

# Indian Society of Lifestyle Medicine

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**Theme: Looking past mis-information**



**E-newsletter  
Issue 6**

INDIAN SOCIETY OF  
LIFESTYLE MEDICINE

**April 2025**

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# Message from the ISLM executive committee

Dr. Vinu Vij

Dear Readers,

We are pleased to share the sixth issue of the ISLM newsletter, a reflection of our ongoing efforts to promote evidence-based lifestyle practices and empower individuals with knowledge that supports good health and prevents disease. In a time when lifestyle-related diseases continue to rise and health information is more accessible than ever, the challenge lies not in the lack of content-but in discerning what is credible, relevant, and safe. ISLM remains committed to bridging the gap between clinical evidence and personal lifestyle choices, enabling individuals to make choices that enhance their overall well-being.

The theme of this edition, "**Looking Past Misinformation**," speaks to that very challenge. We live in a world saturated with wellness advice-some backed by science, but much of it shaped by commercial interests, social media trends, and half-truths. This issue explores how easily misinformation can creep into our lives, sometimes disguised as health advice. Through diverse contributions, we examine the confusion around protein and its role in diet, the hidden harms of today's wellness culture, and the impact of fad diets on children's developing relationship with food. We also look at commonly believed myths around lifestyle practices-from sleep and strength training to alcohol, tobacco, and detox fads-prompting a re-examination of claims not supported by evidence. A real-world case study illustrates how thoughtful lifestyle changes can significantly impact chronic kidney disease and hypertension. Additionally, a research review offers a cautionary look at YouTube as a source of health information, underscoring the importance of digital discernment.

Together, these pieces remind us that *wellness is not about extremes or perfection. It is about balance and decisions informed by scientific evidence and critical evaluation.* We hope this edition encourages readers to pause, question, and move forward with greater confidence in navigating the complex world of health information.

Warm wishes,

**Dr Vinu Vij**

Treasurer, ISLM.



# From the Editor's desk...

Dr. Richa Lal

Dear friends,

We present this newsletter to you with much joy & enthusiasm. The ISLM family has expanded exponentially since its inception and, hence the organization has a rich & diverse talent as showcased by the articles authored by young members in this newsletter.

The theme "Looking past misinformation" is rather unconventional but, we felt, it was the need of the hour. While lifestyle related diseases are rising at an alarming rate & our country is sadly becoming the world capital of some LRD's-"wellness" unfortunately, is being "advertised" as an industry with motives that are far beyond true health. Moreover, the social media is replete with information about "wellness" which is often non-scientific to say the least, and in fact, very often misleading & hence detrimental.

Hence, the imminent need to look past misinformation. We dedicate this Issue with sincere wishes for "true health & well - being " for our own selves and for those who entrust their health in our hands



**Richa**

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## About “Indian Society of Lifestyle Medicine”

Dr. Anupama Devadas

As we step into 2025, ISLM has been actively engaging in initiatives to promote evidence-based lifestyle medicine across India. Here's a look at our key activities and accomplishments so far this year.

- 1. New Year Vision & Goals:** ISLM set a strong vision for 2025, aiming to: i) conduct at least two impactful workshops before the annual conference; ii) promote education and awareness across sectors; iii) introduce zonal representatives to decentralize and strengthen outreach throughout India & iv) emphasize prevention and holistic well-being.
- 2. Webinars & Learning Events:** i) January 22, 2025: Webinar on "The Paradox of Happiness" explored how striving for happiness can paradoxically reduce it. ii) February 12, 2025: Webinar on "Role of AI in Scientific Writing" provided practical insights into how AI tools can support researchers and academics in their scientific communication.
- 3. Instagram Live Sessions:** January 25, 2025: Dr. Sheela Nambiar (Past President, ISLM) hosted an engaging Insta Live on the Exercise Pillar of Lifestyle Medicine. The session focused on how regular physical activity supports health and mental well-being. It emphasized accessible, science-backed fitness strategies for all.
- 4. Journal Club & Case-Based Learning:** i) March 2, 2025: ISLM hosted its first Journal Club of the year with an interactive discussion on a selected LM article; ii) Case Study & Panel Discussion on Obesity: A multidisciplinary session on real-world challenges in obesity management and innovative lifestyle interventions.
- 5. Collaborations & New Initiatives:** i) Official Partnership with *Walk with a Doc*: ISLM launched its first chapter in Chennai on March 9, 2025. This initiative fosters community engagement through doctor-led walks and health talks. Interested members are encouraged to start chapters in their cities; ii) ISLM has entered into a collaboration with AIIMS, Nagpur. An MoU was officially signed and ISLM is partnering with them for the post-doctoral certification in LM
- 6. Announcement of Zonal Representatives:** To increase regional outreach, ISLM introduced zonal representatives: Central (Dr. Mrunal); South (Dr. Kannan); East (Dr. Ankita Priya); North (Dr. Khalid); West (Dr. Nitin). They will play a pivotal role in organizing local events and increasing awareness about lifestyle medicine.
- 7. CME Courses & Observances:** i) "Fasting in Medicine" CME: A focused course on guiding patients with appropriate fasting strategies tailored to individual needs; ii) April 7, 2025 (World Health Day): Online CME by AIIMS Nagpur & ISLM Central Zone to boost LM awareness in Central India, led by Dr. Mrunal Phatak.

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**8. Introduction of Board of of Advisors:** ISLM welcomes our esteemed advisors who bring rich expertise: Dr. Bhateja (Neurosurgeon and lifestyle medicine advocate); Dr. Purushottam Giri (Secretary General, National IAPSM); Prof. Mamtani (Professor, Weil Cornell University); Dr. Sheela Nambiar (Past President, ISLM); Sheela Krishnaswamy (RD & Wellness Consultant)

**9. Elective Program in Lifestyle Medicine:** Annapoorana Medical College, Salem has begun incorporating Lifestyle Medicine into the 2-week elective MBBS posting in Community Medicine. This is an inspiring model for other institutions aiming to integrate LM in UG education.

*Ongoing Efforts of ISLM:* Continued promotion of LM through webinars, journal discussions, and active engagement via our official Instagram handle. Preparations are underway for more workshops and a major conference later this year.

Together, let's keep transforming healthcare-one lifestyle change at a time!

With gratitude and anticipation for what lies ahead

**Dr Anupama Devadas**

Secretary ISLM

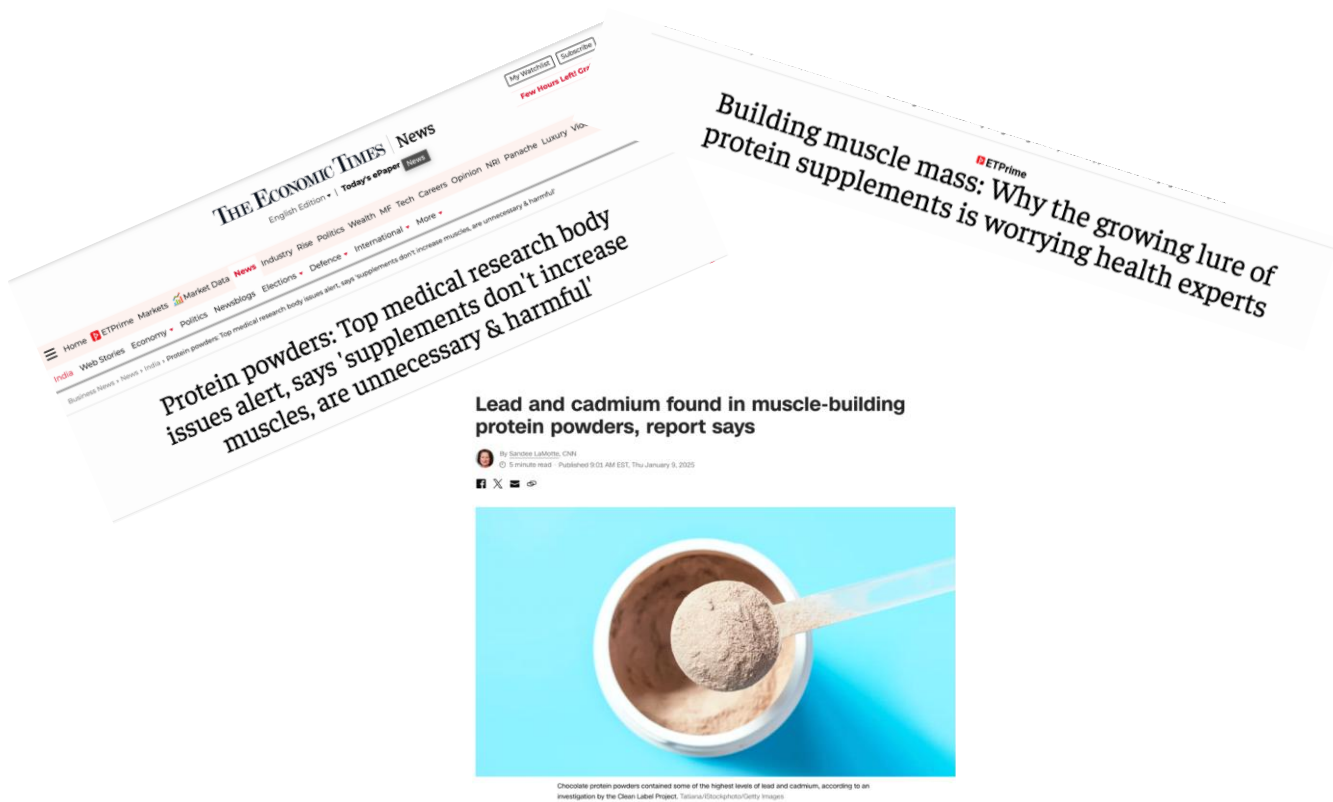


# Proteins: Fuels, facts and fall out

Dr. Nrutya Subramanyam

Protein is the Buzzword now. It's being discussed by everyone from the lay public to patients in our clinics, and of course, the almighty fitness influencers on social media.

The subject of protein consumption is controversial and complex. There's always an ongoing debate about optimal protein intake. Compounding this complexity are questions surrounding protein sources and supplements. And recent media reports have highlighted concerns about heavy metal contamination in protein supplements, further stirring the pot.



So let me try and bring some clarity to the confusion.

## What is Protein?

Protein is one of the essential macronutrients alongside fats and carbohydrates, and it is recommended that protein in our diet should comprise anywhere from 10% to 35% of total calorie intake.

Proteins are composed of amino acids, which serve as the foundation for all cells and tissues in the body. While protein is often associated with muscle fitness and athletic performance, its importance extends far beyond muscle growth.

*Amino acids, which are the building blocks of protein, are crucial for the development and maintenance of bones, joints, ligaments, skin, and hair, as well as enzymes and hormones. So, proteins are more than just about muscle.*

### Incomplete/Complete proteins

There are 20 amino acids and nine are termed as essential as our body cannot synthesize these 9 essential amino acids and we need to obtain it from our diet. Protein derived from animal sources such as dairy, eggs and meat are typically considered complete, as they contain all nine essential amino acids, while plant proteins are often regarded as incomplete as they may be deficient in one or more essential amino acids. For example, rice is deficient in lysine and dal is deficient in methionine and cysteine but ***there are plant proteins which are complete proteins such as soy, quinoa, buckwheat, and amaranth to name a few.***

***Indian dishes pair various sources of plant proteins in a complimentary manner such that one food makes up for the deficiency in the other, such as pairing rice with dal or serving idli or dosa with sambar.***

It is important to consider protein sources from all the food that we consume rather than focusing on getting the daily recommended intake through a single food like meat, dairy, poultry, or eggs.

It's important to note that all foods contain varying amounts of macronutrients, including protein. Even fruits contain some protein.

### Protein Quality

Protein quality is assessed using the Protein Digestibility-Corrected Amino Acid Score (PDCAAS), which compares the limiting essential amino acid in a test protein to a reference protein (egg or milk). Animal proteins tend to have higher digestibility (90-99%) than plant proteins (70-90%).

*Studies comparing whey, pea, rice, and soy protein supplementation found no significant differences in strength, muscle gain, or performance after resistance training. Overall, the key factor in muscle development appears to be adequate protein intake combined with proper resistance training, regardless of protein source.* Though more quantity of plant derived protein may need to be consumed to achieve the same results when compared to the quantity of animal derived protein.

Babault N, Paizis C, Deley G, et al (2015). Pea proteins oral supplementation promotes muscle thickness gains during resistance training: a double-blind, randomized, placebo-controlled clinical trial vs. whey protein. *Journal of the International Society of Sports Nutrition*, 12(1). <https://doi.org/10.1186/s12970-014-0064-5>

### Protein Requirements

What's the optimal intake? *Most health organizations, including the NIN, suggest a recommended dietary allowance of 0.8 gm/kg body weight for protein consumption.* However, contemporary research indicates that this might be the bare minimum needed, and protein requirements can fluctuate based on age and physical activity

Phillips, S. M., Chevalier, S. & Leidy, H. (2016). Protein "requirements" beyond the RDA: implications for optimizing health. *Applied physiology, nutrition, and metabolism = Physiologie appliquee, nutrition et metabolisme*. <https://doi.org/10.1139/apnm-2015-0550>  
Bauer, J. M, Biolo, G, Cederholm et al. T (2013). Evidence-based recommendations for optimal dietary protein intake in older people: a position paper from the PROT-AGE Study Group. *Journal of the American Medical Directors Association*, 14 8. <https://doi.org/10.1016/j.jamda.2013.05.021>  
Landi F, Calvani R, Tosato M et al (2016). Protein Intake and Muscle Health in Old Age: From Biological Plausibility to Clinical Evidence. *Nutrients*.

### Protein Sources

Research indicates that increasing plant-based protein intake, as opposed to animal-derived protein, can lead to improvements in non-communicable diseases (NCDs) and biomarkers associated with diabetes, cardiovascular disease, dyslipidemia, and non-alcoholic fatty liver disease (NAFLD).

*Experts advise incorporating more plant-based protein sources into one's diet. Reputable institutions such as Stanford and Harvard Medical School have updated their nutritional guidelines to advocate for a higher consumption of plant proteins relative to animal proteins.*

Vigiulio E, Stewart SE, Jayalath VH et al. Effect of Replacing Animal Protein with Plant Protein on Glycemic Control in Diabetes: A Systematic Review and Meta-Analysis of Randomized Controlled Trials. *Nutrients*. 2015; 7(12):9804-9824. <https://doi.org/10.3390/nu7125509>  
Tielemans S, de Kuijper WA, Engberink MF et al. (2013). Intake of total protein, plant protein and animal protein in relation to blood pressure: a meta-analysis of observational and intervention studies. *Journal of Human Hypertension*, 27(9). <https://doi.org/10.1038/jhh.2013.16>

### Protein intake and kidney health

There is a common misconception that consuming protein above the Recommended Dietary Allowance (RDA) can result in chronic kidney disease (CKD). However, current research does not support this claim for healthy, physically active adults who have no existing kidney problems or other medical conditions. In these individuals, higher protein consumption is not associated with the development of kidney disease. Adequate hydration is a key aspect of kidney health. One also needs to keep an eye on salt consumption as a high salt intake can increase the risk of kidney disease.

Martin WF, Armstrong LE, Rodriguez NR. (2005). Dietary protein intake and renal function. *Nutrition & Metabolism*, 2(1). <https://doi.org/10.1186/1743-7075-2-25>

### Protein supplements

**It is important to follow a food first policy**, but protein supplements may be appropriate when dietary guidelines for protein consumption cannot be met through food alone especially in situations where overall quantity of food consumed may be relatively less.

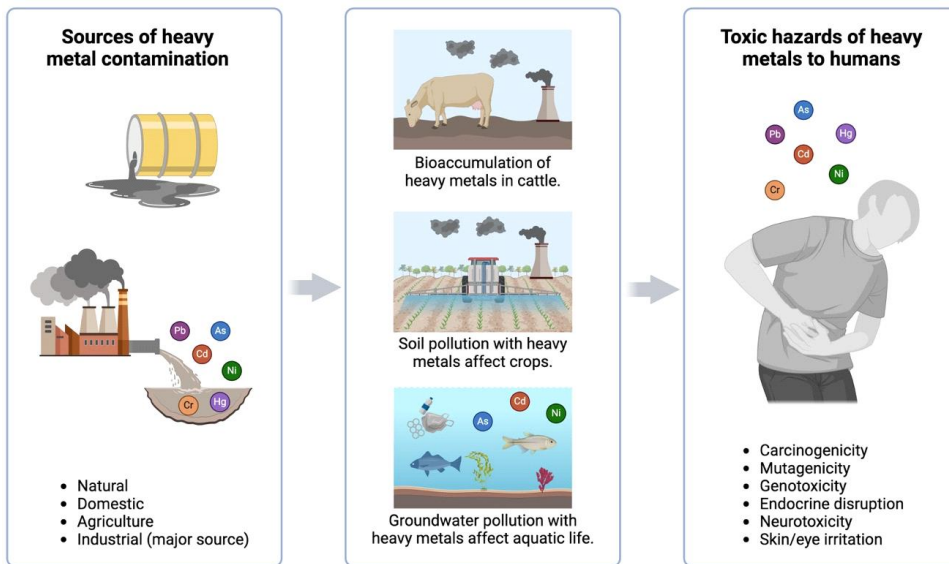
*A recent news article highlighted concerns about high levels of heavy metals in protein supplements. However, it's important to note that heavy metal contamination is not exclusive to these products. This issue stems from food processing methods, environmental pollution, and unsustainable farming practices that affect our natural resources, including soil. The contamination of food can occur at various stages of food production and processing, as illustrated in the diagram in the next page.*

Studies have found that plant protein powders especially the chocolate flavored ones contain higher amounts of heavy metals than animal sources of protein powder. This is in part because of the agriculture practice and the manner in which cocoa is grown

*Protein powders from peas has shown to have the least amount of contamination compared to soy/rice derived protein powders*

Bandara SB, Towle KM, Monnot AD. A human health risk assessment of heavy metal ingestion among consumers of protein powder supplements. *Toxicol Rep*. 2020 Aug 21;7:1255-1262. doi: 10.1016/j.toxrep.2020.08.001

## Proteins: Fuels, facts and fall out



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### Key Takeaways

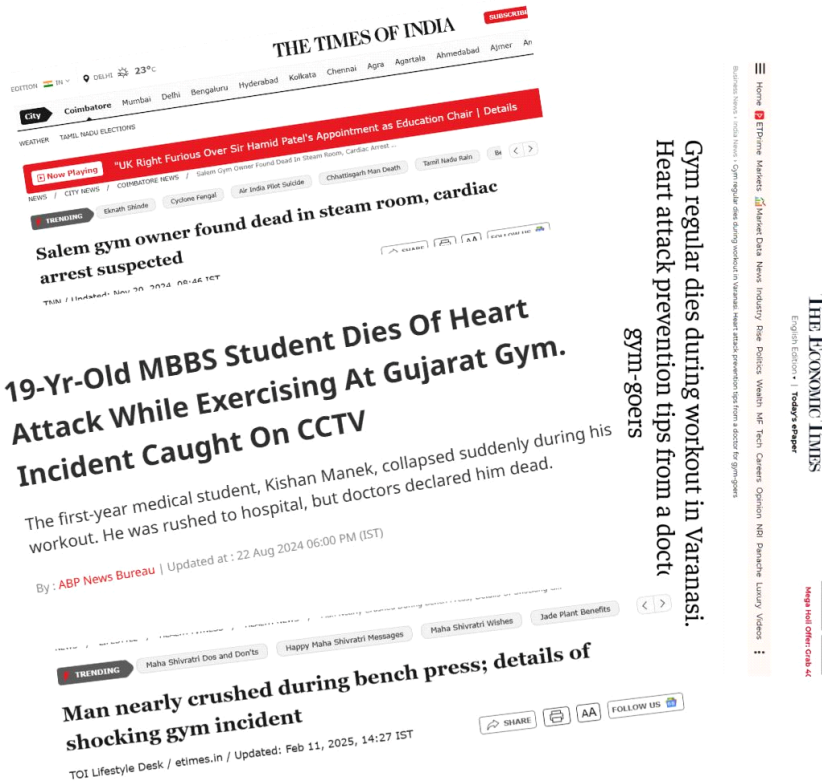
1. Maintain a Food first policy - try and include beans/lentils/nuts and seeds/whole grains daily.
2. Let your plate be more plant predominant at every meal
3. When choosing animal products such as low-fat dairy, eggs, fish and poultry, opt for products which are certified as grass-fed/wild-caught/free-range
4. Aim to get at least 1gm/kg body weight of protein every day and include protein at every meal.
5. If you are sufficiently active and meeting the physical activity guidelines you can aim for 1.2 to 1.6gm/kg of protein per day.
6. If you must opt for a supplement, pick a protein supplement: a) That is unflavored; b) Does not contain added sugar /artificial sweeteners; c) Check the list of additives; d) Check that it is 3rd party tested; e) If choosing a plant protein supplement choose pea protein over other sources; f) Check the label for sodium content as plant proteins tend to have a higher sodium content.
7. Ensure that you are adequately hydrated.

**Author: Dr. Nrutya Subramanyam**



# Hidden dangers of wellness culture: When healthy becomes unhealthy

Dr. Harpreet Kour



Gym regular dies during workout in Varanasi.  
Heart attack prevention tips from a doctor  
gym-goers

Headlines continue to surface about individuals succumbing to unforeseen cardiac events or severe injuries during workouts. From young athletes collapsing on treadmills to seemingly fit individuals suffering heart attacks post-exercise, these incidents are becoming alarmingly frequent. The pervasive belief that physical exertion is universally beneficial, without due consideration for individual health parameters, has contributed to a culture where people dive into fitness routines without proper screening or preparation.

## The Rise of Wellness Culture

In recent years, wellness culture has gained significant attraction, evolving into a multi-trillion-dollar industry. The global wellness market, valued at over \$4.5 trillion (Global Wellness Institute, 2019), permeates fitness, nutrition, beauty, and mental health. **From exorbitantly priced fitness regimens to highly restrictive dietary trends, wellness has transitioned from a lifestyle choice to a societal expectation.** Social media exacerbates this phenomenon by inundating individuals with an overwhelming stream of health-related content. A 2022 survey by OpenText revealed that 88% of Indian respondents feel that information overload driven by constant information flow, pervasive social media, and numerous apps contributes to their daily stress. Furthermore, the Global Wellness Institute predicts a 9.9% annual growth rate in the industry, underscoring its expanding influence (Global Wellness Institute, 2023).

The paradox of this wellness obsession is that those who struggle to keep up often experience heightened guilt, anxiety, and self-doubt. What begins as a pursuit of health can spiral into a relentless and unforgiving obligation.

### The Rise of Orthorexia and Obsessive Health Behaviours

*One of the most insidious consequences of contemporary wellness culture is orthorexia nervosa, a pathological obsession with consuming only "clean" or "pure" foods.* Unlike conventional eating disorders that center on caloric restriction or overconsumption, orthorexia fixates on food quality, often culminating in malnutrition, social isolation, and heightened anxiety surrounding dietary choices.

Emerging research underscores the pervasive nature of this condition, particularly among health-focused populations. *In India, studies estimate that orthorexic tendencies among medical students range from 29.86% to 46.5%,* reflecting the deep-rooted impact of this issue within highly health-conscious demographics. Similarly, in the U.S., 21% of college students exhibit symptoms of orthorexia (Dunn & Bratman, 2016).

A broader examination of the literature reveals a significant predisposition among health professionals, especially dietitians and dietetics students, toward orthorexic behaviors. A systematic review reports prevalence rates fluctuating between 23.3% and 88.7% in these groups an alarming variation attributed to the absence of standardized diagnostic criteria and the inconsistency of assessment methodologies.

Furthermore, a meta-analysis of 30,476 participants across 18 countries estimates the global prevalence of orthorexia nervosa symptoms at approximately 30%, with no significant gender disparity. Medical students, in particular, appear disproportionately affected, with some studies reporting prevalence rates as high as 76.2%, suggesting that individuals immersed in health-centric environments may be more susceptible to developing disordered eating patterns under the guise of wellness.

### Wellness and Privilege: Who Gets to Be Healthy?

The commodification of wellness in India has inadvertently turned health into a privilege rather than a universal right. ***The country's burgeoning 8.5 lakh crore (\$102 billion) wellness industry (FICCI & EY, 2022) disproportionately caters to the urban elite, those who can afford premium gym memberships, organic produce, personalized nutrition plans, and luxury wellness retreats.*** Traditional Indian wellness practices such as Ayurveda and yoga, once deeply embedded in holistic well-being, have been commercialized and repackaged, often pricing out lower-income communities while diluting their authentic cultural essence.

This unequal access to wellness resources raises a fundamental question: Is health an individual pursuit, or should it be a collective societal responsibility? India faces stark healthcare disparities, with over 30% of the population lacking access to basic healthcare services (National Health Profile, 2021). While wellness culture places heavy emphasis on individual lifestyle choices, it often overlooks structural issues such as poverty, food insecurity, and inadequate public health infrastructure.

Reports from the Public Health Foundation of India (PHFI) highlight that socioeconomic status is one of the strongest determinants of access to wellness resources, exacerbating the divide between those who can afford proactive health interventions and those who remain dependent on an overburdened public healthcare system (PHFI, 2022).

If wellness is to be truly inclusive, it must transcend its elitist boundaries and address these systemic disparities. A shift toward community-based wellness programs, affordable nutritional education, and equitable healthcare policies is crucial to ensuring that well-being is not just a privilege for the few, but a right for all.

### Perfectionism and the Illusion of Control

The wellness industry often promotes an idealized image of health, leading individuals to strive for unattainable standards of self-optimization. This relentless pursuit can foster self-criticism, guilt, and chronic stress. Research indicates that social media usage is associated with body dissatisfaction and disordered eating behaviors. A systematic review found that specific activities, such as viewing and uploading photos, are particularly problematic in this regard. ***Moreover, the illusion of complete control over one's health can be detrimental, promoting the belief that any health imperfection results from personal failure, thereby cultivating a cycle of anxiety and dissatisfaction rather than genuine well-being.***

### The Role of Social Media and Influencers

Social media significantly influences modern wellness culture, often ***amplifying extreme health trends and unrealistic body standards.*** While specific statistics from Jones & Williams (2020) and Gupta et al. (2021) are not readily available, existing research highlights similar concerns. For instance, a study published in Health Communication found that social media influencers frequently share body-related ideals, such as body positivity or fitspiration, which can impact followers' perceptions of their own health habits. Additionally, a systematic review in the Journal of Medical Internet Research summarized various health-related uses of social media, noting both benefits and potential misinformation risks. These findings suggest that while digital platforms can offer valuable health information, users should critically evaluate the credibility of wellness content to avoid misinformation and unrealistic expectations.

### The Imperative of Pre-Participation Screening: Exercise vs. Sports

One of the most overlooked yet crucial aspects of wellness culture is ***the necessity of pre-participation screening before engaging in physical activity.*** A widespread yet erroneous belief exists that exercise is universally beneficial, leading many individuals to assume that if a peer embarks on an intense workout regimen, they can effortlessly follow suit.

This misconception is dangerous. Every individual possesses a unique physiological profile, encompassing varying levels of cardiovascular endurance, musculoskeletal resilience, and preexisting medical conditions. Exercise, when undertaken indiscriminately, can precipitate severe health complications, including sudden cardiac arrest, ligament tears, and overuse injuries.

### ***A critical distinction must be made between recreational exercise and professional sports.***

Recreational exercise prioritizes holistic well-being, emphasizing moderate physical activity tailored to individual needs. Conversely, sports demand disciplined regimens, structured training, and rigorous conditioning often at the expense of long-term joint and cardiovascular health. The failure to differentiate between these two domains has led to numerous avoidable injuries and health setbacks. Reports from the Public Health Foundation of India (PHFI) highlight that socioeconomic status is one of the strongest determinants of access to wellness resources, exacerbating the divide between those who can afford proactive health interventions and those who remain dependent on an overburdened public healthcare system (PHFI, 2022).

Medical screening, fitness assessments, and personalized workout plans are imperative to ensure that physical activity remains both safe and beneficial. The adoption of a one-size-fits-all fitness mindset can yield catastrophic consequences, making it imperative for individuals to approach exercise with informed caution.

### **Conclusion**

The wellness industry has cultivated an environment where self-improvement borders on self-flagellation. While striving for health is commendable, the journey toward well-being should not be marred by obsession, guilt, or unattainable ideals. *The key to sustainable wellness lies in balance, self-awareness, and the ability to discern between beneficial practices and harmful trends. Prioritizing inclusivity, scientific literacy, and mental well-being over commercialized perfectionism is the only path toward a truly holistic definition of health.*

**Wellness should liberate, not imprison.  
True health lies in balance, not in obsession. - Harpreet**



### References

The Global Wellness Economy Monitor Data 2023. Global Wellness Institute. <https://globalwellnessinstitute.org/press-room/press-releases/wellness-now-a-4-2-trillion-global-industry/>. Last accessed on 17th March 2025.

### References (Contd)

Chandana, Akkidasu, Vinnakota, Archana Mopidevi, Vijayagopal, Arpitha, B; Sravani, A; Tejesh, M. Prevalence of orthorexia nervosa among medical students of South India. Archives of Mental Health 2024; 25(1):p 72-76

Jain A.& Sharma U. Prevalence and Relationship of Orthorexia Nervosa with Self-Esteem and Lifestyle Satisfaction in Indian Married Women. International Journal of Indian Psychology, 2021; 9(3), 181-193.

Sethi J, Singh M, Garg M, Singh P, Sethi U, Preliminary screening for orthorexia nervosa in undergraduate student population of north India using ORTO-15 questionnaire. J Prev Med Holist Health 2021;7(2):79-83

Chloe Ephrem, Rana Rizk, Danielle Saadeh, Souheil Hallit, Sahar Obeid, Carolien Martijn, Orthorexia nervosa in dietitians and dietetics students-prevalence, risk factors, and interventions: a scoping review using a systematic approach, Nutrition Reviews.2025;83(2); 382-396.

Dunn TM, Bratman S. On orthorexia nervosa: A review of the literature and proposed diagnostic criteria. Eat Behav. 2016;21:11-7.

Żucka, I.; Mazur, A.; Żucka, A.; Sarzyńska, I.; Trojniak, J.; Kopańska, M. Orthorexia as an Eating Disorder Spectrum-A Review of the Literature. Nutrients 2024, 16, 3304.

Unboxing the Wellness Economy: India's \$102 Billion Opportunity." Federation of Indian Chambers of Commerce & Industry. Retrieved from [www.ficci.in](http://www.ficci.in)

Healthcare Access and Equity in India." Central Bureau of Health Intelligence, Government of India. Retrieved from [www.cbhidghs.nic.in](http://www.cbhidghs.nic.in)

Public Health Foundation of India (PHFI). (2022). Socioeconomic Determinants of Health and Wellness in India. Retrieved from [www.phfi.org](http://www.phfi.org)

Sanzari CM, Gorrell S, Anderson LM, Reilly EE, Niemiec MA, Orloff NC, Anderson DA, Hormes JM. The impact of social media use on body image and disordered eating behaviors: Content matters more than duration of exposure. Eat Behav. 2023;49:101722.

Breves, P. L., van Berlo, Z. M. C., Teunissen, L., König, L., Binder, A., & Naderer, B. Happier and Healthier? Investigating the Longitudinal Impact of Body-Positive and Fitspirational Influencers on Weight Satisfaction, Healthy Eating, and Physical Activity. Health Communication, 2025;1-13.

Chen J, Wang Y. Social Media Use for Health Purposes: Systematic Review. J Med Internet Res 2021;23(5):e17917

**Author: Dr. Harpreet Kour**

# Fad diets & fragile minds: The hidden impact on children's relationship with food!

Dr. Michelle Shah

As lifestyle medicine practitioners, we recognize the intricate relationship between nutrition, behavior and long-term health outcomes.

However, in an era where restrictive eating patterns, diet fads and weight-centric approaches dominate societal narratives, we must critically examine how these trends shape not just adult health but also children's foundational relationship with food.

## The hidden dangers of fad diets in a child's world

Children develop their earliest food associations from their caregivers. When adults adopt restrictive eating habits, whether through conversations such as 'cheat meals,' keto, intermittent fasting, detox regimens or elimination diets without medical justification, children observe, internalize and often mimic these behaviors.

Research shows that children exposed to diet culture at home are at higher risk for maladaptive eating behaviors, including: i) **Early-onset restrictive eating** often leads to a higher likelihood of disordered eating in adolescence; ii) **Heightened food-related anxiety**, where children become excessively preoccupied with food choices and "healthiness."; iii) **Disrupted hunger and satiety cues**, increasing susceptibility to emotional eating, binge cycles or chronic under-eating; iv) **Nutritional inadequacies**, particularly among children whose families eliminate entire food groups without sufficient alternatives.

While adults may engage in dieting for personal health goals, the unintentional message to children can be damaging: **that food is something to be feared, controlled or moralized rather than appreciated as a source of nourishment and well-being.**

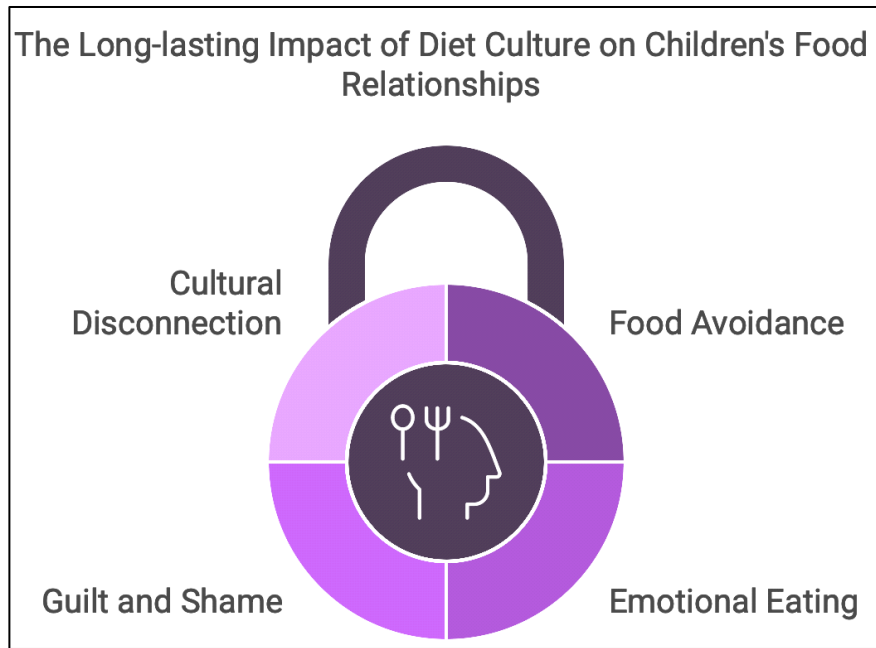
## How disordered eating shapes a child's relationship with food

The impact of diet culture on children extends beyond childhood eating behaviors and has long-lasting psychological implications. When children grow up in an environment where food is categorized in extremes, 'healthy vs. unhealthy', 'clean vs. dirty' and 'good vs. bad,' their relationship with food often becomes rigid and emotionally charged. This can manifest in several ways:

- **Food avoidance and fear-based eating:** Children may begin to fear specific foods, leading to unnecessary restrictions and anxiety around eating. This can contribute to conditions such as *orthorexia*, where an obsession with 'clean eating' leads to nutritional deficiencies and social withdrawal from food-related events.
- **Emotional eating and loss of intuition:** When food is restricted or used as a reward, children may learn to eat based on external rules rather than internal cues. This disrupts their natural ability to self-regulate hunger and fullness, increasing the risk of binge-eating behaviors in adolescence and adulthood.
- **Guilt and shame around eating:** If children are frequently exposed to negative language about food, they may develop feelings of guilt when consuming certain foods. Over time, this association can lead to cycles of restriction, overeating and self-reproach, which are commonly seen in disordered eating patterns.

## Fad diets & fragile minds: The hidden impact on children's relationship with food!

- **Disconnection from cultural and social aspects of food:** Food plays a vital role in cultural identity, social bonding, and emotional connection. When children are raised in an environment that prioritizes dietary restriction over enjoyment, they may lose the ability to appreciate food as more than just a source of nutrition. This can result in a strained relationship with food that persists into adulthood.



As practitioners, we must move beyond weight-centric narratives and promote a holistic approach to childhood nutrition that fosters a healthy, balanced relationship with food. The way children perceive eating today will shape how they nourish themselves in the future. Instead of reinforcing restrictive ideals, *we must prioritize education, autonomy and emotional well-being around food choices.*

**By addressing the psychological and developmental consequences of fad diets and disordered eating, we can contribute to a future where food is seen as a source of joy, connection and sustenance rather than a battleground of guilt and restriction**

**Author: Dr Michelle Shah**

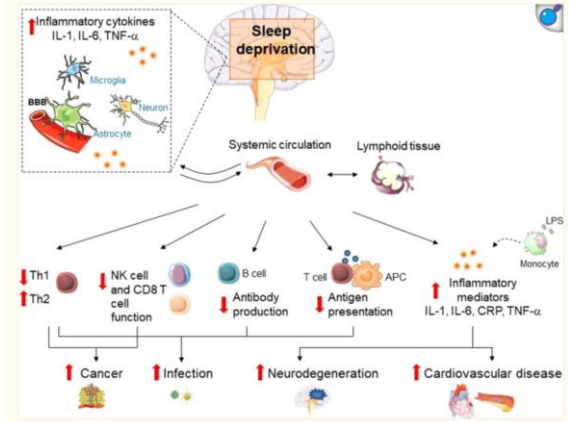


# Lifestyle medicine: Unravelling common myths

Dr. Anchal Aggarwal

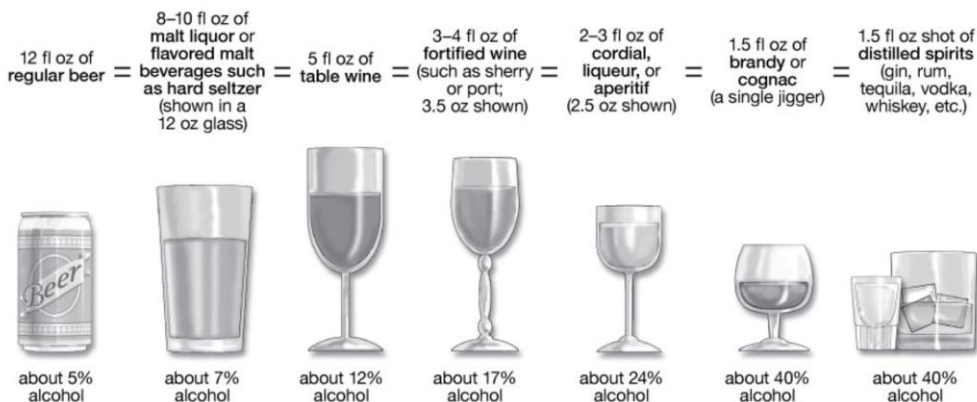
## 1) Myth: Sleeping for about 8 hours is a waste of time:

**Fact:** Sleep deficiency impairs functional performance and sleeping for about 8 hours is essential for maintaining optimal health and well-being. Short duration and disrupted sleep is associated with elevated BMI, obesity, metabolic syndrome, type 2 diabetes and cardiovascular diseases. 1



## 2) Myth: Beer is not alcohol and can be consumed safely.

**Fact:** Beer is indeed an alcoholic beverage. It contains ethanol (ethyl alcohol), which is the same type of alcohol found in wine, spirits, and other alcoholic drinks. The alcohol content in beer can vary, but it typically ranges from 4% to 6% alcohol by volume (ABV). The data in humans on alcohol and health show a strong association between drinking alcohol and increased the risk of more than seven types of cancer, regardless of the type of alcohol (e.g., beer, wine, and spirits).



## 3) Myth: Consumption of Smokeless tobacco is acceptable and has no consequences.

**Fact:** There are more than 3000 chemicals in smokeless (chewable) tobacco products and about 28 of them are proven carcinogens. Apart from causing cancers of mouth, throat, esophagus, stomach etc, periodontal diseases, hypertension, cardiovascular disorders, strokes, obesity, dyslipidemia, infertility are some of the problems in the spectrum of diseases which can be attributed to the consumption of the same.



### 4) Myth: Strength training is not for me as I am not a wrestler.

**Fact:** Strength training is for everyone whether you are a wrestler, an athlete, a homemaker or a professional. It helps in reducing body fat, improves muscle strength and overall endurance.

### 5) Myth: Elderly people who walk and do yoga, don't need strength training

**Fact:** Strength training is far more necessary in old age than in youth. We tend to lose muscle mass every decade as we age with a more rapid fall in our muscle strength. Strength training improves muscle quality, prevents risk of falls and fatigue and improves sleep, bone health and overall mental health. Wall Push-ups, sit to stand, seated leg lifts and standing heel raising etc are some of the exercises which can be done at home without any equipment.

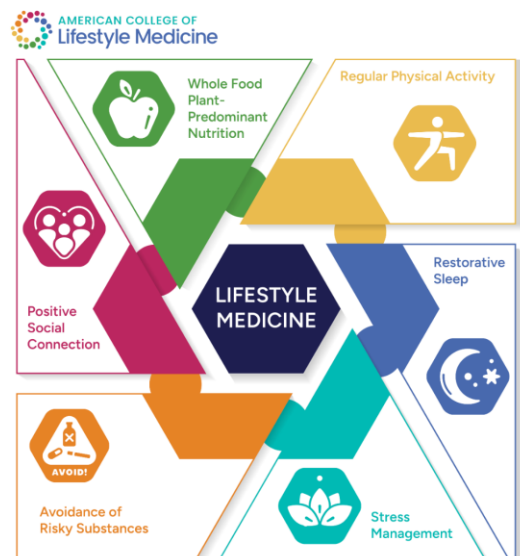


### 6) Myth: Screen usage ad lib is harmless and is required for learning:

**Fact:** Excess social media use is associated with poor sleep, anxiety, depression and low self-esteem. While screens can be valuable educational tools, excessive use can impair learning by reducing attention spans and limiting face-to-face interactions, which are essential for cognitive and social development. It's crucial to balance screen time with other activities, including physical exercise, outdoor play, and social interactions, to ensure overall well-being.

### 7) Myth: Expensive detoxification products or therapies are required to remove toxins from the body:

**Fact:** Human body has built-in mechanisms, primarily the liver, kidneys, lungs and skin, which naturally detoxify and eliminate waste and toxins in the form of stools, urine, sweat or carbon-di-oxide. Embracing a whole plant-based diet, staying well hydrated, engaging in regular physical activity, working on stress and getting enough sleep are some very effective ways to support the body's natural detoxification processes.



#### References:

1. Garbarino S, Lanteri P, Bragazzi NL, Magnavita N, Scoditti E. Role of sleep deprivation in immune-related disease risk and outcomes. *Commun Biol.* 2021 Nov 18;4(1):1304. doi: 10.1038/s42003-021-02825-4. PMID: 34795404; PMCID: PMC8602722.
2. <https://extranet.who.int/fctcapps/fctcapps/fctc/kh/slt/news/smokeless-tobacco-slt-products>
3. <https://connect.lifestylemedicine.org/partnerresources/new-page513/toolkit-what-is-lm>

## Case study: From chronic illness to wellness: The power of lifestyle changes in CKD and hypertension management

Dr. Shruthi Thennati

**Abstract** Chronic kidney disease (CKD) is a multifaceted condition characterized by a gradual decline in renal function, often precipitated by comorbidities such as hypertension (HTN) and metabolic disorders. Hypertension, a major risk factor for CKD, exacerbates renal damage by increasing the pressure on the small blood vessels within the kidneys, thereby impairing their filtration capabilities. Hypothyroidism, while not directly causal in CKD, can contribute to cardiovascular risk factors, including hypertension, through its effects on lipid metabolism and systemic vascular resistance. The management of CKD, particularly in the context of multiple comorbidities, necessitates a comprehensive approach that integrates pharmacological interventions with lifestyle modifications.

*This case study presents a 63-year-old male patient with a long-standing history of hypertension and hypothyroidism, who was diagnosed with stage 3 CKD five years prior to his presentation. Despite being on multiple medications, he expressed concerns about the increasing number of drugs he was taking and sought a more holistic approach to manage his health and work towards decreasing his medication load.*

**Case Details-** The patient, a 63 year old retired male from Chennai, Tamil Nadu, presented in February 2024 with a 20-year history of hypertension and hypothyroidism and CKD for 5 years. He currently had no active complaints and came for lifestyle modification advice for his condition.

**Physical examination-** Blood Pressure: 120/80 mm Hg, Pulse: 80 bpm, BMI: 21 kg/m<sup>2</sup> (weight - 55 kgs, height - 165cms). No pallor noted. Patient was lean and fit and was able to do his day to activities himself.

His CKD was diagnosed in 2019 during a regular annual health check with an initial serum creatinine level of 1.9 mg/dL. Over the subsequent five years, his creatinine levels progressively increased to 2.9 mg/dL, accompanied by a urine protein creatinine ratio (UPCR) of 2, indicating significant proteinuria.

### Laboratory results at diagnosis-

Parameter	Value
Hemoglobin	13.7
S. Creatinine	2.9 mg/dl, indicative of stage 3 CKD
Uric acid	9 mg/dl
Urine Protein Creatinine Ratio (UPCR)	2, reflecting substantial proteinuria
TSH	7.8
HbA1C	5.8%
Lipid profile	Non HDL - 230 mg/dl, T. Triglycerides - 200 mg/dl, HDL cholesterol - 24mg/dl.

## Case study: From chronic illness to wellness: The power of lifestyle changes in CKD and hypertension management

**Laboratory results at diagnosis (Contd):** USG Abdomen - Bilateral mildly echogenic kidneys with maintained corticomedullary differentiation.

*Medication at first presentation:* i) T. Arkamin 100 mcg, ii) T. Cilacar 5 mg, iii) T. Telma 40 mg, iv) T. Eltroxin 100 mcg, v) T. Nodosis ½-0-½, vi) T. Febuxostat 40 mg, vii) T. Neurobion Forte, viii) T. Shelcal HD : 1 OD

### Lifestyle History

*Diet:* Pure vegetarian diet, mostly consumes home-cooked meals - first meal lunch by 11:30 AM , finished dinner by 7:30 PM. Never consumed store bought fried foods or ultra processed foods. Outside food consumption very rare.

*Physical Activity:* Limited to short walks to the temple or grocery store adding upto maximum 60 mins of moderate intensity exercise per week

*Sleep Patterns:* Regular, sleeping by 9:30-10 PM everyday and waking up by 5-5:30 AM even on weekends. He wakes up fresh in the morning.

*Stress Management:* Engaged in daily prayers and offerings. His stress levels in life were quite low.

No drinking or smoking habit

### Misconceptions

The patient held several misconceptions regarding his diet and exercise:

- Believed he should totally avoid protein due to CKD.
- Thought pink salt was healthier than regular salt.
- Thought cruciferous vegetables were harmful for hypothyroidism.
- Believed strength training was not suitable for seniors.

### Lifestyle Intervention

After taking a detailed history and clinical examination and going through his current lab reports, we deep dived into his lifestyle. For one week we tracked his meals that he usually consumes, his step count for the day, sleep and stress levels for the day. The patient was told to maintain an AM/ PM Blood pressure charting. After collecting his data for a week, a personalized lifestyle plan was developed for him.

This is what his meals looked like before joining our program.



## Case study: From chronic illness to wellness: The power of lifestyle changes in CKD and hypertension management

### Nutrition

*Patient Education* - Patient was initially educated on nutrition, macro and micronutrients, how to portion and plate their foods, importance of protein intake and how to improve it and all his misconceptions were busted.

*Protein Intake*: Advised to consume 0.8 g/kg body weight ( ~ 40-45 gms) of protein to support muscle health without overburdening the kidneys. 15 gms. of protein was advised in each meal in the form of regular foods. This recommendation aligns with guidelines suggesting that moderate protein intake can help maintain muscle mass and does not accelerate CKD progression in most patients. Patient was educated on protein sources which are in line with his religious beliefs and how much to incorporate in each meal. He was advised to add greek yogurt, soya chunks, paneer, tofu, legumes (chana, rajma, sprouts) in his meals.

*Salt Restriction*: Initial intake of ~ 8gms/day was noted. Slowly over 1 month on a weekly basis, salt intake was gradually decreased to less than 3.5 g/day to manage blood pressure.

*Iodized Salt*: Switched from pink salt to iodized salt to support thyroid function. Iodine is crucial for thyroid hormone synthesis, and its deficiency can exacerbate hypothyroidism.

*Dietary Fiber*: Encouraged to include more fiber-rich foods, including cruciferous vegetables, which are safe for hypothyroidism when properly cooked. Patient was advised to weigh his vegetables and to consume ~ 200 gms cooked non starchy veggies and 2 fruits a day.

Vitamin D3 and B12 Supplementation: Provided to address deficiencies

This is what the meals looked like through the course of his association with us.



## Case study: From chronic illness to wellness: The power of lifestyle changes in CKD and hypertension management

### Physical Activity

*Walking:* Initially 15 mins walk was added before his temple visits. Gradually every week 10 more minutes were added. Now the patient walks for 45 minutes - moderate intensity walking for 6 days of the week.

*Strength Training:* After 2 months of continued walking, bodyweight exercises were introduced for 15 mins twice a week using YouTube videos, tailored for seniors. He now does resistance band whole body exercises twice a week.

*Stress Management:* Meditation: Continued and encouraged to maintain low stress levels.

### Sleep

Continued regular sleep schedule. Adequate sleep is crucial for overall health and can help regulate blood pressure and metabolic functions.

### Social connectedness

He was encouraged to indulge in his daily prayers and prayer meetings. He attended music classes and met friends and family over the weekends.

### Management and Outcome

#### *Medication Adjustments*

Over the course of a year, the patient's blood pressure was monitored, and the antihypertensive medications were gradually tapered. Briefly for 2 months, patient maintained normal blood pressure without any blood pressure medications. We reintroduced T. Telmisartan 20 mg, primarily for proteinuria management, not blood pressure control.

#### **Follow-Up Assessments:**

Seven months post-intervention:

Parameter	Value
Serum Creatinine	Decreased to 1.4 mg/dL, indicating a significant improvement in renal function.
Uric Acid	3.8 mg/dL without Febuxostat, suggesting improved metabolic health.
UPCR	Reduced to 0.3, reflecting decreased proteinuria
TSH	6.6mIU/mL
HbA1C	5.5%
Lipid profile	Normal

## Case study: From chronic illness to wellness: The power of lifestyle changes in CKD and hypertension management

Medications during first visit – Feb 2024	Medications as on Feb 2025
T. Arkamin 100 mcg 1-0-1 T. Cilacar 5 mg 1-0-1 T. Telmisartan 40 mg 1-0-0 T. Eltroxin 100 mcg 1-0-0 T. Nodosis ½-0-½ T. Febuxostat 40 mg 1-0-1 T. Neurobion Forte 1-0-0 T. Shelcal HD 0-1-0	T. Telmisartan 20 mg 1-0-0 T. Eltroxin 62.5 mcg 1-0-0 Multivitamin

As of Feb 2025, The patient continues to have his blood pressure under control, urine proteinuria continues to be around the same value of UPCR between 0.4-0.6, Sr. creatinine is between 1.4-1.7 mg/dl. He continues to follow his new routine, and these lifestyle modifications have been his new normal.

### Discussion

This case study underscores the efficacy of lifestyle interventions in managing CKD, particularly in the context of multiple comorbidities. Key findings include:

**1. Dietary Changes:** The introduction of a balanced diet with adequate protein, fiber, and salt restriction significantly improved renal function and blood pressure control. This approach challenges common misconceptions about protein intake in CKD patients and highlights the importance of a well-planned diet.

**2. Physical Activity:** Gradual increases in walking and strength training enhanced cardiovascular health and muscle strength, contributing to overall well-being. This demonstrates that seniors can safely engage in strength training, which is crucial for maintaining physical function.

**3. Stress Management:** Continued meditation practice helped maintain stress levels, which is beneficial for blood pressure management and overall health.

**4. Debunking Misconceptions:** Correcting misconceptions about protein intake, cruciferous vegetables, and strength training allowed for a more comprehensive approach to health management. This emphasizes the importance of patient education in lifestyle medicine.

### Conclusion

This case highlights the potential of lifestyle medicine in effectively managing complex chronic conditions like CKD, HTN, and hypothyroidism, reducing reliance on pharmacotherapy and improving patient outcomes. By adopting a holistic lifestyle intervention strategy, individuals with CKD can experience significant improvements in their health and quality of life. Healthcare providers should prioritize lifestyle changes as a first-line approach in CKD management, complemented by pharmacological interventions as needed.

**Author: Dr. Shruthi Thennati**

# Research Summary

Dr. Sudha Ramalingam

## **Is YouTube useful as a source of information for approaches to reducing blood pressure and hypertension treatment?**

### **A Research Summary based on the article**

Kaya E, Solak Y, Sahin M, Kurt B, Vural Solak GT, Üçer H. Is YouTube useful as a source of information for approaches to reducing blood pressure and hypertension treatment?. *Hypertens Res.* 2023;46(2):386-394.

### **Why was the Study done?**

Hypertension is a major public health hazard affecting over 33% of the population as per the American heart Association. The treatment involves lifelong medicines and lifestyle changes. However, the adherence to treatment is less than 50% resulting in complications. With the globalized world, internet has become a primary source of health information for many. YouTube with its large user base is one of the important sources of this information. While there are many videos with reliable content, there are videos which are inconsistent and misleading.

*This study was conducted to analyze the contents related to hypertension treatment and lowering high blood pressure in terms of information quality and usefulness and to compare some YouTube parameters (view count, likes, dislikes, comments, etc.) according to the pharmacological treatment (PT), lifestyle change (LC), and alternative treatment (AT) content of the videos. The videos were also evaluated for the accuracy, reliability and validity of the content.*

### **How was the study conducted?**

This was a descriptive study and YouTube was searched using the search terms "hypertension treatment", "cure hypertension", "hypertension medication", "control high blood pressure", "lower high blood pressure", and "reduce high blood pressure". Search terms related to hypertension treatment and lowering blood pressure were selected because of the search for "hypertension" in Google Trends. The videos were sorted by relevance. A total of 360 videos were evaluated from all search terms. Non-English language videos, duplicate videos, and irrelevant videos were excluded. The videos were evaluated by two independent observers. In case of disagreement, the third independent evaluator made the final decision. The length of the video, number of days on YouTube, number of view counts, and number of likes, dislikes, and comments, were noted for all videos. The values for views/day, likes/day, dislikes/day, and comments/day were calculated by dividing the view count and the number of likes, dislikes, and comments by the number of days on the YouTube platform. The like ratio was calculated as like/[like + dislike]. Global quality scale was used to assess the quality and the DISCERN scale was used to assess the reliability of the videos. In addition, the audio video quality rating was done.

**Results**

Of the total 360 videos, 104 were selected of which **53 (51%) were useful, and 51 (49%) were misleading**. YouTube videos had more content about LCs (65 videos, 62.5%) and only 39.4% (41 videos) of all the videos contained information about PT. The number of views was higher for AT videos and lower for PT videos and the difference was statistically significant.

**Videos which included information on LCs and AT had more likes, similar to the number of views. Information quality (GQS) and reliability (DISCERN) scores were significantly higher for videos that contained PT (p < 0.001) and LC (p < 0.05) information.** Video quality was higher among videos that had PT and LC content and useful videos (p < 0.05). (Fig 2) Videos with PT content received significantly fewer comments, while videos with LC content received more comments. Useful videos had more uploads by physicians, and misleading videos had more uploads by herbalists/nutritionists.

While physicians were the most common sources of PT and LC information, herbalists were the most common sources of AT information (Fig 1). The countries that uploaded the most videos about hypertension treatment and lowering high blood pressure were the USA, India, Australia, and the UK. While videos from the USA were more useful, videos from India were mostly misleading.

**Conclusions**

*This study underscores the need for the correct health information to be disseminated online to prevent the consequences of misinformation. Doctors and health professionals should familiarize themselves with the internet and YouTube to provide authentic content to the community.* In addition, the context and country of origin of these videos should also be considered.

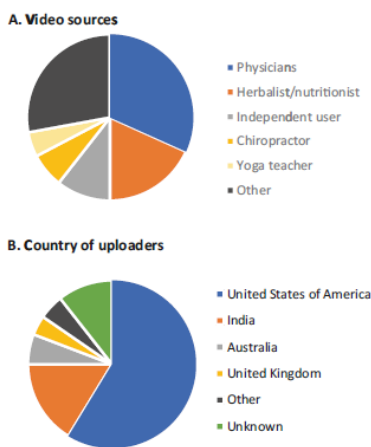


Fig 1 : Countries of Uploader

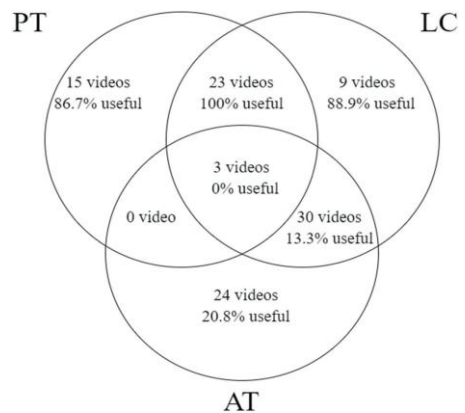


Fig 2: Usefulness rate by content

**Author: Dr. Sudha Ramalingam**

# Book Review:

## Make Change that Lasts

Author: Dr. Rangan Chatterjee

Contributed by: Dr. Lakshmi Sundar

*How I feel about and behave toward myself is the basic determinant of most of my behavior. If I improve my self-regard, I will find that dozens of behaviors change automatically. If, for example, I increase my feelings of self-competence, I will probably be less defensive, less angered by criticism, less devastated if I do not get a raise, less anxious when I come to work, better able to make decisions, and more able to appreciate and praise other people.*

*Willian Schutz*

As Lifestyle medicine Physicians, we all know and understand that working towards sustainable behavior change isn't easy, and this book is a must-read for all those who want to make a change that lasts.

Rangan Chatterjee is a British physician, author, television presenter and podcaster. He is best known for his TV show *Doctor in the House*, for being the resident doctor on *BBC breakfast*, and for being a regular contributor to *BBC Radio*. He has spent years helping people transform their lives through small practical steps.

In this book, he breaks down the science of habit formation and offers strategies for long-term success. In this book, he presents nine powerful strategies to break free from habits that hold us back.

He starts his introduction with a powerful story that clearly makes readers understand that *to make a change knowledge is not enough*.

*"Unhealthy habits are a symptom of other upstream problems - problems that are often completely invisible to us."*

Before he goes on to explain the 9 actionable strategies, he concludes the introductory chapter by saying *effortless change is the best change of all*. It is change that is automatic because it has become a part of you. He also talks about reliance's and how minimal reliance should be the goal.

### The Nine Principles

The 9 principles in his book are:

**1. Trust yourself:** *Relying on oneself and not outsourcing life to others.* With the explosion of experts and the influence of social media, it is very easy to try things that may not work for you. He talks about time in solitude, embracing the journey of becoming an expert, understanding what works for you, and having minimal reliance on others.

**2. Give up your heroes:** *Reliance on perfection.* He talks about the myth of the hero and heroes are never the people we think they are. He says it never occurred to him that "perfect" could be a myth. We are biologically programmed to seek out heroes to mimic.

We also make heroes of people we share our lives with - parents, siblings, spouse, a friend. Then the relationship becomes unhealthily vertical. He gives practical tips on choosing our heroes intentionally, redefining them and *avoiding the psychological pitfall of perfectionism*.

**3.Be yourself:** *Reliance on being liked.* People pleasing can be exhausting. It can lead to burnout, chronically overextending yourself and internal rage. It can also impact sleep and affect close relationships. He quotes Dr. Gabor Mate's "*If you want to be liked, just please everybody. Never say no. Take everything on. Be responsible for how other people feel. Never disappoint anybody. They're all gonna like you. But nobody's gonna love you, because they don't know you.*"

**4.Embrace discomfort:** *Reliance on comfort.* He draws a parallel between reliance on comfort and diseases like Type 2 Diabetes. He gives practical tips to embrace discomfort since we are capable of much more than what we think we can. Reliance on comfort can stop us from pushing ourselves and trying new challenges.

**5.Take less offence:** *Reliance on being right.* He urges you to adopt a learner mindset. Another powerful quote by Adam Grant is, "*If knowledge is power, knowing what we don't know is wisdom.*"

**6.Expect adversity:** *Reliance on things never going wrong.* He talks about the "Life is an Escalator Myth" and why progress is never linear. He says, "*Choosing gratitude would stop me thinking like a victim and choosing action would stop me acting like a victim*". "Without death, you cannot experience the beauty of life" - can there be anything more powerful than this statement?

**7.Let go and move on:** *Reliance on the past.* We are not our past or our illness. We can never achieve anything unless we believe it is possible. The past can never be the source of our identity, and forgiveness is an important tool for breaking our reliance on the past.

**8.Reclaim your time:** *Reliance on busyness.* He talks about six signs of burnout. He redefines success by saying A successful life is one that is broad rather than narrow. He defines rest and gives practical tips to work on body, mind and heart.

**9.Give more than you get:** *The gift of reliance.* "The gift of reliance runs in both directions." "*The more connections we have, the more likely we are to thrive.*" He talks about humans being a social species, and a certain amount of reliance is not only advisable but also essential.

**Final Thoughts :** This book has very practical and actionable advice. The nine principles are very relatable. He writes the book with warmth, empathy and clarity, and it is an inspiring read. The fact that he has so much personal information and case studies to share makes it highly relatable. The book is also backed by science. As you read the book, you also begin to question yourself and reflect on yourself. *For those of us who have experienced the gap between information and transformation in our own lives-who have known what we "should" do yet struggled to sustain meaningful change-Chatterjee's approach offers both compassion and hope. It reminds us that sustainable change flows not from perfection but from alignment with our deeper values and authentic needs.*

I would recommend this book to anyone who wants to make a change that lasts.

**Author: Dr. Lakshmi Sundar,** President, ISLM.