iron levels had tanked. Naina's sleep grew restless, her legs cramped, digestion failed her. Kabir, despite his shredded workouts, started experiencing fatigue, mood swings, and hair fall.



Concern filled the household like heavy clouds. That evening, as the rain tapped gently on the windows, Dadi walked in not with lectures, but with a brass plate of warm, golden Sing ke Laddo. She said nothing at first, just placed one in each of their palms, her eyes kind but firm. "Eat it. Then ask." Meera was the first to break the silence: "Dadi, I thought fasting meant no energy foods?" Dadi smiled, "Beta, fasting doesn't mean weakening it means cleansing. During fasting, peanuts from this laddos provide sustained energy and support metabolic health. They are rich in protein, healthy fats, fibre, and antioxidants key to preventing muscle break-down and maintaining fullness. A randomized trial showed daily peanut snacking aided weight management, reduced blood pressure, and improved fasting glucose levels in adults at risk for type 2 diabetes. Cashews supply quality plant protein, mono-unsaturated fats, magnesium, and antioxidants all important for satiety, metabolic balance, and stable energy during fasts. An 8-week study in overweight adults found daily cashew intake significantly reduced fasting insulin and LDL/HDL ratio helping sustain metabolism during fasting. Almonds help lower postprandial glycemia and insulin spikes even when consumed before a meal ideal for stabilizing blood sugar after fasting. They also keep hunger at bay. A crossover RCT showed almonds consumed pre-meal reduced both glucose and insulin responses; another study confirmed they reduce appetite versus carb-based snacks. Raisins offer iron, fibre, potassium, and antioxidants supporting digestion, replenishing minerals, and providing low-GI energy after fasting. A 12-week trial found raisins lowered postprandial glucose and blood pressure compared to calorie-matched snacks Animal studies also show raisin supplementation can alleviate iron-deficiency anaemia"

Naina, sceptical but worried, asked, "But is this safe in pregnancy?" Dadi nodded, "Not just safe needed. Shoodh / dry ginger powder helps alleviate pregnancy-related nausea and vomiting without posing significant risks. Ginger contains bioactive compounds like gingerols and shogaols that act directly on the gastrointestinal tract and nervous system to reduce queasiness. A randomized controlled trial confirmed its effectiveness and safety compared to placebo and vitamin B6, with minimal side effects. Ganthoda / peepramul powder Acts as a potent bioavailability enhancer, improving the absorption of essential nutrients particularly minerals like iron and zinc, crucial during pregnancy. Studies show piperine inhibits metabolic enzymes and enhances uptake of vitamins, minerals, and herbal compounds by up to 2000%. When combined with nutrient-rich foods, it ensures mothers receive the full benefit of every bite. And alongside either jaggery or mishri, adequate iron and micronutrient intake helps fetal development and maternal health.

Jaggery is an unrefined sweetener rich in iron, calcium, magnesium, potassium, and antioxidants. In pregnant women and adolescents, daily jaggery supplementation (with raisins) over 8 weeks significantly increased haemoglobin and RBC counts combatting anemia a leading cause of maternal complications In winter, jaggery's warming properties support circulation and digestion and in summer, Mishri offers a cooling alternative while still providing essential minerals."



Kabir, still chewing, raised an eyebrow: "Is this... good for muscle building?" Dadi chuckled, "Even better than your scoops. Ghee contains butyric acid, a short-chain fatty acid that fuels gut health, supports digestion, and enhances immune function all key for sustained training and recovery. Ayurvedic and modern science recognise its role in improving gastrointestinal integrity and providing fat soluble vitamin assimilation, which supports overall metabolic efficiency during intense workouts. Gut resilience helps athletes better tolerate high-protein, high-fat diets without gastrointestinal distress. Immune support reduces workout-related inflammation and improves recovery. Even Coconut which is added is Rich in medium-chain triglycerides (MCTs), which supplies a rapid, efficient energy source that bypasses slow digestion. MCTs are absorbed straight to the liver and quickly converted into ketones fuel that sustains moderate to high intensity exercise and delays fatigue. Walnuts are full of alpha-linolenic acid (plant-based omega-3), along with antioxidants and polyunsaturated fats. Walnuts are a crucial ingredient because they: Omega-3s increase nitric oxide production, encourage vasodilation, and enhance endothelial function - improving blood flow and oxygen delivery to muscles. Their anti-inflammatory compounds can help manage oxidative stress and muscle soreness that can help you recover faster after training Regular walnut intake alongside training improves postural balance, cognitive function, and isokinetic muscle strength in older adults demonstrating real-world training synergy. No crash, no chemicals."

In that moment, their world tilted not with shock, but with quiet realization. These weren't just sweet balls of tradition. Nutrition science they had known all along and were unaware of melding into lifestyle. From that day on, they acted simply and naturally, not because they were forced to, but because they understood. Their modern world had attempted to repackage wellness laced with chemicals, while Dadi maintained wellness through the wealth of wisdom within her. And as they savoured their laddoo now with respect, they realised that not all superfoods come with labels - some simply come with stories seasoned with useful intuition, and served with love. Because maybe, just maybe, they found what they had previously run half way across the world looking for, had been waiting for them in their own kitchen - lovingly stirred with wooden spoon and centuries of trust.

In a world racing towards artificial intelligence, synthetic nutrition, and algorithm-driven health advice, there lies an irony we can no longer ignore: the most authentic science wasn't born in labs, it was simmered in our kitchens, whispered through generations, and shaped by hands that never held a degree. That Sing ke Laddo humble, warm, unbranded is not just food. It is data. It is evidence. It is wisdom, passed down without a podium, a hashtag, or a research grant. It nourished Meera's fast, supported Naina's pregnancy, and rebuilt Kabir's strength not with chemicals, but with conviction. This isn't just about food or health, it's about identity, legacy, and respect for the intellect woven into our culture. It's about recognizing that not all wisdom wears a lab coat—some of it wears a cotton saree, stands barefoot in the kitchen, and says, "Drink this, you'll feel better." Today, as global food systems buckle under processed excess, lifestyle diseases surge, and immunity becomes a billion-dollar industry maybe it's time we looked back to look ahead. Maybe the answers we seek in pills, powders, and protein bars were already simmering in a steel vessel on a slow flame, with a dash of cumin and a mother's quiet knowing. Maybe, just maybe the science we chased across the world was waiting for us at home, in the words of someone who had never stepped into a lab but had healed generations.

So, the next time we look outward for solutions, perhaps we should pause. Reflect. And listen to the quiet genius of our grandmothers. Because in the end, the answers we chase across continents might just be waiting at home in a brass plate, wrapped in a cotton saree, offered with love... and served as a laddu





THE GLOW BEHIND THE DUST

-Dev Patel and Urmil Patel

Have you ever wondered why our grandmothers trusted mud more than medicine? Why does a bowl of wet clay, mixed by hand in the courtyard, hold more value than anything from a shop? While the world raced toward bottled beauty and packaged healing, our ancestors found comfort in the cool touch of the earth. They didn't need labels like "organic" or "chemical-free"; their science was passed down not in textbooks but in whispers over afternoon oil massages, in stories told while washing rice, and in the silent faith placed in kitchen shelves lined with clay jars. Their remedies didn't come with instructions, yet they worked like magic. Somewhere between turmeric milk at bedtime and neem leaves in bathwater, we forgot that healing didn't always come with a prescription. And just when we thought our mud was worthless and our wisdom outdated, something happened that changed it all.

Once upon a time, in a quiet, sun-drenched village nestled within the plains of Punjab. The air smelled faintly of baked earth and sandalwood, and the sky above was wide and mercifully blue. Beneath it, Mannek, a graceful woman with deep eyes and a calm presence, sat outside her mud-brick home, bathing her infant son. Her hands moved with care as she gently massaged a cool, wet clay onto his limbs. This wasn't just any soil—it was sacred. It had been passed down through generations, carried in the folds of memory and rituals. This was Multani Mitti, the fabled clay of Multan. But the serenity of the morning was soon pierced by a voice that reeked of entitlement and disdain. "How cheap you Indians are!" sneered a British officer from atop his horse, his shadow long across the cobbled path. "Don't know how to use proper soap or shampoo, and instead you rub dirt on your children!" His eyes narrowed in contempt at the bowl of clay in Mannek's hand.

She said nothing. What could she say? Words were of little use in an India still shackled under the weight of colonial power, when silence itself had become the language of dignity. She lowered her eyes, continued bathing her son, letting the ancient rhythm of her hands speak louder than her tongue ever could.

Later that same afternoon, as fate would have it, the British Colonel's wife, Lady Jerry, was riding through the village streets, marveling at its raw beauty, when her horse stumbled. With a scream, she was thrown violently to the ground. Her leg was bleeding heavily, and her cries of pain were desperate, wild, and unrelenting. The officer panicked, shouting for help, but the villagers stood still. Fear, old and rooted, froze their feet.

Mannek, meanwhile, was quietly mixing her daily bowl of Multani Mitti to wash her face, sitting on the edge of her veranda. The officer stormed toward her, fury burning in his voice. "Are you blind? Can't you see Madam Jerry has fallen? Stop playing with your mud!" With a sweep of his arm, he knocked the bowl from her hand. Terrified, Mannek bent down and gently lifted the bowl again. Her voice trembled as she spoke, "Rub this... it will be fine." He glared. "This? This is the same disgusting clay you smear on your children and your face! You think we are beggars, to use this filth?" But before he could hurl another insult, Lady Jerry groaned in agony from the ground. "Whatever she has... please bring it. The pain is too much."

In reluctant defeat, the officer handed the bowl to Lady Jerry, and Mannek knelt beside her. With care, with reverence, she applied the cooling paste onto the bleeding wound. It spread like silk across her skin, the earth reclaiming pain with each soft press. Hours passed. The sun dipped below the horizon. No doctor came, no gauze wrapped her leg, and yet, the pain faded. The swelling disappeared. The wound, once raw and angry, now looked calm. Jerry sat in stunned silence, unsure whether it was grace, medicine, or magic that had touched her.



The next day, she insisted on visiting Mannek.

When she arrived at her humble home, she found her sitting again with that same earthen bowl in hand. But this time, it was Mannek who had the clay on her face, a soft mask that made her skin glow under the morning light.

“Are you hurt?” Jerry asked, puzzled.

Mannek shook her head. “No, madam.”

Jerry asked Manek “Then why are you using this clay on your face?” Manek replied, “This is for beauty.”

“Beauty?” Jerry echoed, “What did you put on my wound yesterday? Was it the same clay you now wear?”

Mannek nodded. “It is called Multani Mitti, the earth of Multan. In our Harita Samhita, we call it sītā mṛttikā, white clay. It is sacred to us. In our scriptures, Charaka Samhita and Sushruta Samhita, it is mentioned not only for healing but for cleansing the skin, calming the body, and connecting to the divine. It was used by sages, healers, and mothers. I use it on my child, my skin, my wounds. It is a gift from the earth.”

The officer scoffed in the corner, as if still trying to justify yesterday’s arrogance. Mannek turned to him and smiled. “Yes, we Indians are cheap. We use clay instead of soap. But perhaps this ‘cheap’ clay does more than expensive lotions ever could.”

Lady Jerry, deeply moved, sat beside her. Her tone was no longer superior, but humble and curious. “Tell me everything, Mannek. How can a bit of earth do so much?”

And so, with the slow-burning wisdom only women pass from one generation to another, Mannek shared her truth.

“Multani Mitti,” she began, “Multani Mitti is a natural clay known for its exceptional oil-absorbing, exfoliating, and skin-purifying properties, making it one of the most trusted remedies in traditional skincare. We commonly use it in facial masks and bath powders because it deeply cleanses the skin, unclogs pores, and removes impurities, sweat, and excess sebum. It leaves the skin smooth, toned, and refreshed. During bathing rituals, especially in Indian homes, we mix it with herbs like rose petals, turmeric, and sandalwood, applying it as a full-body mask or scrub to detoxify the skin, improve circulation, and treat body acne or pigmentation.

It also reduces inflammation, brightens dull skin, and soothes conditions like rashes or sunburn. Regular use improves the skin’s texture and imparts a natural glow.

But that’s not all. We even use Multani Mitti for our hair. Its mild cleansing nature and rich mineral content make it a natural shampoo. It absorbs excess oil and dirt without stripping away the scalp’s moisture—perfect for oily hair. It calms scalp irritations and reduces dandruff thanks to its cooling and antimicrobial nature. When we make a hair pack using it with yogurt, aloe vera, or egg, it turns into a deep conditioner that adds shine and softness. It removes buildup, stimulates the scalp, and promotes healthy hair growth.

Traditionally, in Ayurveda and Unani medicine, Multani Mitti is celebrated for its therapeutic effects—cooling, detoxifying, and anti-inflammatory. We apply it as a poultice for muscle cramps, joint pain, insect bites, or inflammation. It draws out heat and toxins from the body. During fevers, mud packs on the abdomen or forehead help reduce body temperature. Its minerals soothe eczema, burns, and skin rashes, allowing the skin to heal naturally. And because it’s non-toxic and natural, it’s safe for regular use.”

Jerry listened, wide-eyed. “So... the glow on your face...”

Mannek laughed softly, washing the mask from her skin. “Yes, madam. This is the glow of Multani Mitti.” After rinsing and patting her face dry, she turned back and added, “Multani Mitti is the base ingredient in many of our face masks, scrubs, soaps, and even compact powders. Its skin-purifying and oil-absorbing qualities are unmatched. Its fine texture and natural mineral richness make it perfect for anti-acne creams and oil-control formulations. We blend it with botanical extracts and essential oils in our herbal cosmetics. Because it draws out toxins and smooths the skin, it’s used in both traditional and modern beauty products.

But its role goes even deeper in our culture. Multani Mitti is sacred in Indian rituals—especially during weddings and religious ceremonies. It’s one of the key ingredients in our traditional ubtan, applied to the bride and groom to cleanse, purify, and brighten their skin before their big day. In spiritual rituals, it’s mixed with turmeric and sandalwood, applied during holy baths. It’s believed to remove not just physical dirt, but also negative energy. Its earthy scent, its grounding nature—it’s more than just clay. It’s purification for both body and soul.”

Lady Jerry left that afternoon a different woman. She no longer saw the clay as dirt. She saw it as tradition, medicine, memory, and miracle.

Years would pass. The empire that once ruled over Mannek’s people would collapse like dry leaves in the wind. But the stories? They would remain. Whispered through generations, clinging to the scent of clay and turmeric. Because sometimes, the greatest treasures are not locked in gold-plated jars, but kneaded in the hands of mothers and healers, in courtyards soaked by the sun. And Multani Mitti, silent, humble, healing, would continue to glow long after palaces had crumbled.





-Manvitha Malapaka

How three common spices became molecular marvels

The smell of Indian kitchens is warm, and so is the quiet magic that happens every day in our spice boxes. For hundreds of years, our grandmothers have used simple ingredients like **clove, cinnamon, and black pepper** to not only flavor food but also to **calm coughs, help with digestion, and ease pain**. What was once thought of as a tradition based on folklore is now gaining attention from scientists. It turns out that dadi's masalas were not only tasty, but they also had medicinal properties.

Clove: A Natural Pain Reliever and Kitchen Microbe Fighter

Clove (*Syzygium aromaticum*) has been a valuable part of Ayurvedic medicine for a long time because it helps with toothaches and digestive problems. Old books like the Charaka Samhita praise its use for oral health. We now know that eugenol is the powerful compound that makes it work. This unstable phenolic compound, which makes up more than 70% of clove oil, has amazing antimicrobial and pain-relieving properties. Research has shown that eugenol can stop the growth of oral pathogens like *Candida albicans* and *Streptococcus mutans* at very low minimum inhibitory concentrations. It is a candidate for use in modern dental composites and cements because it can break up microbial biofilms. Its numbing effect has also been used in dental practices since the early 1900s, which is similar to how it was used in the past to relieve pain. The science is clear: dadi's crushed clove isn't a superstition; it's natural pharmacology at work.

Cinnamon: A versatile substance that helps with metabolism and fights free radicals

Cinnamon (*Cinnamomum verum*) is more than just a flavoring. People often add it to teas or sweets. Ayurveda and other traditional systems have praised it for helping with digestion, balancing blood sugar, and keeping the heart healthy. Modern research is now backing up these claims, which were once thought to be just stories. Cinnamaldehyde, flavonoids, and polyphenols are powerful phytochemicals found in cinnamon bark that are very good at fighting free radicals. Studies in the lab have shown that cinnamon extracts can stop the growth of harmful bacteria like *Staphylococcus aureus*, *Pseudomonas aeruginosa*, and *Listeria monocytogenes*. Clinical trials show that taking about 2 grams of cinnamon every day can lower fasting blood sugar and LDL cholesterol levels by a small amount. However, you should be careful to use the Ceylon variety instead of the Cassia variety, which has more coumarin, a compound that can be toxic to the liver in high doses. So, what used to be a common spice is now known as a metabolic ally, which is a modern nod to its ancient fame.

Black Pepper: The Digestive Booster and Bioavailability Booster

Black pepper (*Piper nigrum*) has been a common ingredient in digestive tonics and seasonal kadhas in Indian homes for a long time. Classical Ayurveda has a lot of information about how it can help with appetite and breathing problems. One important study showed that when 20 mg of piperine is given with 2 grams of curcumin, the amount of curcumin in the blood rises by about 2,000%. Also, studies in animals show that combining piperine and curcumin makes their anti-inflammatory and pain-relieving effects much stronger, and there are no side effects on the central nervous system. So, the black pepper that dadi put in her turmeric milk wasn't just for flavor; it was a smart mix that was way ahead of its time.

The Combined Effect: How Spice Synergy Helps You Heal

Our elders didn't just use these spices on their own; they often mixed them together to make herbal teas, spice blends, and home remedies that made the most of all their benefits. The way spices work together is an interesting area of nutrition research.

Spice Combination | Combined Benefit:

Cinnamon and clove: Makes an antimicrobial blend that works against a lot of different types of bacteria.

Turmeric and black pepper: Piperine can make curcumin up to 20 times more effective at fighting inflammation and free radicals.

In the past, these kinds of combinations made sense in traditional medicine. Now, they are starting to show up in scientific and pharmacognosy journals. The combination of old practices and new research paints a strong picture of how traditional remedies might help shape new treatments in the future.

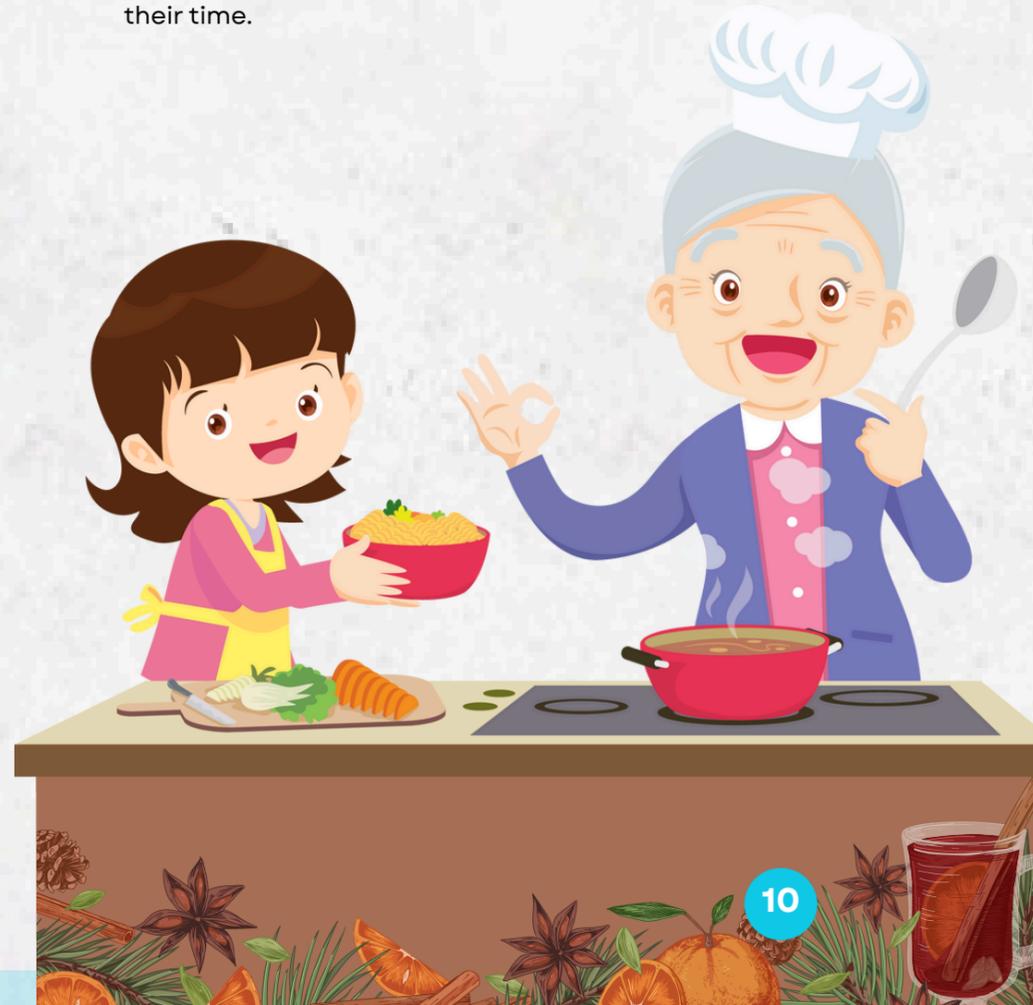
An herbal brew that has been around for a long time, inspired by Grandma's masala cabinet To get the best of both worlds, try making a spice tea based on old recipes. Every soothing sip of this infusion helps with digestion, metabolism, and fighting germs.

Things that go into it:

- 1 stick of Ceylon cinnamon
- Three to four whole cloves
- 2 crushed black peppercorns
- 250 mL of water

How to do it:

Put all the ingredients in water and let them simmer for 5 to 7 minutes. Strain and drink it warm. To make it taste better and give you more health benefits, add ginger or honey. This easy recipe shows how culinary traditions can have a lot of medicinal value, which shows that dadi's remedies were ahead of their time.



Conclusion:

The meeting point of tradition and biochemistry The spices that danced in dadi's kadhai and boiled in her calming teas were more than just food. They were carefully made and based on evidence. As scientists keep looking into the healing properties of natural substances, they find out what people have known for a long time. This article is both a tribute to the quiet genius of home remedies and a call to embrace the connection between old knowledge and new research. After all, healing may be as close as the smell of the spices in our kitchen.



- Prachi Mewa

Turmeric – that vibrant golden root you might know from curry powder – is actually a close cousin of ginger, growing back year after year. It started its journey in Asia, especially India, where it's been a kitchen and medicine cabinet staple for centuries. People there haven't just used it for health; it's woven into their spiritual life too, seen as a symbol of protection and purity.

So, what makes this root so special? It's packed with natural compounds. The real superstar inside is called curcumin. Scientists have found that curcumin is a bit of a powerhouse, offering benefits like fighting inflammation, tackling harmful microbes, and even showing promise against cancer.

But here's an interesting twist: while curcumin gets a lot of attention, eating the whole turmeric root might actually be better for us than just taking isolated curcumin. Why? Because our bodies don't always absorb curcumin super well on its own. Mother Nature might have packed other helpful things in turmeric that work together with curcumin to make it more effective.

BACKGROUND

The Turmeric is known as the “golden spice” and has strong sociocultural ties to the people of India and its surrounding sister countries. Many South Asian cultures have been using this earthy spice for thousands of years for medicinal purposes as well as cultural uses (Rathaur et al., 2012). The ancient Vedic societies of India regarded it as “the herb of the sun” because of its yellow-orange rhizome. In fact, there is at least 6000 years of documented use of the spice (Ravindran et al., 2007).

Also known by its Latin classification, *Curcuma longa*, turmeric is part of the Zingiberaceae or ginger family. Its geographic origin is not agreed upon; though, the plant most likely originated in Cochin, China and was brought to the Indian subcontinent through either Chinese migration to the Northeast Indian region or by Buddhist monks traveling through the region. Once introduced into the subcontinent, *Curcuma longa* most likely replaced most of the indigenous variants of the species (Ravindran et al., 2007).

Today, there is a word for turmeric in various languages across the globe from Burmese to Portuguese. Even though many cultures from different world regions knew of turmeric, only recently has it come into the lime light of research and American marketing. Turmeric is currently grown in several Asian countries and parts of South America. However, India remains the largest producer, producing over 500,000 metric tons annually and exporting nearly half. Major importers of Indian turmeric include the United Arab Emirates, followed by US, Japan, United Kingdom, Iran, Singapore, Sri Lanka, and South Africa.

BIOLOGICAL EFFECTS OF CURCUMIN

Curcumin is a highly pleiotropic molecule that influences multiple signalling pathways. It has anti-inflammatory, anti-oxidant, antimicrobial, hypoglycaemic, wound healing, chemo preventive, chemo sensitising and radio sensitising properties.

ACTIVE COMPOUNDS OF TURMERIC

Curcuma: This is the primary bioactive compound in turmeric and is responsible for its vibrant yellow colour. Curcumin has antioxidant and anti-inflammatory properties, making it a focus of numerous studies for its potential health benefits.

Desmethoxycurcumin: A derivative of curcumin, desmethoxycurcumin also exhibits antioxidant and anti-inflammatory effects.

Bisdemethoxycurcumin: Another derivative of curcumin, bisdemethoxycurcumin contributes to turmeric's overall bioactivity.

Turmerones: These are aromatic compounds found in turmeric that may have anti-inflammatory and antioxidant properties. They also contribute to the aroma of turmeric.

Curcuminoids: Apart from curcumin, turmeric contains other curcuminoids like desmethoxycurcumin and bisdemethoxycurcumin, which collectively contribute to its medicinal properties.

These chemical properties give turmeric the ability to heal many different types of diseases and are the reason that ancient societies venerated turmeric as a holy substance. There are many studies proving the anti-disease properties South Asian societies have known for thousands of generations. The studies reviewed in this paper look at anti-cancerous, anti-inflammatory, and anti-microbial properties.

COMMERCIAL USE

Turmeric is used in other industries beyond traditional household and medicinal purposes. In India, for centuries, turmeric was used to dye cloth yellow. In fact, the yellow colour of the cloth was considered sacred and purifying, as it was yellow/ orange like fire, an element symbolic of eradicating impurities. Currently, use of turmeric for commercial dyeing has ceased but it is still used as a common food additive to reach the desired yellow tinge in many dishes (Ravindran et al., 2007). In America, the food industry uses curcumin as a colouring agent in “cheese, spices, mustard, cereals, pickles, potato flakes, soups, ice cream, and yogurt” (Shishodia et al., 2007).

COSMETOLOGY

Turmeric may be the first known cosmetic as it has been traditionally smeared on the skin by women. It is believed to reduce facial hair growth, reduce acne and improve complexion. Many women in India still apply turmeric on their face daily before taking bath. Curcuminoids have potential in cosmeceuticals as antioxidant, anti-inflammatory and skin lightening agents. In-vitro curcuminoids inhibit collagenase, elastase and hyaluronidase. Curcumin gel has been reported to improve the appearance of photodamaged skin conditions such as pigmentary changes, solar elastoses, actinic poikiloderma, solar lentigines and actinic keratosis when applied for prolonged period such as six months. It may promote apoptosis of cells with DNA damage. It is being evaluated as an environmentally friendly hair colouring agent. The essential oils may have potential in the perfume, cosmetic and soap industry.



DERMATOLOGICAL USES

- Inflammatory Skin Conditions
- Oral Lichen Planus:
 - High-dose curcuminoids (6 g/day) reduced symptoms in clinical trials.
 - Well tolerated; main side effect: diarrhoea.
- Psoriasis:
 - Animal/in vitro: Curcumin blocks inflammation pathways (NF-κB, Th1 cytokines).
 - Oral: Low effectiveness in human trials (poor absorption).
 - Topical gel (1%): Helped reduce plaques by inhibiting key enzymes.
- Burns & Wound Healing
- Speeds up healing by:
 - Reducing inflammation.
 - Increasing collagen and new blood vessels.
 - Boosting extracellular matrix repair.
- Skin Cancers
- Basal Cell Carcinoma:
 - Promotes cancer cell death by activating p53.
- Melanoma & Squamous Cell Carcinoma:
 - Stops tumour growth via oxidative stress and apoptosis.
 - Works even better when combined with light therapy (red/blue).
- Cutaneous T-cell Lymphoma:
 - Selectively kills cancer cells by downregulating STAT-3 & NF-κB.
- Scleroderma (Skin fibrosis)
- Causes selective death of disease-causing fibroblasts.
- Linked to lower glutathione-S-transferase enzyme levels.
- Vitiligo
- Topical tetrahydro curcumin + UVB light therapy showed improved pigmentation (not statistically significant).
- Antimicrobial Action
- Antifungal: Effective against Candida.
- Antibacterial, antiviral, antiparasitic: Shown potential in lab studies.

INTEGRATING AYURVEDIC KNOWLEDGE INTO WESTERN TREATMENT

As the West becomes more acquainted with Eastern culture through the proliferation of inter-continental exchanges in a modern global economy, the realization that Western medicine in its current form is not meeting all the needs of its patients is becoming increasingly apparent. According to Francis C. Assisi (2007), a writer for India Currents magazine, Americans have been questioning the fundamentals of traditional allopathic medicine for over thirty years. Ayurvedic advocates like Dr. Vasant Lad and Maharishi Mahesh Yogi have initiated an interest in discovering better ways to prevent and treat disease which align with the pillars of Ayurveda. In other words, treating the individual from a perspective of amalgamating the body, mind, and spirit. More frequently, patients turn to alternative forms of therapy like acupuncture, diet-based treatments, and even meditation for chronic and non-chronic illnesses alike. In fact, in 2003, California passed the Health Freedom Act (SB 577), which allows for non-traditional medicine practitioners to consult with patients without fear of violating the Medical Practice Act, which prohibits non-physicians to provide medical services (Assisi, 2007). An issue that arises in bringing Ayurveda to America and other western societies is striking the right balance between making the art marketable to a new audience as well as staying true to the colours of an ancient teaching. Ayurveda is rooted in a holistic treatment of body, mind, and soul, and this spiritual approach cannot be totally eliminated to reach an American audience, or the art will chance degradation.

CONCLUSION

Many studies show promising results for the efficacy of turmeric and its active ingredient curcumin against many important diseases. Bacterial and carcinogenic diseases alike can be treated with this plant-based compound with apparently minimal adverse side-effects.

Use of curcumin as compared to the use of turmeric should be further studied to determine whether there is a loss of benefit when extrapolating and using key ingredients in isolation. The integration of turmeric into society started thousands of years ago and the evolution is continuing today. Integration of the plant into modern Western society will undoubtedly reveal new understandings and uses for an age-old plant.

There is some clinical evidence that turmeric/curcumin formulations, used both orally and topically, may provide benefits to treating various skin diseases and overall skin health. Although it has been used for centuries in many parts of the world to treat skin diseases, its efficacy as an alternative or adjunct to traditional treatments has not yet been proven. Dermatologists should be aware of the clinical studies that examine the use of curcumin-containing products as alternative or adjunct skin care therapies.

If active components in turmeric prove to provide clinically significant benefits to skin health, dermatologists may consider offering this natural remedy to patients to improve certain skin diseases and overall skin health.

Our systematic search produced a limited number of results for how turmeric/curcumin may therapeutically treat skin diseases. More thorough and large-scale clinical studies are needed to assess how turmeric could be used orally and topically to treat skin diseases. Additionally, the development of improved curcumin delivery methods with improved bioavailability and solubility characteristics would optimize its use in treating skin conditions.

Excessive intake of turmeric may result in gastrointestinal discomfort, such as stomach upset, nausea, or diarrhoea. The natural blood-thinning properties of turmeric can be advantageous for some but may pose a risk to those already taking blood-thinning medications. Individuals with gallbladder issues should be cautious, as turmeric could exacerbate problems or interfere with gallbladder function. Turmeric also contains compounds that may hinder iron absorption, making it a consideration for individuals with iron deficiency or anaemia.

The “yellow root”, turmeric, is deeply rooted in many cultures. An increased awareness regarding its traditional uses, benefits, adverse effects, and more studies with better bioavailable formulations is needed. This age-old spice will slowly find its way into the dermatology armamentarium of the future.





TRADITION MEETS NUTRITION

-Dr. Ankit Sudhir

Introduction:

Most of us must have observed that since our childhood (when we came into senses) that there are some food formulations available at home which are always prescribed by our parents or grand parents especially, grandmother. These formulations are not available with a medical doctor but the home based formulations do work in the cases which are not acute. Rather, these formulations often prevent the acute suffering or symptoms in the future. These formulations or Grandma's formulations are home based remedies for symptoms of mild diseases like cough and cold and many. These home based remedies are also found to delay the onset of certain diseases. Many of us still use them to overcome certain disease symptoms and it works too. Likewise, these home based formulations (Grandma's formulations) include some metabolic marvels which nutritional science has also accepted which is backed by research.

The Almond Effect: From Memory to Metabolism:

Almonds scientifically named as *Prunus dulcis*. Locally it is known as Badam. Almonds are known as the king of the nuts. Almond tree has its native to Middle East and South Asia and now it is available globally due to its widespread cultivation (Hussain et al., 2021). Almonds not have only better taste but also have medicinal properties. It has been identified as one of the traditional ingredient for health benefits in Ayurveda (India) and Unani (Middle East) (Siddiqui and Begum, 2023; Pandey et al., 2013). Almonds are rich in monounsaturated fats, protein, fibre, and essential vitamin like E and minerals like magnesium, and potassium, and offers various health benefits (Badrudin et al, 2024). Not only almond but its oil is also considered to be important for treating dryness of the skin. Traditionally, it is being used to treat dry skin and maintain skin elasticity (Ahmad, 2010; Berdick, 1972). Our grandma's wisdom has passed on to the generations orally and many of her recommendations are supported by modern nutritional science.

Recommendation in consuming Almonds:

The raw almonds are beneficial too. But soaked almonds are better as removing the peel of soaked almonds helps in easy digestion and nutrient absorption. Soaked almonds release enzymes that prevent weight gain and aid in metabolism. Eat on empty stomach, body absorbs nutrients in the morning when the stomach is clean. Eating too many should be avoided. It can be paired with milk for strong bones and better memory. It can be used along with sweets especially winter sweets as a memory tonic or treatment to dry skin.



Recommendations in consuming Ghee:

Having one spoonful of ghee daily is helpful to avoid weakness it is said that it keeps our joints and digestion strong. Ghee can be mixed with hot dal, rice, milk, tea., etc. It is also believed that burning sensations after consuming spices can be overcome by consuming small amount of ghee. Since centuries India is eating roti with ghee. One should avoid using oil and use ghee instead. It is also believed that ghee should be given to kids to make them sharper and stronger. It is obvious that excess of everything is bad, so consuming more ghee is not good either. Per meal 1-2 teaspoonful.

Benefits of consuming almonds backed by science:

- It is found to lower cholesterol levels by increasing the Vitamin E in blood and plasma. Vitamin E is a powerful antioxidant which prevent artery clogging by oxidation of cholesterol. Consumption of almonds on daily basis reduces cholesterol (Javaid et al., 2019).
- It has immunostimulant properties: in one of the studies almond consumption showed the production of cytokines (types of immuno chemicals) on the advent of viral infections
- Antiinflammatory effect: It helps to combat the oxidative stress produced during diseases. (Rao et al., 2012)
- Hypoglycemic action
- Good for liver: It helps to increase the concentration of enzymes which activates antioxidant defense system and reduces the risk of chronic diseases (Mushtaq et al., 2015)
- Memory enhancing property: The studies on effect of almonds on memory has also been checked using mouse models which showed enhanced memory function in the mouse which consumed almond supplements (Mushtaq et al., 2015).
- Prebiotic potential - helps in increasing the good bacteria (good for health) in our gut to reduce the populations of harmful bacteria (Karimi et al., 2021)
- Reduces the risk of cancer - In one report it is mentioned that consumption of almonds reduces the occurrence of cancer by 2 to 3 times (Javaid et al., 2019).
- Reduces obesity
- Reduces cardiovascular risk

The Ghee Code: Unlocking Traditional Nutrition:

Ghee is a clarified butter fat and is being used traditionally in Ayurveda for various health benefits. Since centuries ghee is being used in our Indian cuisine and in Ayurvedic medicines (Kataria et al., 2024). Ghee provides textural and food structuring properties just like cocoa butter in chocolate (Morshedi et al., 2016). In India there are various mouth watering delicacies or sweets prepared in ghee like laddoo, mysore pak, halwa, etc. Ghee consists of short chain fatty acids (SCFAs), medium chain fatty acids (MCFAs), and fat soluble vitamins like A, D, E & K lead to health benefits. In ancient texts of ayurveda it is mentioned that the ghee produced from the milk of different animals can be used for different functional purposes. Additionally, cow ghee is believed to be better for its high nourishing and rejuvenation properties. Not only in Indian delicacies ghee is also used in preparing herbal formulations. Ghee is believed to be a coolant, capable of increasing mental power, physical appearance, curative of ulcers and eye diseases (Kataria et al., 2024). Studies show that ghee is superior to other oils and fats as it consists of medium chain fatty acids (MCFA) which are easily absorbed by liver and provide energy. It is better for athletes to release energy consistently (St-Onge & Jones, 2008; Nokasa et al, 2009).

Benefits of consuming Ghee:

- a) There are various benefits of consuming ghee which includes enhancing memory and treating diseases like epilepsy and insanity.
- b) There are several studies showing the benefits of ingredients of the ghee in brain health.
- c) Ghee is believed to be a coolant, capable of increasing mental power, physical appearance, curative of ulcers and eye diseases.
- d) Ayurveda claims ghee to show benefits in lubricating joints, increasing flexibility, and reducing joint pain (Falahatzadeh et al., 2024).
- e) Cow ghee being rich in Vitamin K2 and Conjugate linoleic acid (CLA), an antioxidant, which imparts anti viral and anticancer properties (Dhiman et al, 1999, 2000).

Conclusion:

The Grandma's superfoods (Almonds and Ghee) are actually backed by science and the world is looking into it and proving it scientifically. The recent pandemic left an impact on the lives of all suggesting a reconnect with Ayurveda (the age old remedies). Grandma's nuskhe (tricks and tricks) have direct connection with Ayurveda which not only overcome the symptoms but also prevents the diseases. Its more than 5000 year old asset of India, gift from our ancestors to the world. With time we have shifted to chemical based products for their lucrative packaging, less response time and accessibility. This all is due to the ease of usage and convenience which led us to shift to low quality products (www.onmanorama.com). Its country's own knowledge for the betterment of us and we should be benefitted with it. Likewise, as discussed above consuming almonds and ghee not only helps to combat diseases but also prevent us from some deadly diseases.



**GHEE IS GOLD,
PURE AND BOLD,
A TIMELESS
TREASURE THAT
NEVER GETS OLD.**





SCIENCE IN TRADITION: DECODING THE WISDOM OF GRANDMA'S KITCHEN

-Jay Suthar

As a kid, each day started with an unspoken ritual. A bit before the school bus blew its horn outside, my dadi would arrive like clockwork – a little steel bowl held in her hand, laden with soaked almonds, a dollop of golden ghee, and a tiny cube of jaggery. "Eat," she'd say, "your body and brain require it." I would grunt, half-awake, but she would sit next to me, remove the almonds using her fingers, and put one in my mouth. I believed it was love in food form back then. I never knew this was a science-supported energy ritual – honed over centuries by wise people long before nutritionists named it.

Soaked Almonds: The Brain's Morning Fuel

Dadi never served raw almonds. Always soaked overnight, skinned in the morning. Today, nutritionists verify that soaking almonds inhibits tannins and phytic acid, making nutrients such as Vitamin E, magnesium, and healthy fats more bioavailable. These nutrients are important for:

- Enhancing brain function (thanks to riboflavin and L-carnitine)
- Increasing energy metabolism
- Enhancing memory and concentration

Contemporary research connects almond eating to steady blood sugar, heart well-being, and even less fatigue. But dadi made it straightforward: "Almonds make your mind sharp."

Jaggery: Sweetness with a Purpose

Not all sweets are created equal. That little cube of jaggery wasn't just to fulfill my sweet tooth – it was ancient energy science in action. Jaggery, or gur, is high in iron, potassium, and magnesium. It releases energy slowly, keeping blood glucose stable – critically important in India's tropical climate where energy easily drains.

Jaggery also:

- Improves digestion by triggering digestive enzymes
 - Detoxifies the liver naturally
 - Notices natural warmth and improves circulation of the blood
- Now, we grab energy drinks. Dadi grabbed jaggery – nature's first prebiotic sweetener.

Ghee: Liquid Gold for the Gut and Brain

Ghee, that shining spoonful she lovingly stirred into my rice or applied to a roti, was too often written off as "fattening." But today, it's touted as a superfood – and rightly so.

Produced from clarified butter, ghee is high in butyrate, a short-chain fatty acid that:

- Enhances gut health by nourishing good bacteria
- Decreases inflammation
- Maintains brain function and hormone regulation

And here's the hidden secret: ghee helps in the absorption of fat-soluble vitamins like A, D, E, and K. Without it, all the nutrients from greens and dals would pass right through. To dadi, it was simple. "Without ghee," she'd say, "your food is dry, and so is your energy."

More Than Food – It Was Timing, Too These foods weren't given randomly. There was a rhythm to it:

- Almonds in the morning – to wake up the mind
- Ghee in the afternoon lunch – to process heavy food
- Jaggery in the evening – to pick up energy without crashing the system

Her decisions weren't only healthy they were also in sync with the body's natural energy gradient, aligning with what contemporary science today refers to as chrono nutrition – the science of eating in harmony with your internal clock.

Science Catches Up With Dadi

Nowadays, dietitians are suggesting what our grandparents used to know:

- Soaked nuts to kick start your metabolism
- Healthy fats to keep energy levels stable
- Natural sugars to prevent insulin spikes
- Fermented and traditional foods for improved digestion

What we refer to as "grandma's food" has been repackaged as clean eating, brain food, and biohacking. But fundamentally, it is still the same: what we ate as children was intensely functional, intensely seasonal, and most importantly – intensely intentional. The Actual Secret Ingredient? Love and Instinct

Naturally, she added one thing that no text book can quantify– concern. She didn't require a fitness band to check that I was running low on steam or a blood test to feel a dip in my hemoglobin level. She simply did.

And perhaps that is the wisest thing of all: actual nutrition isn't all about calories, macros, and meal plans – it's about listening, watching, and feeding with love.

So tomorrow morning, when someone presents you with a handful of soaked almonds, a jaggery cube, or a spoonful of ghee straight from the pan – don't refuse before you even know what it is. Because it could be your ancestral multivitamin in disguise.

And it could very well be the spark your soul has been hungering for.





-Aayush Varia

We have summers we get through, and others that we recall. The ones remembered with the aroma of raw mangoes, the whirring of ceiling fans, and the rustle of neem leaves that danced in the heat. And around whom it all revolved was her Dadi, Nani, or just Grandma. Her summer arsenal didn't arrive with designer wrappers. It arrived covered in damp towels, confused in a clay pitcher of aam panna, and stirred fondly with a wooden spoon churner. Long before scientists ever talked about thermoregulation or hydration techniques, our grandmothers already knew them by instinct, by tradition, by love.

I still recall how, on the hottest afternoons, she'd fetch a cotton towel from the clothesline, dip it in cool water kept in a matka, and drape it tenderly around my neck. I'd giggle at the icy touch, unaware that she was engaging in something scientists today refer to as "evaporative cooling." As the water in the cloth evaporated, it drew heat from my skin, helping my body maintain a cooler core temperature. It was simple, effective, and soothing. For her, it was never about science. It was about comfort, intuition, and centuries of inherited wisdom.

When playtime was over and we pulled our sun-scorched feet back home, she would always have something ready with a tall glass of nimbu shianji or pudina-pani. The smell of mint filled the air as she bruised the leaves with rock salt and lime, sprinkled with chilled water from the earthen pot. "Drink this. It cools your belly and clears your head," she'd tell me, brushing her hand over my sweaty head. Years later, I discovered that mint has menthol, a chemical that stimulates cold-sensitive receptors in the body to create a cooling, refreshing feeling. The lemon and salt weren't added for flavour they replenished lost electrolytes in sweat, keeping our body's fluid balance in check. Her "cooling potion" wasn't merely a beverage it was a tasty, science-supported fix in a cup.

And then there was the savior of each Indian summer kacchi kairi, or raw mango. Sliced with skillful precision, drizzled with a pinch of black salt, chili powder, and cumin powder, it was a delight as well as a defense against the accursed loo—the hot, dry summer winds. "Eat this. It will make you strong," she'd command. What she could not have told us in words, science later established: raw mangoes contain Vitamin C and pectin, which support electrolyte balances and ward off dehydration. Their tartness induces salivation and thirst, leading to higher intake of water, something very important in hot climates. But to us kids, it was merely sour bliss that drizzled down our elbows while we laughed in the sun.

My most vivid recollection is seeing her make chhaachh spiced buttermilk in the covered corner of our court. She would churn it in a clay vessel with a wooden mathani, adding roasted cumin, ground ginger, and fresh coriander. The churner's whirring, her soft humming, and the smell of clay earthy mixture were all merged into something intensely reassuring. That humble buttermilk, I now understand, was a probiotic storehouse—cooling the body internally, supporting digestion, and replacing lost fluids. The clay pot contributed its own magic, cooling the drink naturally by allowing water to evaporate and cool the liquid inside through its permeable surface. No plastic, no refrigeration, no fuss just nature, working in harmony.

And then there were those little black seeds sabja, or sweet basil. She'd soak them in water until they puffed up like little jelly balls, then stir them into milk or lemonade. "This will cool your insides out," she'd say, smiling. Nowadays, the same seeds are endorsed by nutritionists as containing a lot of fiber and having the power to hold water in the body, which makes one stay hydrated for a longer period. Their gelatinous covering slows down digestion and releases energy and water steadily, which made them a perfect addition to food in warm weather. To us, they were enjoyable to chew and curiously calming. To her, they were nature's air conditioner.



All she did selecting light cotton clothing to wearing, closing curtains at midday sun stemmed from an appreciation of how body and world interact. She never studied from books of thermal conductivity or electrolyte balance. But she knew the precise moment to cool the floor with a splash of water, when to give us, cucumbers dipped in salt water, and when to leave us motionless and unruffled, reading to us as the sun went through its apogee.

In today's fast-paced world of instant coolants and bottled beverages, we've lost touch with this rhythm. Air-conditioners hum in every room, but they don't carry the scent of roasted cumin or the chill of a clay pot. We've traded earthen wisdom for digital convenience, and in the process, forgotten the gentle beauty of these summer rituals. But the science still holds true—and perhaps more importantly, so does the emotion.

Current thermoregulation discusses the regulation of core body temperature by hydration, clothing, and environment. It is lauding electrolyte balance, gut integrity, and passive cooling techniques. But these were not new to our grandmothers. They simply did not use those phrases. They depended on their senses, their hearts, and a profound faith in the healing aspect of nature.

Today, with the mercury rising and summers getting harsher, perhaps it's time we went back not because we yearn for it nostalgically, but because we have a lesson to learn. Take out the old matka, wet the towel, bruise some mint leaves, and chop a raw mango. Get the past to meet the present, not only in defiance but in rebirth. Because between the technology of cooling and the warmth of recollections lies the key to actually enduring summer. And in that instant, when your neck is touched by the towel, or the first draught of chhaachh revives your dry throat, you'll see her speaking once more gently, lovingly, and with wisdom telling you that sometimes, the most sophisticated fixes come from the most ancient hearts.





DADI KE NUSHKE

-Aryan Radadiya

Dadi Ke Nuskhe – A Journey of Healing, Love, and Timeless Wisdom

There's a special kind of magic in an Indian kitchen, not just from the spices sizzling in hot ghee but also from the wisdom passed down through generations. This magic doesn't come in fancy bottles or expensive boxes. It's found in jars of turmeric, seeds of methi, leaves of tulsi, and most importantly, in the soft, wrinkled hands of our Dadi.

I recall those childhood days when even the slightest sneeze would make my world feel like it was falling apart. I'd lie on my nani or dadi's lap, my head heavy and my eyes drooping. In an instant, her hand would reach for the old metal box, the treasure chest of nuskhe.

"Zyada hawa lag gayi hai. Thoda sarso ka tel lagate hain," she'd say with calm assurance, gently massaging my temples. There was no rushing to the chemist and no panic. Just mustard oil, a warm towel, and her firm belief in what nature could offer.

The Khaansi-Ke-Liye Kadha Chronicles:

The monsoons were the real test. Rain-soaked roads, wet clothes, and a stubborn cough that wouldn't go away. That's when Dadi's Kadha made its entrance.

This drink could scare a cough away just by its smell. It included cloves, ginger, black pepper, tulsi leaves, and a hint of jaggery, all boiled with patience and care.

"Ghoont bhar ke pee le beta, toh hi aaraam milega," she would insist. We'd wrinkle our noses, gulp it down, and within hours, feel warmth spread in our chests like a hug.

We didn't realize it then, but she wasn't just giving us kadha. She was passing on a legacy, a part of herself, her care wrapped in spices.

For Every Scar, A Remedy:

Once, I came home crying, bruised and scraped from falling off my bike. I expected to get scolded or maybe go to the doctor. Instead, dadi smiled softly and went into the kitchen. She brought out haldi and ghee, mixed with love and a quiet prayer. "This haldi heals every wound. No doctor in the world can match it." She applied the golden paste, wrapped it with an old cotton cloth, and kissed my forehead. The pain eased right away—not just from the haldi, but because of her touch.

Sunday Champi & Soul Talks

If there was one ritual that needed no reason, it was the Sunday oil champi. With her in the chair, I'd sit on the floor while she massaged warm coconut oil into my scalp. She'd tell stories of her childhood, how she raised three kids on her own, and of wars fought and love lost, all while oiling away my worries. She never called it therapy. But it was. And it worked better than any spa ever could.

Nighttime Nuskhe and Comfort:

Even at night, when fevers rose or stomachs ached, Dadi's remedies never stopped. Ajwain wrapped in a cloth, lightly roasted, and tied to the stomach. A spoonful of honey with a pinch of cinnamon. A glass of warm milk with turmeric. She had something for everything, and somehow, it always worked. Her remedies were simple. But what made them effective was her presence. The way she approached things—with love, patience, and a knowing smile—was the true healing.

More Than Medicine

These days, when I Google every little ache, when I swipe past a thousand wellness trends, I stop and breathe. I hear her voice, steady and low: "Sab kuch kitchen mein milta hai. Bas pyaar daalna aana chahiye."

At the time, we took it lightly. The milky turmeric, the folded bay leaves, the honey-smearred parathas were labeled nuskhe and filed under good advice. Yet, looking back, I see the truth: her little rituals were never merely prescriptions. They were threads that stitched us back to soil and sky, to grandmothers and grandsons, to the simple act of leaning into one another. Her pinch of ajwain fixed the stomach, yes, but the bigger cure was the hand that pressed it to the brow, the pinch that was a promise, the steady hum of someone who never counted time, only care.

Today, when I stir a tiny bit of haldi into warm milk or massage mustard oil into my feet against the cold, I sense her hovering close. I taste her tenderness in every golden swirl. Dadi ke Nuskhe were never merely fixes; they were memories sealed in a bottle, handed down with the hush of bedtime tales, kept in the quiet chambers of the heart.





SCIENTIFIC LEGACY OF INDIAN CULTURE

-Rutika Pardeshi

Introduction:

Every summer signaled the start of an eagerly anticipated trip to my home town. Away from the clamor and rush of the city, this tranquil environment provided more than a respite. It unfolded a way of life imbued with tradition, in harmony with nature, and rooted in age-old wisdom. Then these traditions were merely perceived as cultural. The deep scientific rationale behind them was slowly realized.

Through meaningful discussions with my grandparents and judicious observation of the community, science embedded in day-to-day living was slowly enjoyed.

Natural Cooling Methods:

In Indian homes, especially rural communities, architectural design and routine ways of living were in harmony with climatic conditions. Such methods evolved over the centuries reflected a pragmatic understanding of thermoregulation and ecological design. Dwellings were built using mud and wood both of which have excellent

insulation properties. Thick walls reduced heat intake during the day and released it slowly over a period of time, providing a naturally balanced indoor environment. Small, strategically placed windows enabled cross-ventilation while reducing direct sun exposure. These principles are applied currently within sustainable architecture within the framework of passive cooling design. One of the most remarkable practices seen in such dwellings was the frequent application of a thin paste of cow dung over floors, this practice offered both hygienic and thermal advantages. Cow dung is rich in phenols and terpenes with natural antimicrobial properties and it acts as a thermal insulator that keeps indoor temperature lower.

Cotton bedsheets stitched at home and sun-dried were popular and commonly used. Cotton's breathability allowed for effective sweat absorption and contributed to better sleep quality by supporting the body's natural cooling mechanisms. Hair and grooming habits also followed the same logic. Rather than use commercial shampoos, some families employed clean sand for washing the scalp. The clean sand served as a gentle exfoliant, removed oil and dirt, and encouraged blood flow. The efficiency of this process is comparable to that of modern scalp treatments without synthetics.

Neem: A Daily Detox Ritual:

Among the numerous daily practices followed in typical Indian homes, drinking neem leaves in the morning was some special advantage. Neem was commonly employed for its cleaning and healing properties in spite of being bitter. Neem leaves carry dense bioactive compounds like nimbin that possess antibacterial, antifungal and antiviral properties. Drinking neem on an empty stomach was thought to aid digestion, cleanse the blood and boost immune strength.

The time for this practice also corresponds to chronobiological studies. Early morning when metabolic and endocrine functions reach their maximum provide the best conditions for nutrient absorption and detoxification processes. The sanctity of neem and other herbs is not confined to verbal traditions only. The ancient scriptures like the Ramayana refer to the use of forest herbs by Lord Rama while on his exile suggesting a relationship between nature, and body cleansing. The holistic application of the plant reflects the sustainable bounty of classical Indian lifestyles, where one natural material performs varied functions across health, home, and communal life.

Ancient Summer Remedies:

In most Indian homes, the kitchen used to be a hub of natural remedies that came in handy during times of seasonal distress such as summer. Turmeric, for example, was used to dress wounds or mixed with warm milk for its anti-inflammatory and antiseptic properties. Ginger paste was also used on the forehead to relieve headaches, a practice aided by ginger's established anti-inflammatory effect. Cardamom was another spice used to control nausea since it contains antispasmodic substances. Salt and warm sand compresses were also beneficial as hot packs, eliminating inflammation and pain in the event of seasonal conditions such as tonsillitis. Castor oil was usually applied around the nostrils to relieve sinus congestion. These treatments were an example of home-directed management of frequent ailments. Most of these methods provided relief from symptoms in hot and damp weather without resorting to current medicine.

Ayurveda-based Nutrition:

Nutrition was similarly addressed with purposeful intent. Some foods were given more emphasis in the summer months for their physiological impacts. Masala chai was usually eschewed during the warmer seasons as it is said to create internal heat. As an alternative, Tulsi tea, a caffeine-free tea with adaptogenic and cooling characteristics, was taken. In order to avoid dehydration, jaggery water was consumed on a regular basis. High in iron and electrolytes, it acted as a natural hydrating agent and supply energy when glucose was not a viable option. These food selections were based on a knowledge of seasonal diet, as taught by Ayurvedic thought.

Sleep, the Ancestral Way:

Bedtime in traditional India was serene and made individuals feel calm and prepared to sleep. Their routine harmonized with their hormones. Pre-bed oil massage on the scalp and soles of the feet was a common practice. This regimen stimulated pressure points linked to stress relief, calming fatigue and nervous system regulation. Research indicates that such massage with oil is able to reduce cortisol levels and improve the quality of sleep. The evening lighting was kept minimal on purpose. Diyas (small oil lights) were employed instead of artificial light, producing dim environment. Soft ambient light increases melatonin production. It helps control the body's own sleep-wake cycle. Natural mattresses and breathable cotton bedding facilitate temperature control. Combined, they result in a peaceful and sleep-conducive environment. These practices applied cumulatively throughout the community reflected a culturally grounded awareness of sleep hygiene centuries prior to the entry of the term into scientific vocabulary.

Conclusion: Reviving a Time-Tested Legacy

Practices frequently belittled today as old-fashioned were, in fact, rooted in profound observational intelligence and utility. From natural cooling of houses and induction of sound sleep through to immune-augmenting remedies and seasonally attuned nutrition, traditional Indian lifestyles embodied a holistic conscious way of staying healthy and well. In an age where the world is ailing with the ravages of climate change, escalating healthcare needs, and lifestyle diseases, most of these traditional practices are becoming relevant once more. Scientific evidence is now finally confirming what culture had always accepted: sustainable living, preventive care and harmony with nature. As the Bhagavad Gita states, "Whatever action is performed by great people, others follow." Reusing the traditions of past generations, ancient wisdom can be mindfully applied to contemporary life, not as antiquated habit, but as a significant and enlightened tradition.

Note: Although some of the practices outlined have been substantiated by contemporary scientific research, others are based on oral tradition and communal knowledge.



THE LEGACY OF SPICES: SCRIPTURES AND SCIENCE

-Priya Baria

Do you all remember the bitter and pungent smell of that steaming hot glass of Kadha which was forcefully given by our mothers or grandmothers in winter whenever we felt uneasy? A strong mix of ingredients: Tulsi leaves, pepper, ginger, clove and jaggery would cure our sore throat, cough in a single night which the commercially available cough syrups fail to do so in 3-5 days of consumption. Undoubtedly, the wisdom of our ancestors is beyond imagination. Their knowledge is even older than modern science. The perfect use of specific spices or condiments in a definite amount along with Dadi's unconditional love kept our childhood free from frequent medications and which is now proven by Scientific researches too. It is not wrong to quote that "What Maharishi Charaka wrote with precision, Dadi applied it with her love and wisdom and now Science is accepting the miracle of both!"

But now the question arrives: How do these two traditions align or differ from each other? Is it like Rishi Charaka spelled the recipe of kadha and our mothers wrote it down just like modern mothers do it by noting down the recipes of MasterChef but never prepares? Jokes apart, but it is a point to be discussed. Did our Dadis know it before the Charaka could compile his Samhita? Or our Dadis were given special boon for understanding the science behind the spices? The answer to these questions according to me is that Maharishi Charaka's knowledge was compiled in his Samhita around 1st- 2nd century BCE which was the set of rulebooks for the Vaidyas prevailed at that time which was mainly male dominated profession. On the contrary the 'Dadi ke Nuskhe' were passed down orally within families or even in communities in accordance to generations of observation and adaptation.

While much of this overlaps with Ayurveda, it was often developed independently or as a simplified form of scholarly knowledge. It may be like whenever Vaidyas prepared the jadibooti for an individual, our detective Dadis might be investigating the recipe of it and after years of test and trials our 'Dadi ke Nuskhe' may have come into existence. What is now ignored as mere folklore is now being proven as a fact by modern Science. For example, Dadi insisted on pressing a sharp, aromatic clove onto aching tooth. Pharmacology reveals that clove contains Eugenol which is a potent natural anesthetic and antimicrobial agent proving its soothing effect. Also, black pepper often sprinkled into tea and kadha contains Piperine, a compound proven to enhance the absorption of curcumin from turmeric by upto 100% which amplifies the anti-inflammatory properties. Cinnamon shows regulating blood sugar levels, ginger in relieving nausea and inflammation while Tulsi in boosting immunity. Also, the researchers have proven that some condiments like turmeric, cinnamon are having anti-microbial, anti-oxidative and anti-inflammatory properties. These condiments are not just households but also are hot topics studied in nutraceutical researchers as well as pharma people which is a testimonial to what our grandmothers have known for long is a potential medicine for many diseases. The Sanskrit verses of the Charaka Samhita years later after its acceptance, got simmered into the oral traditions of households, became one of the aspects of hereditary from maternal side. Thus, it can be concluded that our grandmothers though fully unaware of Ayurvedic nomenclature, managed to create remedies based on observation, memory and care. And it is not wrong to say that the wisdom of Ayurveda migrated from Granthas to Kitchens. Today the scientific laboratories are testing these spices what our grandmothers have already known and made a ritual to follow at times when needed. The researchers are now identifying bioactive compounds in common spices like turmeric, clove and black pepper. These researches serve as the evident for our age-old practices which is now accepted by the whole world. It simply authenticates our ancestral knowledge via Scientific vocabulary that fits the generation of this new era who is curious in finding the science behind every phenomenon. But, in my point of view science isn't replacing tradition it is rather validating it.



Spice	Ayurvedic Name	Dadi's Remedy	Charaka Samhita's Inputs
Turmeric	Haridra	Mixed in milk for coughs, wounds, and glowing skin	Krimighna (antiparasitic), Varnya (enhances complexion), Shothahara (anti-inflammatory)
Clove	Lavanga	Clove oil for toothache, clove in kadha for colds	Shoolaprashamana (pain reliever), Deepana (stimulates digestion)
Black Pepper	Maricha	Used in kadha and soups for cough, digestion	Deepana (appetizer), Anulomana (relieves gas), Ruchya (improves taste), Kaphahara
Ginger	Shunthi	Used in teas and kadha for nausea, sore throat, digestion	Agnideepana (stimulates digestive fire), Shothahara
Cardamom	Ela	Used after meals for digestion, in sweets for aroma	Hridya (cardiac tonic), Trushnighna (relieves nausea), Deepana
Cinnamon	Tvak	Used in sweets, teas to warm the body and aid digestion	Vata-Kaphahara, Shothahara, Kandughna (relieves itching), Raktashodhaka (blood purifier)
Tulsi	Holy Basil	Added in kadha, chewed for cough/cold, immunity booster	Jwaraghna (fever reducer), Kaphahara, Rasayana (rejuvenative), Shwasaghna (relieves asthma)
Hing	Asafoetida	Added to dal/tadka for digestion and gas relief	Vataghna, Deepana, Shoolaghna (relieves pain), Krimighna
Jaggery	Guda	Added to kadha for sweetness, anemia prevention	Vrishya (aphrodisiac), Raktavardhak (increases blood), Snigdha (nourishing)

From mortar pestle to microscopes, these spice condiments have travelled so far and yet have become the non-integral part of any generation. Their legacy is still a part of many households and are destined to be passed on too. It just blows one's mind that what once was simply an ingredient of every kitchen household is now ruling the nutraceuticals and pharmaceuticals laboratories and companies' stock value. It's our duty to make the world understand that our ancestors were so intelligent that they were able to keep the diseases at bay by just utilizing basic ingredients when there was no concept of Antibiotics. No doubt, that modern inventions and medications have advantage of quick results but they come with side effects and allergies too whereas our Indian spices serve the same role without any major drawback. So, the amalgamation of both practices can generate a marvel which is definitely limitations free and is giving favorable results.



THE SCIENCE BEHIND DADI KE NUSKE

-Tiya patel

As summer arrives, it brings intense heat, leading to sunburns, dizziness, skin rashes, heat stroke, and dehydration. Our first instinct is to reach for air conditioning or electrolyte tablets. However, when technology wasn't as developed, the only solution for heat was Dadi ka Nuska—simple, natural, and effective. These remedies came from observing how our bodies react to heat, and even science supports them now. From their diet to how they kept cool, Dadi's summer survival tips covered it all. To prevent heat stroke and fatigue, raw mango drinks like Aam Panna were essential. Boiled unripe mangoes mixed with jaggery, roasted cumin, mint, and black salt created a tangy drink that helped retain salts lost through sweat. Pectin and acids balanced electrolytes, while cumin and mint supported digestion.

Alongside meals, a spoonful of mint chutney made from mint, coriander, lemon, and green chili kept digestion light and the body cool. Drinking mint water throughout the day activated cold-sensing receptors due to menthol. Grandma's evenings included herbal teas brewed with tulsi, fennel, or coriander, each providing heat relief—tulsi helped with stress, fennel aided digestion, and coriander eliminated internal heat. Buttermilk mixed with cumin, ginger, and salt was a lunch staple, rehydrating the body and restoring gut flora with probiotics. Instead of a fridge, she used a clay pot for water, which naturally cooled through evaporation and preserved minerals. After playing, bananas with rock salt helped prevent cramps and fatigue by replenishing potassium and sodium. Sattu sherbet made from roasted gram flour, lemon juice, black salt, and cumin became the go-to midday drink, rich in protein, fiber, and electrolytes.

Sattu Sherbet:

Black raisins which are soaked overnight and eaten in the morning cleans the body and aids circulation of antioxidants and iron. Curd mixed with onions and coriander, served with roti, helps to lower body temperature, support digestion, and protect against sun damage as it has sulfur compounds which prevents tanning, pigmentation and aging due to harmful sun rays.

Nimbu Pani (lemonade) made with lemon, sugar, salt, and chilled water was her energy booster during hot afternoons. It combined vitamin C, glucose, and electrolytes to restore hydration. Watermelon with black salt, being 92% water and rich in lycopene and potassium, served as a hydrating post-lunch treat. Cold curd rice tempered with curry leaves and mustard seeds became an ultimate cooling meal, easy on the stomach and good for gut health.

Sugarcane juice, consumed just before sunset, was thought to support liver function and prevent urinary tract infections thanks to its iron content and antioxidants. Beyond food, Dadi's summer hacks included hanging wet gunny bags outside, which cooled the home through natural evaporation. Walking barefoot on dewy grass in the early morning reduced internal heat and calmed the mind by stimulating nerves. On hot nights, she often slept on a damp cotton sheet on the floor, allowing body heat to escape through evaporation and the coolness of the floor. She made sure to cover her head with a scarf or dupatta before going outside, knowing this would protect her from solar radiation and reduce the risk of heatstroke.

While modern summers come with gadgets, these timeless remedies remind us that Dadi ke Nuske were not just cures; they were a way of life that respected the season, with science now backing these traditions.





INDIAN KITCHEN SPICES: PHYTOCHEMICAL AND THERAPEUTIC INSIGHTS

-Ved Vyas

अन्नं हि भूतेभ्यः भूत्यं, पथ्यं चोपदिश्यते । औषधं भोजनं चैव, द्वे धा रण्यौ शरी रणाम् ॥

"Food is sustenance for all creatures, and proper diet is recommended. Medicine and food – both maintain the body." This ancient Ayurvedic dictum underscored the deep relationship between healing and diet, with the implication that our kitchen may just be our pharmacy. For generations, our grandmothers have lived by this belief, doling out home remedies based on common spices. These humble-seeming ingredients were not merely flavorings – they were therapeutic agents. Now, modern science is finally discovering and confirming the phenomenal medicinal properties contained within these culinary practices. By integrating knowledge from pharmacodynamics and phytochemistry, contemporary research not only elucidates the way these spice compounds operate at the molecular level, but also provides doors to their incorporation into evidence-based medicine – linking ancient knowledge with contemporary therapeutic innovation. Pharmacodynamics is defined as the science of how a drug operates on the body – including mechanisms of action, duration, and degree of effect. Phytochemistry is a science that deals with the chemical compounds synthesized by plants, particularly those exhibiting biological or medicinal activity. It assists us in knowing the composition, action, and curative power of plant compounds from spices, herbs, and medicinal plants. Though phytochemistry and pharmacodynamics give us a scientific perspective to study the curative properties of natural elements, our grandmothers followed this knowledge instinctively.

They didn't require microscopes or molecular models to be aware that a clove calms pain, cinnamon regulates the body, or black pepper enhances immunity. Their home remedies were based on observation, experience, and a hereditary faith in nature. Now, science is finally catching up – uncovering the molecular secrets behind traditional Dadi ke Nuske. Now, as we combine ancient knowledge with scientific research, let's look at some of the most heralded spices in our kitchens – clove, cinnamon, and black pepper – and discover how their age-old uses harmonize with contemporary pharmacological discoveries. Clove – The Bud of Healing: Clove, or laung, has been a treasured part of Indian homes long before it became a mainstay of Bollywood burps and biryani – not only for its aromatic, pungent taste that adds depth to biryani, garam masala, and innumerable party foods, but also as a generations-old natural cure. Whether used as a speedy remedy for a troublesome toothache, a comforting relief for indigestion, or a warm spice for cold and cough relief, clove has never been merely a flavor managing ingredient. This is why it remains important in contemporary dentistry, particularly in root canal sealants and short-term fillings, where its anesthetic and antibacterial properties are particularly useful. Confirming this age-old knowledge, a 2021 paper in the Journal of Natural Products discovered that clove extract has strong antimicrobial activity against Streptococcus mutans, the main bacterium responsible for tooth decay. In addition, clove is also an abundance of antioxidants, which neutralize free radicals – the unsteady molecules that cause damage to cells, aging, and illness. So, when our grandmothers uttered, "Laung dabaa lo, dard chala jaayega" (Press a clove on the aching tooth and the pain will go away), they were not merely providing solace – they were subconsciously sharing centuries of science-proven wisdom.

Cinnamon:

The Sweet Defense of Immunity: Cinnamon, or dalchini, is not just a pungent spice that imparts warmth to Indian tea, pulao, and sweets – it has been a faith healer in traditional homes all along, being a known treatment for colds, obesity, and most notably, diabetes. At the center of its healing potential lies cinnamaldehyde, the oil that lends cinnamon its distinctive smell and much of its therapeutic goodness. Scientifically, cinnamaldehyde improves insulin sensitivity by enhancing insulin receptor function and encouraging glucose uptake by cells, thus making it especially useful in controlling Type 2 diabetes. There are a number of clinical studies to attest to this, indicating that taking cinnamon regularly can reduce fasting blood glucose levels and maintain overall metabolic health. But the advantages go even further – studies have determined that cinnamaldehyde can also provide neuroprotective benefits, such as blocking the formation of tau proteins, which are linked with Alzheimer's disease. Furthermore, the strong antimicrobial activity of cinnamon kills off pathogenic bacteria and fungi such as Candida albicans and Helicobacter pylori as well as some viruses, further enhancing the immunity of the body. All this redounds to the time-tested wisdom that has been handed down through generations – such as the well-known tip from our grandparents: "Garam paani mein dalchini daalke peeyo, sardi-zukaam chala jaayega" (Drink warm water with cinnamon and your cold will run away). With science constantly exploring all the ways it can heal, it's obvious that cinnamon is not only delicious – it's healing in a mighty way as well.

Black Pepper:

The Quiet Booster: Black pepper (Kali Mirch), which is usually deemed a plain seasoning, possesses phenomenal healing potential beyond its application as a flavor booster. The medicinal power of black pepper lies in piperine, a very strong alkaloid behind black pepper's pungent flavor and its potent status as a bio-booster – an agent that enhances the absorption and potency of numerous nutrients and medications in the body. Scientifically, piperine achieves this by acting as an inhibitor on enzymes like cytochrome P450 in the liver and P-glycoprotein in intestines that tend to decrease the amount of active compounds in the blood. Through this, piperine has the ability to increase the bioavailability of such chemicals as curcumin (found in turmeric) by as much as 2000%, thereby making therapeutic herbs and drugs very effective. Furthermore, piperine has neurotransmitter-modulating activity, which translates into modulation of serotonin and dopamine levels and thereby aids in enhancing mood and could sustain mental health, especially in mild depression. Piperine's anti-cancer properties are also noted in Molecular Nutrition & Food Research, with the ability to induce apoptosis in breast and colon cancer cells – an important pathway for inhibiting tumor growth. Historically, our grandmothers knew how important this spice was: "Haldi aur kali mirch waala doodh peeyo" (Turmeric milk with black pepper), they'd advise a cure that scientific modernity now hails for its synergistic action on immunity and healing. Once more, the old people's wisdom perfectly matches evidence-based pharmacology.



Asafoetida:

The Fragrant Medicinal Healer: Asafoetida (Hing), although pungent in odor, is a hallowed spice in Indian cooking – added not only to dals, curries, and tempering for its taste but also for its medicinal properties. Used traditionally for clearing indigestion, flatulence, and respiratory ailments, the chemistry behind hing's action is in the wealth of bioactive sulfur compounds, primarily ferulic acid, umbelliferone, and other volatile oils. These substances have intensive antispasmodic, carminative, and anti-inflammatory activities. Hing is a natural antispasmodic and induces relaxation of the smooth muscles of the digestive tract, rendering it most effective against bloating, abdominal spasms, and irritable bowel syndrome. Pharmacodynamically, it stops the release of excess gastric acid and enzymes, facilitating digestion and the relief of intestinal distress. Phytochemical studies have also revealed that asafoetida possesses antiviral, antifungal, and bronchodilatory properties, and is thus beneficial in the management of respiratory disorders such as asthma, bronchitis, and chronic cough. Additionally, its sulfur-bearing compounds have been reported to modulate enzyme activity and exert blood pressure-lowering activity through enhancement of vascular relaxation. In recent research, asafoetida inhibited some cancer-causing enzymes and free radicals, further solidifying its status as a functional food. Generations back, Dadi would instruct: "Zyada gas ho toh hing ka paani peeyo" (Drink hing water if you feel bloated). Now, science concurs – this old remedy is a powerful natural anti-inflammatory and digestive agent with an Ayurvedic pedigree and molecular backing.

Turmeric:

The Golden Guardian: Turmeric (Haldi) is among India's most renowned spices in the home – not just for its power to add a bright yellow hue and warm earthy taste to food but also due to its immense healing power. The essence of turmeric's medicinal properties is its main bioactive constituent, curcumin, a highly potent polyphenol that has anti-inflammatory, antioxidant, antimicrobial, and anticarcinogenic activities. Curcumin acts by modulating a number of important biological processes, such as the inhibition of NF- κ B (nuclear factor kappa-light-chain-enhancer of activated B cells), a protein complex that is responsible for provoking inflammation. It also suppresses the release of cytokines, which are communication molecules that exacerbate inflammatory reactions. This renders turmeric particularly useful for the treatment of chronic inflammatory conditions such as arthritis, metabolic syndrome, and even some cancers. Its antioxidant property aids in neutralizing dangerous free radicals, thus safeguarding cells from oxidative injury and aging. While curcumin has poor natural bioavailability, its bioavailability can be greatly enhanced – by as much as 2000% – by combining it with piperine from black pepper. Turmeric has been proven in recent clinical trials to be effective in alleviating joint pain, accelerating wound healing, enhancing skin health, and even boosting cognitive function. No surprise our grandmothers used "Haldi wala doodh" (turmeric milk) not only for colds and coughs, but also for wounds, infections, and recovery from illness. What was originally a soothing warm drink at night is now an international "golden latte" – and a classic example of how age-old remedies are based on profound science.



Cardamom:

The Aromatic Alkalizer: Cardamom (Elaichi), commonly referred to as the "Queen of Spices," is a must-have in every Indian home – not just valued for its sweet fragrance and taste in sweets, teas, and curries, but also for its vast therapeutic potential. The major bioactive constituents present in cardamom are cineole, limonene, and terpinene, responsible for its antioxidant, antispasmodic, and anti-inflammatory properties. Scientifically, cardamom has been shown to aid digestive function by relaxing the smooth muscles of the gastrointestinal tract and stimulating the secretion of digestive enzymes. It helps in relieving symptoms of indigestion, acidity, and bloating, which is why it's often chewed after meals in Indian culture. Current pharmacological research indicates that cardamom can assist in the management of hypertension since its constituents have a mild diuretic action and enhance vascular relaxation, leading to a drop in blood pressure without the use of medication. It is also antimicrobial, acting against bacteria in the mouth – hence its long-standing application as a natural mouth freshener. In addition, its soothing smell has been associated with the reduction of stress and enhanced mood, suggesting potential applications in mild anxiety or mental exhaustion. Our dadas and dadijis were aware of its value well – whether making elaichi tea to calm an upset stomach or making use of it in calming nerves while suffering from headaches and menstrual pain. Today, science recognizes what Dadi used to know: a tiny pod of cardamom is an effective, all-natural remedy for digestion, detoxification, and emotional health.

In every Indian kitchen, a spice box contains more than mere ingredients – it contains centuries of lived knowledge, tried-and-tested cures, and now, science-approved medicine. From the analgesic virtues of clove, the metabolic aid of cinnamon, the bio-potentiating force of black pepper, to the gut relief of hing, and the cellular safeguard given by turmeric and cardamom – these humble spices constitute a pharmacological treasure chest waiting in plain sight. What our grandmothers used to do instinctively, today's research now reveals through the lenses of phytochemistry, pharmacodynamics, and clinical science. While the world turns towards safer, natural, and holistic methods of health, Dadi ke Nuske's legacy remains as robust as ever – a reminder that healing does not necessarily start in a lab, but sometimes, in a ladle. By connecting heritage wisdom with the doctrines of science, we pay respect to our heritage as well as open new avenues for integrative and preventive medicine in the 21st century.





SHANTIH SHANTIH SHANTIH

-Khushi Agrawal

Every night, as the sky turned purple and the streetlights blinked awake, Aarav would climb onto his bed, carrying a head full of school worries, cricket dreams, and YouTube noise. Dadi would arrive with a calm smile, warm coconut oil, and a soft, time-worn voice. "Massaging feet grounds your energy," she said, gently pressing his soles. "It tells your brain – it's time to rest."

She'd light a small diya, place a mug of haldi milk near his side, and begin her favorite chant:

"कर्म ण्येवाधिकारस्ते मा फलेषु कदाचन ।"

Karmanye vadhikaraste ma phaleshu kadachana

(You have the right to action, not to the fruits thereof.) Aarav, eyes half closed, would ask,

"Dadi... what does it mean?"

"It means... do your best today, and let your mind rest tonight."

Her voice, slow and rhythmic, became a lullaby of wisdom.

Before the second shloka ended, Aarav would slip into sleep, his mind unwound by love, ritual, and an ancient guidebook of peace.

The Science Behind Dadi's Ritual:

1. Foot Massage (Padabhyanga):

Stimulates nerve endings → Activates parasympathetic nervous system → Calms heart rate, reduces cortisol.

2. Diya Light:

Avoids melatonin-suppressing blue light → Encourages natural sleep cycle.

3. Turmeric Milk:

Contains tryptophan, supports serotonin and melatonin production → Better mood and sleep.

4. Bhagavad Gita Chanting:

Rhythmic recitation slows breathing → Activates vagus nerve → Brings emotional regulation and mental stillness.

Like mindfulness therapy used for insomnia today.

5. Predictable Ritual = Brain Safety Signal:

Neuroscience shows routines activate dopamine and lower anxiety – essential for deep sleep.

At Last "Dadi ke Nuske" weren't just traditions – they were neuroscience in disguise. The Gita didn't just teach detachment – it taught mental clarity before sleep. And in a world full of notifications, Aarav slept – because someone whispered timeless truth, in a language the brain still understands.





CLOVE – A TINY BUD WITH MIGHTY BENEFITS

-Dr. Swati Jayswal

Scientific name: *Syzygium aromaticum* (L.) Merr. & L.M. Perry

Family: Myrtaceae

Common name: Clove

Now-a-days herbal medicine is at high pick in use as having ability to cure so many diseases and health problems and it is safe to use it. Among all the other spices clove has shown a high level antimicrobial and antioxidant activities. Therefore it attracts the attention more compared to other spices.

Description:

It belongs to myrtaceae family. The native of the clove is East Indonesia. It's a medium size tree (8-12m) frequently cultivated at 200m above the sea level means in coastal area at higher altitudes. The aromatic dried flower bud of clove is a commercialized part of it. When plant becomes 4 years old then flower bud is started to produce. Those flower buds are collected when it is matured. The term "clove" is derived from the French word "clou" and English word "clout", meaning of both the words is "nail" as it looks like nails. Its fragrance is so intense and having burning taste. The colour is brown and fragrance is so powerful having warm, pungent, strongly sweet and a bit astringent odour.

Properties:

Clove is a source of phenolic compounds. The main bioactive compound found in clove is eugenol. Flavonoids, hidroxiphenyl propens, hidroxibenzoic acids, hydroxicinamic acids are found in higher amount. Phenolic acid like gallic acid is also found at higher concentration in clove. Other flavonoids and phenolic acids have been seen at lower concentrations. Eg. kaempferol, quercetin, caffeic, ferulic, elagic and salicylic acid. Clove is also known as powerful antioxidants in recent years. An essential oil is also extracted from clove. In that oil, 89% of the oil is found having eugenol. In addition to antimicrobial and antioxidant activity, it is found having antifungal, antiviral, antidiabetic, anti-inflammatory, antithrombotic, anesthetic, pain relieving and insect repellent activities.

Medicinal Uses:

It is useful in the treatment of many diseases. Apart from that as we know that it is a useful ingredient of all the traditional dishes as cuisine in our country. It is helpful in making dental creams, tooth pastes, mouth washes and throat sprays to cleanse bacterial infection. It is also known to have beneficial effect in relieving pain from sore gums. In short, it improves dental health. As anti-inflammatory agent, it is used in the treatment of rheumatism and arthritis. In digestive problems, it is known as beneficial agent. It can cure loose motion, indigestion, nausea, diarrhea, gastric irritability and vomiting. In addition to that it has power to boost immune system so that a person can fight against various types of diseases. It has ability to solve respiratory problems like cold, cough, asthma, bronchitis etc. It has been proved by researchers that cloves can prevent the skin cancer and lung cancer too.

Culinary Uses:

Clove is used at high frequency in kitchen in so many dishes like biryanis, pickles, salads and garam masala. In Indian masala tea, it works as the key ingredient. It is also used to flavor the dishes like meat products, candies, cookies, pastries, hot spiced drinks, spiced fruits, chewing gum, wines and liqueurs, chocolate drinks, sandwiches, puddings, curries, cakes and pickle. It is used in high amount to stud tomatoes, sausage, onions, salads, soups and herbal teas. It is known as important spice which is used as cuisines in many countries like Greece, China, India, Scandinavia and Russia. Thus, clove is found to have various types of properties which can be useful in curing so many diseases and in solving so many general health problems. So, there is a great scope for researchers to develop an efficient formulation using clove.





SPICES : A HOUSE OF WELLNESS

-Rena Dharsandia

स्वस्थस्य स्वास्थ्यरक्षणं |
आतुरस्य विकार प्रशमनं च ||

This shloka from Charak Samhita specifically from Sutra Sthana (1st century CE) explains to us that the objective of Ayurveda is to keep the health of a healthy person and to cure the disease of an ill person. Being the fundamental principle of Ayurveda, it also showcases us the rich and varied traditions of ancient India. India is a country of vast literature and culture where the remedies to all ailments lie in the age-old kitchens and gardens which were lost over the time but are rediscovered with the science behind Dadi ke Nuske. These traditional tips are passed on from one generation to the next, which includes natural ingredients and practices. Home remedies ? Beauty concerns ? Energy boosters ? Sleep activator ? Hacks for daily lifestyle ? Be it anything Dadi ke Nuske always works as the saviour. Remember how our grandmothers quickly whip up concoctions for us during any sickness, which are just put together with the common ingredients found in our kitchens and gardens. They heal us slowly from within without any side effects. Besides healing they also aim in balancing the body and promoting the overall well-being of a person. After being vanished over time, they have now again started to strengthen their roots after the worldwide pandemic of 2020. We all are aware about the common items like clove, pepper, lemon, ginger, etc. But let me enlighten you all about kakachiya, giloy, jaggery, asafoetida, saffron, oregano, nutmeg and many more such remedies that my Dadi made use of. Let us now take a trip down the memory lane of such remedies and learn how to cure yourself from within.

1) Jaggery : Do you recollect how Dadi used to balance the taste of concoctions with jaggery? It helps in sore throat, chest congestion, or diabetic problems. Along with being anti-inflammatory, it is also a very good anti-bacterial, anti-viral, detoxicant, a good digestive agent and an immune booster. A warm jaggery spiced milk or tea works wonders. So the next time you fight cold or stay warm, then don't forget the sweet hack!

2) Nutmeg: Commonly known as jayfal, it works miracles in joint pain reliefs, inflammation, digestion, skin problems, lowering cholesterol and the major problem of today's world, which is overcoming insomnia as it is an excellent anti-depressant.

3) Kakachiya: Typically known as fever nut, it cures diabetes, asthma, digestion problems, fever, menstrual problems and skin conditions. And for all the students reading this let me tell you that it is a very good memory enhancer!

4) Giloy: Popularized during the COVID season, it is a powerhouse of antioxidants and purifies blood by clearing out all the bacteria and viruses. It also helps in life-threatening fevers like malaria, dengue, swine fluoride, etc.

5) Saffron: The most expensive flower in the world, is best for skin problems, brightening the skin tone, dark circles, skin hydration, seasonal flu and digestion. Girls, you know the secret of beauty now.

6) Oregano: The moment we hear this word and what we recollect is pizzas. But that's not it, oregano along with taste-enhancer, also works for painful joints, soothing tummies and skin, cough relieving tea, and as a very good massage oil.

7) Asafoetida: Better known as hing, it stimulates digestive enzymes, reduces bloating, constipation, stomach cramps, acidity, inflammation and pressure in the stomach. It also cleanses the diuretics of kidneys and mucus of lungs along with waste from the stomach.

8) Star Anise: Also called badiyan, is a star shaped flower used in the treatment of amenorrhea, cataract, jaundice, bloating, abdominal pain, gas and indigestion. It is a life saver for nausea, vomiting and belching during pregnancies.

9) Triphala: Combination of amla, haritaki, and bibhitaki dried powder has antioxidants properties, vitamin - C, gentle laxative properties, anti-inflammatory effects and also helps in maintaining good oral hygiene.

10) Honey: The versatile natural remedy and sweetener soothes sore throat as well as stomach, suppresses cough, heals wounds, rehydrates the body and even improves skin health. But always remember that honey when heated is really toxic in nature.

Many of the remedies listed above are ones I grew up with, ones that families have passed down and brought me up on since I was child, and I look forward to falling back on them when I need the comfort. While there's some research to support home remedies, your best defense against any illness is building a strong immune system with some strategies like:

- Eat a healthy diet.
- Exercise regularly.
- Get sufficient sleep.

These three things will surely help you live a long and healthy life. So the next time you are down with an illness, remember that the cure is already disguised in your everyday spices.



-Divyasingh Rajput

The sun had just begun to lean westward when I spotted my grandmother seated on the veranda, her silver hair wrapped in a damp towel. A brass tumbler of mint water rested by her side, beads of condensation racing down its curved belly. She glanced up, smiled knowingly, and patted the stool next to her. “Sit, beta. You look cooked,” she chuckled, as she offered me a slice of chilled raw mango rubbed with salt and chilli powder – a taste so sharp and cooling it was like a thunderstorm for the senses. Back then, I didn’t know she was enacting a masterclass in thermoregulation. But science today is nodding to what grandmothers across India have practiced for centuries: natural, cultural hacks to beat the heat, long before the age of air conditioning.

The Wet Towel Around the Neck:

Grandma’s simplest hack – a wet towel or gamchha around the neck – wasn’t just comforting, it was strategic. The carotid arteries that pass through the neck carry blood to the brain, and cooling this area can help reduce core body temperature. Modern sports medicine backs this up: studies show that placing cold compresses on areas rich in blood vessels (like the neck, wrists, and inner elbows) enhances heat dissipation through conduction and convection mechanisms (Cheuvront & Kenefick, 2014). “It cools the mind too,” she would say, “not just the body.”

Mint Water, Chaas & Aam Panna: Summer Elixirs:

Daily drinks of pudina-pani (mint water) and chaas (spiced buttermilk) kept hydration, digestion, and heat under control. Mint’s active compound, menthol, triggers cold-sensitive receptors – making the body “feel” cooler even when the temperature hasn’t changed (Eccles, 1994). Buttermilk adds essential electrolytes and probiotics, helping restore hydration lost through sweat.

But the crown jewel was aam panna – made from roasted raw mango pulp blended with jaggery, cumin, and black salt. According to Ayurveda, it is Pitta-pacifying and cooling. Scientifically, raw mangoes are packed with vitamin C, pectin, and antioxidants, all of which help prevent dehydration and heat stroke by supporting electrolyte balance (Gopalan et al., 2012).

“Kairi keeps the loo away,” she’d say – referring to the scorching loo winds of northern India.

The Onion-in-Pocket Trick:

Yes, it sounds odd. But ask any kisan (farmer) in India, and they’ll tell you: keep a peeled onion in your shirt pocket when working in the sun.

Onions are rich in quercetin, a natural antioxidant and anti-inflammatory compound. While the topical use might not be scientifically documented, Ayurveda attributes onions with cooling and grounding properties, and folk medicine views them as a shield against heatstroke. Additionally, the sulphur compounds in onions may help maintain vascular stability during high heat exposure.

The pungent little bulb, it seems, had protective secrets.

Sattu: The Protein-Packed Coolant of Bihar:

Across the Gangetic plains, one summer staple reigns supreme – sattu. Made by roasting and grinding Bengal gram (chana), sattu is mixed with water, salt, lemon juice, and cumin to create a nutrient-dense, cooling drink. It is low-glycemic, protein-rich, and hydrating – making it a natural isotonic drink. Studies highlight roasted pulses like sattu as excellent for replenishing lost nutrients and maintaining electrolyte balance in extreme weather (NIN, 2018).

“One glass in the morning, and I can work till noon,” my uncle from Patna used to swear.

Other Rituals with Scientific Backing:

Matka Water: Natural evaporative cooling from clay pots ensures a safe, ambient-temperature hydration source – without shocking the system like iced drinks can.

Khas ki Diwal (Vetiver Grass Screens): Before the age of electric coolers, homes in North India relied on khas mats – woven from vetiver roots, hung over doors or windows and soaked with water. As wind passed through them, they cooled the air through evaporation, much like a swamp cooler. Vetiver also releases a distinct, earthy aroma with calming, anti-inflammatory properties and is still used in Ayurveda for its cooling effect on the nervous system and skin.

Coconut Oil Hair Massage: Coconut oil’s high heat capacity absorbs and slowly dissipates heat. Plus, it soothes the scalp – a major area for body heat loss.

Sleeping on the Floor: Floors made of stone or tile stay cool longer and enhance thermal conduction, promoting restful sleep in hot weather.

Light Cotton and Whites: Wearing breathable fabric in white or pastel shades maximizes infrared reflection and air circulation, aiding in sweat evaporation and temperature regulation (NIH, 2021).

The Legacy of Cooling Wisdom:

These hacks may seem humble, but they’re rooted in profound environmental intelligence. They’re sustainable, low-cost, and designed for India’s diverse climates. Today’s heatwaves may be stronger, but the wisdom of our grandmothers – and generations before them – has never been more relevant.

Cooling off, it turns out, doesn’t require a machine. Sometimes, it’s just a slice of raw mango, a damp gamchha, a matka by your side, or the fragrance of khas drifting through the summer air.





GRANDMA'S MULTANI MITTI MAGIC: THE COOLEST LAP

-Dr Yesha Master

There is more to Grandma's beauty secrets story than nostalgia. It has to do with a profound fusion of contemporary science and traditional knowledge. Researchers and formulators are using "bioactive botanicals" more and more these days, and many of them are straight out of Grandma's kitchen. It turns out that beauty is more than just appearances. It is a living code that consists of both memory and molecules. What about Grandma? Wearing a cotton saree, she was the first biochemist.

Fuller's earth, also known as "multani mitti," is a common home treatment in South Asia. In this region of the world, it has been used for generations as a skin and hair cleaner. Although Fuller's earth was used in Europe to clean wool, it is now employed as an adsorbent, to bleach oils or drill mud, and even in the film industry to create dust clouds or mud baths. In their daily lives, people in South Asia, especially in India, Pakistan, and Nepal, utilize Multani mitti as face packs to wash their hair or enhance their appearance.

A clay bowl rests in Grandma's lap as she sits on a woven charpai beneath a neem tree on a warm summer afternoon. Reeva sits in front of her, her face covered in a pale brown paste, her eyes wide with curiosity.

Reeva Speaks:

"Why is your lap so cold today, Daadi?" Grandma applied a chilly, muddy substance on Reeva's cheeks while she giggled.

Grandma chuckled and said, "That's not my lap, silly." "The earth's way of hugging your skin is Multani Mitti."

Reeva took a whiff. "Smells like rain-soaked soil!"

"Because, dear, it's Earth." Grandma rubbed it in carefully and added, "Special clay from the land of Multan." "Like a magnet, it draws out all the heat, dust, and perspiration."

"How about using soap instead?" Reeva enquired.

Soap cleanses, huh? Grandma muttered, "Multani Mitti heals." It has a lot of minerals and magnesium. It tightens your pores, cools your skin, and absorbs the oil like a thirsty sponge.

Reeva had a gleam in her eyes. Is it like a superhero to a skin?

Grandma gave a nod. "Exactly. And only dirt, affection, and a dash of rose water—no chemicals. Reeva felt the air caress her cheeks as the clay dried on her face. Her skin glowed like moonlight as she saw little soldiers in the mitti fighting acne and tanning. From then on, Sunday was Mitti Day, which included a clay bowl, Grandma's lap, and nature's own face mask.





GLOWING THROUGH GENERATIONS

-Bhumika Bisht

You must've heard your grandmothers and mothers scoff at your new beauty concoctions and your 10 step skincare routine which I bet, is followed regularly only before an important event. It's true that beauty does need changes with time but have we ever questioned those new beauty trends? How those same products can make our skin over sensitive and can cause pH disbalance, micro-abrasions which would ultimately lead to damaged skin barrier. Not to mention the vast variety of skincare products adhering to different skin types which leads to more confusion.

Traditionally, Indian women have been known to use only naturally grown and locally sourced ingredients for self care, that are staples in every Indian home and general store. No matter the concern, there's something in the Indian beauty bag for everyone. One of the most common glow code is used during summers, this particular season promises us a lot of fun activities along with the unwelcome souvenir of a tan which often lingers.

Sun tan, is caused by melanin production in response to UV exposure and cannot be quickly removed. But it's necessary for us to understand that there is a big difference between a healthy tan and an excessive tan. A healthy tan is when you have little exposure to the sun, which gives your skin a beautiful golden look. But when you get too much exposure to the sun, it will lead to extensive tan which makes our skin dark and dull. Our main concern here is that there are a lot of products in the market, claiming to remove tan in the most effective and natural way, but the truth is that most of them are loaded with chemicals that can damage your skin further. But here, tan isn't your enemy—these tan removal products are.

And here's a glow code which is being shared from generations to generations by our grandmothers and mothers:



Tomato & Yoghurt Mask:

In order to prepare this pack, add required amount of pulp of tomato and one tablespoon of juice of a along with one tablespoon of yogurt in a bowl. Mix it to form a paste and apply on your face then let it dry for 20 minutes then wash it off with cold water.

Now, let's understand how does this mask works and why do we use these two particular ingredients in this mask.

Tomato has following nutrients which plays an important in this mask:

a. Lycopene - it is an ultimate antioxidant for skin, found in tomatoes which helps protect the skin from UV damage, premature aging and free radicals. This natural compound:

- Works as a natural shield against sunburn.
- Reduces the appearance of wrinkles and fine lines.
- Helps in skin tightening by improving elasticity.

b. Vitamin C - Tomatoes are an excellent source of vitamin C, a nutrient known for its brightening and skin-whitening properties. The high content of vitamin C in tomatoes:

- Enhances skin radiance and promotes glowing skin.
- Reduces dark spots, pigmentation, and acne scars.
- Stimulates collagen production, making the skin firmer and healthier.

Yogurt is packed with essential nutrients that contribute to its skin-nourishing properties such as lactic acid, probiotics, vitamins like B2 and B12, calcium and zinc, all of which play a crucial role in improving the overall health and appearance of your skin. These nutrients make yogurt for skincare a versatile and effective solution for tanning.

a. Lactic Acid: This natural alpha-hydroxy acid gently exfoliates dead skin cells, unclogs pores and promotes skin renewal. This is why yogurt for skin exfoliation is a popular choice for achieving smoother and brighter skin.

b. Probiotics: The live cultures in yogurt help balance the skin's microbiome, which is essential for preventing breakouts, reducing inflammation, and keeping the skin barrier healthy. Probiotics enhance yogurt for skin health, making it a fantastic option for sensitive or acne-prone skin.

c. Calcium and Vitamins: These nutrients contribute to skin moisture, elasticity, and overall vitality. Using yogurt for skin renewal can help repair damaged skin and restore its natural glow.



•Neem Oil:

As we enter our adolescence, we begin to notice how acne takes over our once crystal clear skin. The estimated 85% of teens get acne, usually starting at age 11 for girls and a couple of years later for boys. It can last through the teen years and into the early 20s. Many women note that it worsens just before menstruation and disappears during pregnancy. But there's one thing which can bring us relief in this particular matter, which is:

When we think of Neem's benefits for skin we mentally remove the terms 'for skin' and only limit ourselves to its strong and bitter taste. But that does not do any justice to this herb's efficiency as a potent medicine. Ayurvedic texts described Neem as 'Sarva Roga Nivarini,' which literally implies 'the cure of all ailments.' This herb's anti-inflammatory properties are known to do wonders for skin and hairs. But have we wondered how neem is better than all those acne treating products - as we move further we start to notice that how true to their nature these ingredients are without any external involvement of chemicals and are timeless. Not to mention that these codes are backed by scientific reasons, let's see how: Neem has a well-deserved reputation as a skin care agent. When used as an oil it's more effective and its anti-inflammatory- antibacterial properties make it an effective remedy for a variety of skin conditions, including acne, eczema and psoriasis. Also, it helps provide a better spot correction for acne marks and dark spots. Due to its high vitamin E content, it nourishes the skin, while soothing irritation and redness.

Ghee:

Every winter, we'd line up at the door as our mother spread ghee across our lips before we left for school. It was a ritual she never missed and along with that we never missed to cringe at her "old-fashioned" ways. But over time we realized that this simple, ancient home remedy always worked well. Used as a natural moisturiser, replete with 'good fats', ghee provides nourishment to the body, both inside and out. In Ayurveda this ghee moisturizer, refers to 100 times-washed ghee as Shata Dhauta Ghrita, where "Shata" means "hundred," "Dhauta" means "washed," and "Ghrita" means "Ghee." Loaded with Omega-3 fatty acids and other antioxidants which moisturizes our skin while maintaining the sebum production. You can use it to heal dry, cracked patches on your skin or as an overnight lip mask and in various other ways. So, ditching those high end luxurious, heavy body butters and thick creams never made us regret our decisions, in fact it made us learn to embrace the goodness of ghee.

Conclusion :

As said earlier that beauty need changes with time but it isn't necessary to accept all those new changes into your routine, even those which has potential to damage your skin barrier. In today's world buying new skincare products, inspired by social media has become much of a trend which indeed, is very alarming. At times, we may overlook the damage caused by these products and instead focus on the short term benefits. Over time, we've adapted to everything being done instantly, which makes us forget that sometimes things which are actually good for us takes time and those same things are derived from nature. Which was then passed down to us by grandmothers and mothers as their glow codes.



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ANCIENT WISDOM FOR MANAGING DIABETES

-Dr Akhilesh Prajapati

Certainly! The concept of Diabetes in Ayurveda is referred to as "Madhumeha" (मधुमेह) – literally meaning "sweet urine disease" – and it is classified under a broader group of urinary disorders called "Prameha" (प्रमेह). Ayurvedic texts like the Charaka Samhita and Sushruta Samhita describe its symptoms, causes, and treatments. Below is a well-known verse from Charaka Samhita, Chikitsa Sthana, Chapter 6, Verse 4, which introduces Madhumeha: मधुरो मूत्रगन्धश्च मधुरो मूत्ररूपतः । मधुरेणाभिसंयुक्तो मधुमेहः स उच्यते॥ "When the urine smells sweet, appears sweet in nature, and is mixed with sweetness – such a condition is known as Madhumeha." Introduction: The Roots of Healing Lie in Tradition Our grandmothers didn't have a PhD in endocrinology, but they had generations of lived knowledge about health – passed down through rituals, routines, and remedies. Among the most commonly addressed ailments in Indian households was diabetes, or as it's often called, "sugar ki bimaari."

Remedy	Evidence Types	Notable Outcomes
Fenugreek	Randomized controlled trials (RCTs), meta-analyses	↓ fasting glucose, HbA1c, improved insulin signalling
Bitter Gourd	Reviews, trials	Contains insulin mimetics (charantin, polypeptide-P)
Jamun Seed	Animal + clinical	↓ blood glucose, improved lipid profile
Cinnamon	Meta-analyses, RCTs	↓ fasting glucose (~25 mg/dL), ↓ HOMA-IR, ↓ HbA1c
Neem	Clinical + preclinical	↓ fasting glucose, insulin resistance, HbA1c, ↑ insulin output

Quick Tips: Lifestyle Lessons from Dadi:

- Eat on time and eat seasonal.
- Practice yoga and morning and evening walk
- Sleep early, wake up with nature.
- Use traditional cookware (like iron and clay) for added mineral benefits.

Bless food before eating – a mindful pause that aids digestion. Final Thoughts Our grandmothers may not have known the names of hormones or biochemical pathways, but they intuitively understood the body. As science continues to explore the molecular pathways of these traditional remedies, we're reminded that the wisdom of the past can very well shape the health of our future.

While modern medicine provides essential tools for diagnosis and treatment, emerging research is shining a spotlight on how many Dadi ke Nuske actually align with evidence-based approaches to managing blood sugar. This article explores traditional Indian home remedies for diabetes, now validated by modern science.

1. **Methi** (Fenugreek) Seeds: Nature's Glucose Buffer Dadi's Wisdom: "Soak methi seeds overnight and drink the water in the morning – it keeps sugar under control." Scientific Insight: Fenugreek seeds are rich in soluble fiber and contain 4-hydroxyisoleucine, a bioactive compound that improves insulin sensitivity and stimulates insulin secretion. Studies published in journals like Phytotherapy Research confirm that regular fenugreek use lowers fasting blood glucose and HbA1c in type 2 diabetics. (1,2) How to Use: Soak 1-2 teaspoons of fenugreek seeds overnight in water. Drink the water and chew the seeds on an empty stomach.

2. **Karela** (Bitter Gourd): The Herbal Insulin management. (3,4) Dadi's Wisdom: "A glass of karela juice every morning keeps the sugar in check." Scientific Insight: Karela is a powerhouse of charantin and polypeptide-p, which mimic the action of insulin and reduce blood glucose levels. Research in journals like Journal of Ethnopharmacology supports karela juice as a beneficial adjunct in type 2 diabetes How to Use: Juice one small bitter gourd and drink on an empty stomach 3-4 times a week.

3. **Jamun** (Indian Blackberry): Seed of Stability Dadi's Wisdom: "Eat jamun in season; keep the seeds – they're sugar's enemy." Scientific Insight: Jamun seeds contain jamboline and ellagic acid, which delay the conversion of starch into sugar and support pancreatic function. Seed powder has shown hypoglycemic effects in both animal and human trials. (5,6) How to Use: Dry jamun seeds, grind into powder, and take ½ tsp daily with warm water.

4. **Dalchini** (Cinnamon): Sweet Spice with a Sugar Cut Dadi's Wisdom: "A pinch of cinnamon in your tea daily helps digestion and sugar control." Scientific Insight: Cinnamon increases insulin receptor sensitivity, improves glucose uptake, and slows gastric emptying. Clinical trials show reduced fasting glucose and improved lipid profiles in type 2 diabetes patients using Ceylon cinnamon. (7) How to Use: Add ½ tsp of ground cinnamon to warm water or herbal tea daily. Avoid excess, especially with cassia cinnamon.

5. **Neem Leaves:** The Bitter Healer drink neem leaf tea 3 times a week. Blending Tradition with Evidence Dadi's Wisdom: "Neem is bitter, but it purifies blood and controls sugar." Scientific Insight: Neem leaves have potent antioxidant and anti-inflammatory effects, and compounds like nimbidin have been found to improve insulin sensitivity and reduce glucose levels in preclinical studies. (8,9) How to Use: Chew 4-5 tender neem leaves daily or These remedies aren't meant to replace medical treatment, but rather complement it. Dadi ke Nuske reflect a holistic view of health that values consistency, natural rhythms, and plant based nutrition. With the support of scientific studies, these rituals become powerful tools in preventive and integrative care – especially for lifestyle conditions like diabetes.

