IDOScope

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Indore Divisional Ophthalmological Society

HEALTH & WELLNESS

INDORE DIVISIONAL OPHTHALMOLOGICAL SOCIETY

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IDOScope

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"Medice, cura te ipsum"
"Physician, heal thyself"

- Ancient Proverb

From the Editor's Desk

In our pursuit of clinical excellence, we often overlook the foundation of it all - our own health. Long hours in static postures, erratic meals, and constant digital engagement take a silent toll on our bodies and minds. This issue of IDOScope is a reminder that caring for ourselves is integral to caring for our patients.

A mindful approach to nutrition begins with the gut. A balanced, fiber-rich diet and attention to our microbiome support both metabolism and mood. Intermittent fasting, practiced with awareness, can aid metabolic balance and bring mental clarity - something every surgeon can benefit from.

For ophthalmologists and eye surgeons, posture-related neck and shoulder strain is common. Gentle stretching, core strengthening, and yoga can prevent chronic discomfort. Breathing exercises and short mindfulness breaks can steady both pulse and mind amid busy clinics.

Equally important is mental health and focus on our breath. Meaningful rest, time away from screens, and nurturing relationships protect us from burnout. And as we age, so does our cardiovascular risk - regular exercise and periodic health checks should be non-negotiable.

Let us redefine professional success to include personal well-being. A healthy doctor is a better healer - sharper in mind, steadier in hand, and kinder in heart.

Dr. Ashutosh Agarwal
Editor

FIRST FEED YOUR MICROBIOME, THEN YOURSELF

Dr. Anil Singhvi, MD
www.indorecancerclinic.com

Turning science into soul shifts - healing bodies, rewiring minds, and inspiring unstoppable lives, the creator of the Transform Life Program.

When most people think about eating, they picture feeding themselves. But here's the truth - before you feed your body, you're feeding trillions of tiny guests living inside you.

These guests make up your microbiome - a bustling city of bacteria, fungi, and other microbes that live mostly in your gut. And they're not freeloaders. They help to

- Digest your food
- Strengthen your immune system
- Produce vitamins
- Protect your brain
- Influence your mood

Why Your Microbiome Eats First

When you eat, the first "mouths" to taste your meal aren't yours — they belong to your microbes. They break down fibers and plant compounds you can't digest on your own, creating powerful chemicals that reduce inflammation, protect your cells, and keep your gut lining healthy.

Humans can't digest fiber. Sounds strange, right? We eat it, but our own enzymes can't break it down.That's where your gut microbiome steps in.

Inside your large intestine live trillions of bacteria, many of them specialists at breaking apart plant fibers that slip through your small intestine undigested. These microbes ferment the fiber - a process a bit like slow, gentle brewing - and in doing so, they produce short-chain fatty acids (SCFAs) like acetate, propionate, and butyrate.

Why Short-Chain Fatty Acids Matter

SCFAs are tiny molecules with massive health impact:

- **Fuel for your gut lining** : Butyrate is the preferred energy source for the cells that line your colon, keeping them strong and leak-proof.
- **Inflammation control** : SCFAs help calm an overactive immune system, lowering your risk of chronic disease.
- **Metabolic balance** : They improve insulin sensitivity, support healthy weight, and keep blood sugar steady.
- **Brain protection** : Through the gut-brain connection, SCFAs influence mood, memory, and mental clarity.

The more **diverse plant fibers** you eat - from vegetables, fruits, beans, lentils, nuts, seeds, and whole grains- the more diverse your SCFA-producing microbes become. And the more they thrive, the more they turn yesterday's salad or apple into today's gut-healing,

Feeding the Right Crowd

The good microbes love:

- **Fiber-rich plants**-vegetables, fruits, beans, lentils, complex carbs.
- **Fermented foods** : sauerkraut, kimchi, kefir.
- **Variety** : different plants feed different microbes.

The troublemakers thrive on :

- Processed sugar.
- Refined carbs.
- Highly processed, low-fiber foods.

Over time, a junk-food-heavy diet reshapes your microbiome into one that promotes inflammation, weight gain, and chronic disease.

Flip the Script

Next time you sit down for a meal, imagine your microbiome sitting with you — fork in hand.

Ask yourself : **"Will this feed my healthy microbes first?"**

If the answer is yes, you're not just eating — you're laying the foundation for long-term health, sharper thinking, stronger immunity, and even slower aging.

Because when you feed your microbiome well, it will repay you every single day in ways you can feel and in ways science is only beginning to understand.

If your microbiome thrives, so do you. If it's starving or out of balance, your health suffers - no matter how many "healthy" foods you think you're eating.

That is why rebuilding a healthy microbiome is the cornerstone of our Transform Your Life program. We have been able to consistently reverse obesity, chronic inflammation, metabolic diseases including diabetes, autoimmune disorders including hypothryroidism – all by focusing on these friendly microbes and getting their combinations right.

How to Protect and Nurture Your Microbiome

- **Feed it well** : Eat a wide variety of plant-based foods to give different microbes the fibers they love.
- **Avoid unnecessary antibiotics** : Use them only for life threatening infections, as they wipe out both good and bad microbes.
- **Don't use mouthwashes** : Numerous studies how shown how damaging the oral microbiome has led to hypertension and cardiovascular disease.
- **Go easy on ultra-processed foods:** They starve your good bacteria and encourage harmful ones.
- **Manage stress** : Chronic stress disrupts the gut-brain connection and changes microbial balance.
- **Sleep well** : Quality sleep supports a stable and diverse microbiome.
- **Spend time in nature** : Contact with soil, plants, and fresh air exposes you to beneficial microbes.

Dr. Anil Singhvi : the doctor who turns back the clock, heals what medicine couldn't, and unleashes the unstoppable you. A haematologist – oncologist, who doesn't just give prescriptions to his sick patients, but also helps those with obesity and chronic disease throw away their prescriptions!

He is also a master hypnotist and his therapy sessions have proven to be powerful in creating massive instant transformation.

His iconic Transform Life programs and Mind Body & Soul retreats with Surbhi Pandya have three simple objectives:

1. Release what weighs you down.
2. Renew the body, awaken the mind, ignite the soul.
3. Reverse the years, dissolve the pain, and rise into the life you were born to live.

INTERMITTENT FASTING & LONGEVITY : AN INTRODUCTION

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Founder President, Academy Of Indore Marathoners
Convener, Adventure Club of Indore

Introduction

Fasting is one of the oldest practices known to humanity. For millennia, it has been woven into cultures, traditions, and religions. People have fasted not only for spiritual growth and discipline but also for physical and mental clarity. Modern science is now uncovering the mechanisms behind fasting, revealing why it can be such a powerful tool for health and longevity. Fasting is not a modern diet trend. It is an ancestral way of eating that humans have practiced throughout evolution. Our bodies are designed to handle periods of feast and famine. When we align with this natural rhythm, we activate powerful biological processes that restore balance, repair damage, and promote resilience.

The Science of Fasting

When food is consumed, the body enters a "fed" state. Insulin is released, directing glucose into cells and promoting fat storage. However, prolonged availability of glucose keeps insulin elevated, suppressing fat burning and autophagy (the body's natural repair system). When fasting begins, insulin levels drop.

This triggers a chain reaction:

- Glucagon rises: Mobilizing stored energy.
- AMPK activation: Energy-sensing enzyme that promotes fat oxidation and inhibits fat storage.
- mTOR suppression: Slowing down cell growth and shifting towards repair.
- Autophagy (Self eating): The recycling of old or damaged proteins and organelles. This switch from feeding to fasting is like flipping a metabolic reset button. Cells move away from growth and storage, toward repair, cleaning, and renewal.

Insulin Resistance in Depth

Insulin resistance is at the core of many modern diseases, from obesity to diabetes and cardiovascular problems.

- Normal insulin function: Insulin helps glucose enter muscle and liver cells for fuel or storage.
- Chronic overeating : Constant intake of carbs and frequent snacking keep insulin high.
- Cellular desensitization : Over time, cells become less responsive to insulin.
- Compensation : The pancreas produces even more insulin, creating hyperinsulinemia.

Consequences of insulin resistance include :

- Increased fat storage, especially visceral fat.
- Chronic inflammation.
- Elevated triglycerides and fatty liver.
- Disruption of leptin signaling (hunger-satiety balance).
- Higher risk of type 2 diabetes, heart disease, neurodegeneration and 14 types of common cancers

Fasting directly addresses insulin resistance by lowering insulin levels, improving receptor sensitivity, and restoring metabolic flexibility (the ability to switch between glucose and fat burning).

What Happens at Different Fasting Durations

Fasting effects occur in phases, each with unique biological benefits:

- 12–16 hours: Glycogen stores in the liver begin to deplete. Insulin drops, fat burning begins.
- 20–24 hours: Ketones rise in the bloodstream, providing an alternative energy source. Early autophagy and intestinal healing begins.
- 36–48 hours: Deeper autophagy, recycling of old proteins, and immune cell regeneration. Mental clarity often increases due to stable ketone supply
- 72+ hours: Stem cell activation, profound immune system reset, maximum autophagy. Extended fasts of this length should be supervised but offer deep therapeutic potential.

Fasting in World Religions and Cultures

Fasting is a universal practice that transcends geography and time:

- **Hinduism** : Ekadashi, Navratri,

and Karva Chauth encourage abstinence from food for discipline and purification.

- **Islam** : Ramadan involves daily fasting from dawn to sunset, emphasizing self-control and gratitude.
- **Christianity** : Lent and Good Friday fasting traditions symbolize sacrifice and renewal.
- **Judaism** : Yom Kippur and Tisha B'Av include fasting as a form of repentance and reflection.
- **Buddhism** : Monastic traditions practice mindful fasting, often avoiding food after noon. These traditions show that fasting is not starvation. It is an age-old method, deeply rooted in culture, spirituality, and human biology.

Preparing the Body: Why Low-Carb First

Jumping into fasting directly from a high-carbohydrate lifestyle can be uncomfortable. Common issues include headaches, cravings, irritability, and fatigue (sometimes called "keto flu"). A better approach is to prepare the body first

- 2–3 weeks of low-carb eating: Reduce bread, rice, sugar, and processed foods.
- Stop inter-meal snacking.
- Increase healthy fats and proteins: Eggs, fish, meat, nuts, seeds, avocados, cottage cheese, soya.
- Hydrate with electrolytes: Salt, magnesium, and potassium support the transition. This adaptation period trains the body to burn fat efficiently before longer fasts, making the process smoother and more sustainable.

Types of Intermittent Fasting

There are many ways to practice intermittent fasting, and individuals should choose based on lifestyle and goals:

- 16/8 Method: Fast for 16 hours, eat within an 8-hour window. Easy entry-level method.
- One Meal a Day (OMAD): Consume all calories in a single meal, usually dinner. Powerful for weight loss and insulin sensitivity.
- Alternate-Day Fasting: Eat one day, fast the next (or consume very few calories). Suitable for those seeking more aggressive benefits.
- Extended Fasts (36–72 hours or more): Deep autophagy, immune reset, stem cell activation. Best done occasionally and with preparation.

Fasting is not deprivation. It is alignment with our evolutionary biology. By alternating between feeding and fasting, we allow the body to balance growth with repair.

The benefits are vast:

Improved insulin sensitivity.

Reduced inflammation

Enhanced cellular repair and autophagy.

Mental clarity and emotional resilience.

Potential extension of healthspan and longevity. Fasting combines modern science with ancient wisdom. With preparation, discipline, and awareness, it becomes a lifelong tool for health and vitality.

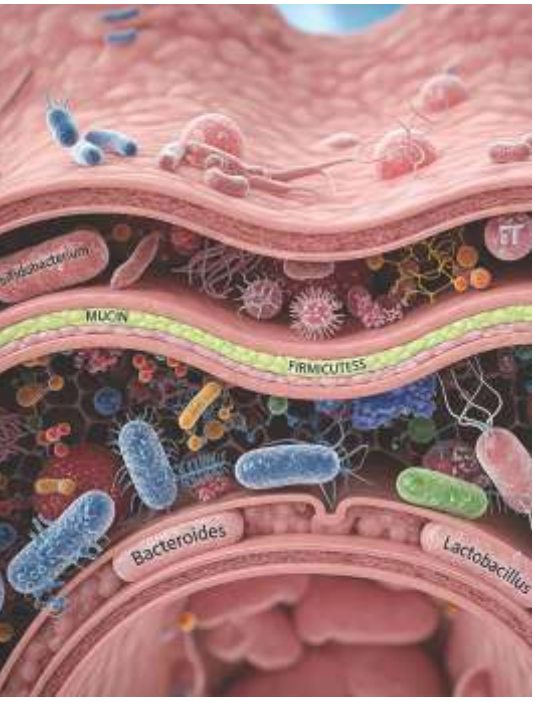
Longevity Strategies

Overview :

Longevity is best supported by everyday habits that nudge the body toward resilience. Across nutrition, movement, sleep, and environment, small, consistent practices activate protective pathways (often referred to as hormesis) and reduce chronic stressors.

1) Calorie Restriction & Fasting (Hormesis – Positive stress to the body to a level which does not kill)

Modestly reducing total calories (around a 20% deficit), eating nutrient-dense foods, and compressing the daily eating window can engage longevity pathways. Intermittent fasting-without snacking between meals-serves as a practical way to reduce meal frequency and support metabolic health.



2) Exercise & Movement (Hormesis)

Combine aerobic work, resistance training, and occasional high-intensity intervals. HIIT can raise VO_2 max and support mitochondrial function and signaling pathways, while strength training helps counter sarcopenia and osteopenia. Keep up daily movement—walking roughly 6,000–10,000 steps-and include flexibility practices such as yoga or Pilates. Short "exercise snacks" sprinkled through the day also help.

3) Cold & Heat Exposure (Hormesis)

Brief exposures to cold (e.g., cold showers or ice baths) and heat (saunas or hot baths) can act as controlled stressors. Cold may stimulate brown-fat activity, while heat exposure can upregulate heat-shock proteins—both adaptions associated with resilience.

4) Sleep & Circadian Rhythm Optimization

Aim for at least seven hours of quality sleep on a regular schedule. Minimize blue-light exposure at night, sleep in a cool, completely dark room, and finish eating at least three hours before bedtime. Simple tactics like mouth-taping for nasal breathing can also encourage deeper sleep for some people.

5) Optimal Diet - Say No To

Dial down refined sugars and sugary foods; refined carbohydrates like white bread and pasta; processed and ultra-processed products with emulsifiers and preservatives; processed meats containing nitrates or nitrites; and sodium-heavy packaged items. Avoid trans-fats and refined seed oils (e.g., palm, soya, sunflower blends), reused frying oils, and foods with artificial sweeteners. Keep clear of preservative-heavy drinks and highly charred or plastic-packaged foods. Limit or avoid alcohol. Prefer the pulp of nightshade vegetables if lectins are a concern.

6) Optimal Diet - Say Yes To

Base meals around whole foods: millets (such as jowar, bajra, ragi, rajgira, buckwheat/kuttu, kangni), chana, sprouted grains and lentils, a wide variety of green and colorful vegetables, tubers, nuts, and seeds. Choose healthy fats like avocado, nuts, seeds, ghee, extra-virgin olive oil, MCT oil, flaxseed, sesame, coconut, mustard, rice-bran, and other cold-pressed oils. Emphasize polyphenol-rich foods-berries, extra-virgin olive oil, dark chocolate, coffee, green tea, turmeric-plus cruciferous vegetables and mushrooms. Include fermented foods (curd, idli/dosa batters, kanjhi, sauerkraut, kimchi, kombucha) and resistant starches (cooked-and-cooled rice, sweet potato, arbi).

7) Stress Reduction & Social Connection

Practice meditation and breathing exercises, cultivate community and purpose, and keep learning new skills or creative hobbies. These habits help balance the nervous system and support long-term health.

8) Environmental Adaptation

Limit exposure to everyday toxins-pesticides, air pollution, and heavily processed foods. Drink clean, filtered water (about 10 glasses per day as a general guide), avoid tobacco, and either abstain from alcohol or keep it minimal. Get natural light during the day to anchor circadian rhythms.

9) Gut Microbiome

A robust gut ecosystem supports digestion, immunity, cardiometabolic health, skin, liver, hormones, and mood. Feed it with prebiotics (a diversity of plant fibers, polyphenols, and resistant starches), include fermented foods for probiotics, and remember that their beneficial metabolites (postbiotics) such as short-chain fatty acids help mediate many of the health effects.

Conclusion

Longevity is not the result of a single intervention but rather the cumulative effect of daily choices. Calorie restriction, fasting, exercise, restorative sleep, dietary quality, and emotional balance all interact to activate the body's innate repair systems and enhance resilience. These strategies echo ancient wisdom yet are validated by modern science, showing that our biology thrives when challenged in small, intentional ways. By embracing these practices-gradually and sustainably-we can extend not just lifespan but healthspan, adding more years of energy, clarity, and vitality to life.

Dr. Arun Agarwal

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DOCTORS' HEART HEALTH : WHAT SHOULD BE THE APPROACH?

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Doctors, like everyone else, need to prioritize their heart health. While they are experts in treating cardiovascular disease, their demanding profession can put them at a higher risk for factors that contribute to it. The same advice they give to their patients and often more applies to them.

Here's how doctors should take care of their heart health, focusing on both the general principles and the unique challenges they face:

1. Adopt a Heart-Healthy Lifestyle

This is the foundation of cardiovascular health for everyone, including doctors.

- **Healthy Diet:** A diet rich in fruits, vegetables, whole grains, and lean proteins is crucial. This helps control cholesterol, blood pressure, and weight. It's important to limit saturated and trans fats, sodium, and added sugars.

Sticking to your healthy eating goals is easier when you enlist the help of a friend or family member to keep you motivated. If one is going out to eat or ordering takeout nix the all-you-can-eat meals, where people tend to overeat.Split a meal with a friend or family member.If you get fast food, pick a salad over fries and don't order bigger versions of a sandwich. Bring a salad or veggie side dish to your next potluck, so you'll have something healthy to fill up on.

- **Regular Exercise :** Aim for at least 150 minutes of moderate-intensity aerobic activity per week, or 75 minutes of vigorous activity. This can be challenging with a physician's schedule, but even short bursts of activity, like taking the stairs or a brisk walk during a break, can make a difference. Adults need a mix of aerobic and muscle-strengthening activities each week. Aerobic activity needs to be at a moderate or vigorous intensity. Moderate-intensity aerobic physical activity means you're working hard enough to breathe harder, raise your heart rate, and break a sweat. You'll notice that you'll be able to talk, but not sing the words to your favourite song. Vigorous-intensity aerobic activity means you're breathing hard and fast, and your heart rate is higher than with moderate activity. You won't be able to say more than a few words without pausing for a breath.I n addition to moderate or vigorous aerobic activity, you need to work at least 2 days a week to make your muscles stronger. Examples of what you can do include Lifting weights, Working with resistance bands, Doing exercises that use your body weight for resistance, such as push-ups or sit-ups ,Digging in a garden ,Doing some yoga postures.
- **Maintain a Healthy Weight :** Being overweight or obese increases the risk of heart disease, high blood pressure, and type 2 diabetes. A healthy diet and regular exercise are key to managing weight. Many factors can affect your weight, including your genes, age, sex, lifestyle, family habits, culture, sleep, and even where you live and work. Some of these factors can make it hard to maintain or achieve a healthy weight. Regardless, following a nutritious eating pattern and exercising regularly can help keep your body as healthy as possible as you age.
- **Quit Smoking and Avoid Secondhand Smoke :** Smoking is a major risk factor for cardiovascular disease. Quitting is one of the single most effective things a person can do for their heart. Smoking causes 1 in 5 deaths every year, Smoking leads to damage to multiple organs in the body including heart, blood vessels, lungs brain, kidney, peripheral arteries reproductive organs etc. The inhaled smoke leads to atherosclerosis. Most of the acute myocardial infarctions in young patient are due to plaque rupture caused by smoking and its chemicals. Secondhand smoking or bystander

smoking is equally harmful and one should avoid such circumstances.

- **Limit Alcohol Intake :** Excessive alcohol consumption can lead to high blood pressure and other heart-related issues. Regular alcohol intake or binge drinking can lead to High blood pressure, stroke, heart attack, alcoholic cardiomyopathy and cirrhosis of liver. Ideal is not to drink at all. There are certain unconfirmed "safe limits" of alcohol intake like 10 standard drinks of spirit spread over one week with 2-3 alcohol free days per week. Alcohol is absolutely contraindicated in children less than 18 yrs and during pregnancy.
- **Prioritize Sleep :** Lack of sleep is linked to various health problems, including an increased risk of heart disease. Doctors often work long hours and may have irregular schedules, making dedicated sleep time a critical part of their self-care. A recent study reveals that inconsistent bedtimes, even with adequate hrs of sleep disturbs the circadian rhythm of body. It leads to increased inflammation of the body and high blood pressure. According to American Academy of Sleep Medicine, sleep deprivation is an important cause of physician burn out making it an important public health issue.

2. Manage Stress and Combat Burnout

This is a particularly critical area for physicians, as burnout is a significant issue in the medical profession and is directly linked to cardiovascular risk.

- **Recognize and Address Burnout:** Burnout is characterized by emotional and physical exhaustion, cynicism, and a lack of accomplishment. It is a form of chronic stress that can lead to physical health problems, including an increased risk of cardiovascular disease. To cope up with stress one should remain active like streching, dancing etc. We can do breathing exercises taught in yoga sessions.
- **Develop Coping Strategies :** Doctors need to find ways to manage the intense stress of their jobs. This can include mindfulness, meditation, hobbies, or simply taking breaks. Indulging in any activity which gives you pleasure can go a long way in managing the work stress. These may include cycling, painting, going for walking trails, spending time with family or all boys/ girls groups.
- **Seek Support :** It's important for physicians to have a support system, whether it's family, friends, or colleagues. Discussing the challenges of the job can help alleviate stress. Some healthcare systems are also implementing wellness programs and resources to help doctors cope.
- **Ensure Work-Life Balance :** This can be one of the hardest things for a doctor to achieve. Finding ways to set boundaries, delegate tasks, and protect personal time is essential for long-term health and career sustainability.

3. "Know Your Numbers" and Stay Proactive

Physicians, like their patients, need to regularly monitor their own health metrics.

- **Regular Check-ups :** Doctors should have regular check-ups with a primary care provider (who is not themself) to monitor their blood pressure, cholesterol levels, blood glucose, and other key health indicators.
- **Monitor Blood Pressure and Cholesterol :** High blood pressure and high cholesterol often have no symptoms, so regular monitoring is the only way to know if these are a concern. Lifestyle changes and medication can effectively manage these conditions.
- **Be Aware of Family History :** A family history of heart disease is a significant risk factor. Doctors should be aware of their own family's medical history and take extra precautions if there is a history of early-onset heart disease.
- **Recognize Early Symptoms :** Doctors should be vigilant about their own bodies and not ignore potential warning signs of heart problems, such as chest discomfort, unusual fatigue, or shortness of breath.

In summary, a doctor's heart health is not only vital for their own well-being but also for their ability to provide the best care to their patients. By following the same evidence-based advice they give their patients and actively managing the unique stressors of their profession, doctors can significantly reduce their risk of cardiovascular disease.

Dr Shailendra Trivedi is graduate and post graduate from MGM Medical College, Indore. He has done his DM in Cardiology from Kanpur University and DNB in cardiology from Madras Medical Mission Chennai in the year 1998.

He worked as a consultant at the same hospital for 2years and then proceeded for his Interventional fellowship at Prince Charles hospital, Brisbane, Australia in the yr 2001. Since 2002, he was working at CHL hospital, Indore till 2014 and then as Director Cardiology at Medanta Hospital,Indore.

Presently, he is Director of Cardiology at Vishesh Jupiter Hospital, Indore. He has several publications to his credit in various international and national journals. He has been invited as faculty at various international and national forums also. He has presented many abstract papers at the national conference of Cardiological society of India.

His main area of interest is cardiovascular interventions.

METABOLIC SYNDROME : PRIMER FOR OPHTHALMOLOGIST

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Introduction
Metabolic syndrome (MetS) is group of medical disorders which together increases risk of diabetes mellitus type 2, heart disease, stroke, and cancers. The prevalence of this disorder is between 15-30 % across various communities and this is gradually increasing. Causes include genetic predisposition, unhealthy diet, alcohol addiction, viral infections etc. Early diagnosis and aggressive control of MetS is vital for prevention of development of other diseases. Control involves weight loss and change of lifestyle. Drugs like Metformin, SGLT2 inhibitors, GLP1 receptor agonist etc are effective medications for control and treatment of this disorder.

Definition of metabolic syndrome:

Metabolic syndrome (MetS) also known as syndrome X earlier is a disorder characterised by at least three of five disorders effecting various organ systems. This definition has been drawn from the National cholesterol education program and adult treatment panel III guidelines (NCEP & ATP III) and is based on simple clinical measurements like waist circumference, HDL cholesterol (HDLc) level, triglyceride (TG) level, blood pressure and fasting blood glucose values. The presence of abnormal values for 3 out of 5 criteria is diagnostic of MetS. The international diabetes federation (IDF) has come up with modification for these criteria and suggests ethnicity defined values of waist circumference. This makes the definition of MetS more accurate in people of different background. The diagnostic criteria has been shown in the table no 1.

Table No 1: Diagnostic criteria of Metabolic syndrome

	Measures (any of the 3 out of 5 constitute diagnosis of MetS)	Categorical cut offs
1	Elevated waist circumference	>102 cm in men and > 88 cm in women (for Asian population its >90 and >80 cm respectively)
2	Elevated Triglycerides	>150 mg/dL or on treatment for hypertriglyceridemia
3	Elevated blood pressure	>130 mmHg systolic or >80 mmHg diastolic or drug treatment for elevation of BP
4	Reduced HDL C	<40 mg/dL in men or < 50mg/dL in females or on drug treatment for low HDLc
5	Elevated fasting sugar	>100 mg/dL of fasting glucose of drug treatment for Diabetes mellitus.

Importance of treating metabolic syndrome:

The most important objective of treatment of metabolic syndrome is to achieve reduction in atherosclerotic cardiovascular diseases (ASCVD) which includes coronary heart disease, ischemic strokes, peripheral vascular diseases and related anomalies. The prevention of ASCVD involves smoking cessation, optimization of body weight, LDL C level and blood pressure and increasing overall activity levels.

The second most important objective is prevention of appearance of pre-diabetes and diabetes mellitus Type 2. Insulin resistance at the level of organs like liver, skeletal muscles and visceral fat is linked with all these phenomena and addressing MetS can help prevent appearance and control of these disorders.

Other conditions related to MetS includes MASLD (metabolic dysfunction-associated steatotic liver disease), chronic kidney disease (CKD), cognitive decline, childhood metabolic syndrome etc.

Treatment of metabolic syndrome:

Treatment of MetS involves use of motivational techniques to achieve behavioural changes in affected individuals along with emphasis on physical activity and medications as per need.

Therapeutic lifestyle changes (TLC) : In children this involves weight control measures during the phase growth instead of weight loss. One model suggested by Rogers et al is called as 5210 model (5 fruits / vegetables daily, < 2-hour screen time, 1-hour sports and 0 sodas). In adults the focus is on weight loss. For these adults need to be counselled and trained for adopting and continuing healthy lifestyle and food choices and to maintain active lifestyle. A weight loss of 5-10% has been shown to correct metabolic syndrome and prevent its progression. Exercise

programs using activities like Yoga, Tai chi etc have shown to be beneficial in achieving results early. Dietary approaches like following DASH diet (Dietary approach to stop hypertension), intermittent fasting, Mediterranean diet has been shown to be useful.

Pharmacological management of MetS: It has been seen only about 1/3 patients adhering to diet and exercise loose more than 5% weight. Hence majority will require pharmacological assistance apart from diet and exercise. The pharmacological therapy available includes Metformin, Orlistat, Sodium glucose co transporter inhibitors (SGLT2i), Glucagon like peptide 1 agonist etc. Other abnormalities like raised BP, deranged lipids also need to addressed. Table no 2 highlights the main approach for treatment of patients with MetS.

Table 2: Pharmacological management of Metabolic Syndrome :
Treatment of metabolic abnormalities for prevention of ASCVD and Type 2 DM

Atherogenic dyslipidaemia: Primary target: LDL-C- Reduce LDL-C levels to ATP III goals	For elevated LDL-C: Give priority to reduction of LDL-C over other lipid parameters. Achieve LDL-C goals based on patient's risk category (LDL c goal less than 100mg/dL for high-risk patients)
Atherogenic dyslipidaemia Secondary target: Non-HDL-C If TG _200 mg/dL, reduce non-HDL-C to ATP III goals	If TG ≥200 mg/dL, goal for non–HDL-C for each risk category is 30 mg/dL higher than for LDL-C. If TG ≥200 mg/dL after achieving LDL-C goal, consider additional therapies to attain non-HDL-C goal
Elevated BP: Reduce BP to at least achieve BP of _140/90 mm Hg (or _130/80 mm Hg if diabetes is present	For BP ≥120/80 mm Hg: Initiate or maintain lifestyle modification via weight control, increased physical activity, alcohol moderation, sodium reduction, and emphasis on increased consumption of fresh fruits, vegetables, and low-fat dairy products in all patients with metabolic syndrome. For BP ≥140/90 mm Hg (or ≥130/80 mm Hg if diabetes is present), add BP medication as needed to achieve goal BP.
Elevated glucose For IFG, delay progression to type 2 diabetes mellitus. For diabetes, haemoglobin A1C <7.0%.	For IFG, encourage weight reduction and increased physical activity. For type 2 diabetes, lifestyle therapy and pharmacotherapy, if necessary, should be used to achieve near-normal HbA1C (<7%). Drugs like Metformin, SGLT 2 inhibitors, GLP1 agonist have shown to be very effective. Modify other risk factors and be behaviours (e.g., abdominal obesity, physical inactivity, elevated BP, lipid abnormalities).
Prothrombotic state Reduce thrombotic and fibrinolytic risk factors	For high-risk patients, initiate and continue low-dose aspirin therapy; in patients with ASCVD, consider clopidogrel if aspirin is contraindicated. For moderately high-risk patients, consider low-dose aspirin prophylaxis.
Proinflammatory state	No specific therapies beyond lifestyle therapies

Conclusion:

MetS is disorder where high blood pressure, elevated blood sugars, obesity and abnormal lipid profile occur together. This is possibly affecting more than 1/4th of adult population from developed nations and is associated with important health issues like ASCVD, diabetes, Fatty liver, cognitive decline etc. The aetiopathogenesis of this involves interplay between various genetic, environmental, and acquired factors. The control of this involves non pharmacological measures like improving physical activity and medical nutrition therapy and pharmacological treatment to control weight, blood pressure and cholesterol. Legislative and public health care measures are needed help children and young adults to inculcate health seeking behaviour which in-turn is vital to build a strong and healthy nation.

Suggested reading:

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A graduate from M.G.M. Medical College, Indore, Dr. Tanmay Bharani has had a brilliant academic career and has been awarded more than 30 gold medals by universities and institutions for best performance in various fields. After securing gold medal for best performance in M.D., from Jawaharlal Nehru Post graduate Institute of Medical Research (JIPMER), Pondicherry, Dr. Bharani got trained at Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow in the field of Endocrinology and further pursued doctorate in Endocrinology (D.M.). Also, he has been involved with research in the field of Type 1 DM, bone metabolism and pulmonary hypertension and has contributed original research papers in peer reviewed journals. Apart from medical expertise, he has been educating public and spreading knowledge regarding Diabetes Management and its complications. He has also been accredited as a well sought after speaker in CME programs and symposia for practicing doctors organised by Association of Physicians of India, Indian Medical Association, Cardiological Society of India, Diabetes Association of India etc.

JOINT HEALTH AND THE OPHTHALMOLOGIST

Dr. Akshat Pandey
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Introduction :

Ophthalmologists, as medical professionals dedicated to the diagnosis and treatment of eye disorders, are often perceived as practitioners whose work is less physically taxing compared to other surgical specialties. However, this perception belies the physical challenges inherent in their daily routines. While the precision required in ophthalmic surgeries is well-recognized, less attention is paid to the toll that the practice takes on the ophthalmologist's musculoskeletal system-especially their joints. Over the years, research and anecdotal evidence have highlighted a concerning prevalence of joint-related and musculoskeletal issues among ophthalmologists. This article explores the causes, manifestations, consequences, and preventive strategies related to joint health in ophthalmology, offering a comprehensive overview for practitioners and medical administrators alike.

Musculoskeletal disorder (MSDs) poses a serious threat to the performance and career longevity of physicians. While this issue is pertinent across all medical specialties, it is particularly relevant in ophthalmology, where practitioners report higher rates of musculoskeletal pain compared to non-surgical specialties. Practicing ophthalmology poses significant risk factors for MSD disorders. The repetitive movements and prolonged maintenance of awkward postures commonly observed during ophthalmic surgery and clinical procedures that rely on microscopes, surgical loupes, and laser-based devices are well-documented contributors to work-related MSD pain.

The consequences of MSDs in ophthalmologists include loss of productivity, decreased surgical efficiency, an increased risk of error, chronic pain and discomfort affecting both professional and personal life, as well as limitations in performing daily activities.

A survey of 377 Indian ophthalmologists reported a 75.3% prevalence of self-reported MSDs, including low back pain (52.5%), neck pain (32.7%), upper extremity pain (10.9%), and other chronic pain (3.9%).

The Physical Demands of Ophthalmology

Ophthalmology is a specialty that demands extraordinary visual acuity, fine motor skills, and unwavering concentration. The core of an ophthalmologist's work—microsurgeries, laser procedures, and detailed examinations—often involves maintaining static, awkward postures for prolonged periods. These include:

- **Operating microscopes**: Surgeons must sit for hours, often with their heads and necks bent forward, shoulders hunched, and arms extended but supported.
- **Slit-lamp examinations**: These require sustained neck and back flexion while adjusting to minute movements.
- **Indirect ophthalmoscopy** involves holding instruments and patients' heads in fixed positions, which strains the wrists and shoulders.
- **Electronic record-keeping**: The increasing reliance on computers has further exacerbated static postures, particularly neck flexion and wrist extension.

While these positions are necessary for optimal visualization and precision, they exert significant stress on the musculoskeletal system, particularly the joints of the neck, back, shoulders, elbows, and wrists.

Common Joint and Musculoskeletal Issues in Ophthalmologists

A. Neck and Cervical Spine Disorders :

Perhaps the most commonly affected region is the cervical spine. Multiple studies report that up to 70% of ophthalmologists experience neck pain or stiffness at some point in their careers. The primary factors include:

- **Prolonged neck flexion:** During microscope-based surgeries and slit-lamp use.
- **Static, awkward postures**: Often with little opportunity for movement or stretching.

Common conditions include:

- Cervical spondylosis (degenerative changes in the cervical vertebrae)

- Cervical muscle strain
- Tension headaches originating from neck strain

B. Shoulder and Upper Back Problems

Shoulder pain is another prevalent complaint, often attributed to:

- **Abducted arms:** During surgery, arms are held away from the body, straining the shoulder girdle.
- **Isometric contractions:** Holding arms steady for fine movements causes muscle fatigue and joint stress.

Common conditions include:

- Rotator cuff tendinitis or impingement
- Trapezius muscle strain
- Frozen shoulder (adhesive capsulitis) in severe, chronic cases

C. Lower Back Disorders

Long hours sitting, often on non-ergonomic stools, contribute to lower back discomfort:

- **Poor lumbar support:** Many ophthalmic chairs lack proper lumbar support, leading to slouching and increased pressure on intervertebral discs.
- **Static sitting**: Prolonged periods of sitting decrease blood flow and increase stiffness.

Common conditions include:

- Lumbar strain or sprain
- Lumbar spondylosis
- Sciatica in severe cases

D. Hand, Wrist, and Elbow Issues

Repetitive fine motor tasks and static holding of instruments can lead to:

- **Carpal tunnel syndrome:** Compression of the median nerve in the wrist due to repetitive flexion and improper wrist positioning.
- **Lateral epicondylitis (tennis elbow)**: Overuse of forearm muscles and tendons.
- **De Quervain's tenosynovitis**: Inflammation of the thumb tendons from repetitive instrument manipulation.

E. Hip and Knee Problems

While less common, some ophthalmologists develop hip and knee discomfort due to:

- **Static sitting postures:** Leading to tight hip flexors and weak gluteal muscles.

- **Prolonged standing during certain procedures:** Straining knee joints, especially in older practitioners.

Risk Factors for Musculoskeletal Disorders in Ophthalmology

Several factors increase the risk of joint and musculoskeletal problems among ophthalmologists:

1. **Duration of Practice:** The cumulative effects of poor ergonomics over the years can lead to chronic issues.
2. **Volume of Surgeries**: High surgical load, especially in high-volume cataract or LASIK centers, increases exposure to risk.
3. **Lack of Ergonomic Awareness**: Many practitioners are not trained in ergonomic principles or ignore them under pressure.
4. **Poor equipment design, including outdated** or non-adjustable microscopes, chairs, and slit lamps, exacerbates the risk.
5. **Personal Health Factors:** Pre-existing musculoskeletal disorders, poor physical fitness, and obesity increase vulnerability.

Management strategies

- **Ergonomic adjustments**

In the context of ophthalmology, ergonomics involves optimizing the setup of examination rooms, surgical theatres, and office spaces to support natural body mechanics and reduce physical strain. Some ergonomic adjustments in the examination room include adjusting the height of the slit lamp and patient's chair, investing in an ergonomic chair with proper lumbar support and adjustability, and ensuring the availability of adequate overhead lighting to prevent hunching over or squinting.

Adjustments in the operating room include positioning the operating microscope to prevent neck and shoulder strain, adjusting the height of the surgical table to allow for comfortable positioning of arms and hands, and ensuring that foot pedals used to control microscopes or other surgical equipment are positioned to allow for natural foot movements.

- **Posture corrections**

Correcting the posture in a simple biomechanical way is advised; for example, by tucking/pulling the stomach and chin every 5 minutes of continuous posture. By doing this, the body gets a normal alignment and activates core postural muscles, resulting in a decrease in undue stress on the affected structures. It is also recommended to actively retract and depress the shoulder blades to promote proper shoulder alignment. Taking short breaks during long working hours is also advised to prevent musculoskeletal strain.

- **Exercise and physical therapy**

Including yoga or any specific stretching exercises can help improve flexibility and range of motion. Stretching exercises include neck stretch, thoracic extension over a foam roller, scapular retractions, wrist and forearm stretch. Strengthening exercises or resistance bodyweight exercises can help strengthen the core, back, and shoulder muscles to support proper posture and reduce strain. Additionally, various physical therapy techniques, such as TENS (Transcutaneous Electrical Nerve Stimulation), joint mobilization, and massage, can help reduce pain.

- **Bracing**

Using braces or supports can help provide additional support to the affected area. Studies have shown that using braces for more than 2 weeks can positively impact pain and discomfort.

- Medical interventions (pain management)
- Along with ergonomic adjustments, exercises, and physical therapy, medications play a key role in managing musculoskeletal pain. Medications include topical treatments such as pain-relieving gels, ointments, and sprays. Counterirritants with active ingredients such as menthol, methyl salicylate, and capsaicin can cause a burning or cooling sensation that can relieve pain. Oral NSAIDs (non-steroidal anti-inflammatory drugs) like ibuprofen, diclofenac, or etoricoxib can be considered in case of severe pain. Corticosteroids like prednisolone and hydrocortisone can be used in case of severe and intolerable pain. Intra-articular steroid injections can work well for elbow/shoulder tendonitis.

The Role of Technology in Reducing Joint Strain

Advancements in technology are playing a growing role in mitigating some of the risks associated with ophthalmic practice:

- **Robotic Surgery:** Minimally invasive, robotic-assisted surgeries reduce the need for awkward postures.
- **Heads-up Displays:** 3D visualization systems allow surgeons to maintain a more natural head and neck position.
- **Voice Recognition Software:** Reduces the need for repetitive typing and wrist strain during record-keeping.

These innovations, while not yet universally available, promise a future where ophthalmologists can perform their duties with less physical strain.

Conclusion

Ophthalmologists dedicate their lives to preserving and restoring vision. In doing so, they are exposed to unique occupational hazards that threaten their own well-being—specifically, the health of their joints and musculoskeletal system. Awareness, prevention, and timely intervention are the cornerstones of maintaining joint health in this demanding specialty. By embracing ergonomic principles, adopting healthy habits, and leveraging technological advances, ophthalmologists can ensure that their careers are as sustainable and pain-free as possible. Ultimately, safeguarding the musculoskeletal health of ophthalmologists is essential not only for their own quality of life but also for the continued excellence of patient care in eye health.

Dr.Akshat Pandey

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- Working as an Adjunct Asso.Prof. & Head Dept.of Rheumatology, Apollo hospitals, Indore
- Special interest in Spondyloarthropathies, Infection related arthritis and Pregnancy in Rheumatic diseases.
- Numerous publications in National & International journals.
- Editor of 2 books "Glucocorticoids in Rheumatology"-2022 & "Tofacitinib in Rheumatology & beyond"- 2024.

WHAT IS YOGA?

Yoga Techniques for Ophthalmologist and Eye Health

Dr. Yashwant Bhati
Consulting Homeopath
Yoga Master

A Shared Art of Precision

If you have ever sat through a delicate eye procedure—or even just carefully examining a patient's eyes—you know what stillness really means. Your hands don't tremble. Your eyes stay focused. Your mind zeroes in on the smallest details.

In my world, we call that ***Dharana***-steady concentration. In your world, it is the lifeline of your craft.

I have always admired ophthalmologists for this exact reason: your work demands not only skill and knowledge, but also the calm presence of mind that yoga has been teaching for thousands of years. The way you adjust your breath before a critical incision, the way you align your body so your hands follow without hesitation — these are yogic moments, even if you have never called them that.

Today, I want to share with you what yoga truly is, and how certain techniques — some as old as written history — can protect your eyes, sharpen your focus, and sustain your mental clarity in a profession that quietly strains the very sense you safeguard in others.

The Unseen Strain of Ophthalmology

From the outside, people imagine an ophthalmologist's day as neat and contained: clean clinics, calm consultations, elegant surgeries. But those of you in the profession know the reality.

Hours hunched over a slit-lamp, neck tilted, upper back stiff, one eye glued to the scope. Patients flowing in with varied temperaments, from anxious to impatient. Surgical days that demand stillness for hours on end, yet mental agility to respond in a split second.

Then there's the digital work: reviewing scans, documenting cases in EMR, answering emails. Screens upon screens, all day long. Your eyes, the very tools of your trade, are never truly at rest.

And behind it all, the pressure - unspoken but present - that your precision determines someone else's vision. That weight doesn't leave the room when the patient does.

Physically, you face:

- Tightness in the neck, trapezius, and upper back.
- Forward-head posture that compresses cervical blood vessels.
- Reduced circulation to ocular tissues.

Visually, you experience:

- Accommodation fatigue.
- Dryness from reduced blink rate.
- Light sensitivity after long microscope sessions.

Mentally, you endure:

- Concentration fatigue.
- Decision pressure.
- The slow creep of burnout.

It is no surprise that by mid-career, many ophthalmologists report chronic neck pain, headaches, and eye strain. This is where yoga, approached intelligently, can become more than a "fitness choice" — it becomes occupational therapy in the truest sense.

Yoga - Beyond the Mat

The word Yoga comes from ***yuj*** **- "to unite."** In modern times, it is often reduced to an exercise class. In truth, it is a system of living, designed to balance body, breath, mind, and awareness.

Classical yoga recognises **eight interconnected limbs:**

- Yama, (Ethical living)
- Niyama(Ethical living)
- Asana (Postures)
- Pranayama (Breath regulation)
- Pratyahara (Sensory rest)
- Dharana (Concentration)
- Dhyana (Meditation)
- Samadhi (Inner integration)

You may never touch a yoga mat, yet **you practise parts of this daily**. The act of centering yourself before a surgery, the way you block out all distractions to focus on the cornea under your scope — these are ***dharana***. When your breath slows in the middle of a tense procedure — that is ***pranayama***.

But yoga offers tools to deliberately train these skills, so they become second nature not only in your practice but in your health.

The Eye in Yogic Understanding

In yogic science, the eyes are more than sensory devices. They are **gateways** - channels through which the mind interacts with the external world. Constant outward engagement drains not only the eyes, but also the nervous system.

One ancient principle, pratyahara, teaches the periodic withdrawal of senses to give them rest. Imagine it as "closing the clinic" for your senses for a few minutes a day, so they can regenerate before returning to service.

The eye's function is also closely linked to posture, breath, and circulation:

- A forward head tilt reduces vertebral artery flow.
- Shallow breathing lowers the oxygenation of ocular tissues.
- Chronic tension in the facial and neck muscles subtly affects intraocular pressure regulation.

Yoga addresses these connections as a whole, rather than treating the eye in isolation.

How Yoga Meets the Ophthalmologist's Needs

Rather than giving you a generic yoga routine, I want to offer techniques that **map directly to your daily challenges.**

Postural Reset

A quick postural rest can help manage stiffness, headaches, and reduced blood flow to the brain. It can even prevent these issues before they build up.

- **Bhujangasana (Gentle Cobra Pose)**: Lie on your stomach, hands under your shoulders, and slowly lift your chest without straining your lower back. Keep elbows slightly bent and shoulders relaxed. This opens the chest, reverses the forward bend, and releases tension in the upper spine.

- **Seated Chest-Openers:** Sit tall, interlace your fingers behind your back, and gently pull your hands downward while opening your chest. This frees up the cervical spine and improves circulation to the head, which can help maintain alertness during precision work.

- **Neck Side Stretches:** Sit tall, drop one ear to the shoulder, and hold for 20 seconds on each side. Relieves trapezius tightness from prolonged head tilt.

Breath Regulation

- Breathing techniques help surgeons steady their minds, maintain calm focus, and balance the autonomic nervous system- crucial before entering a high-pressure operating room.
- **Alternate Nostril Breathing (*Anulom Vilom*):** Sit comfortably with your spine straight. Close your right nostril with your thumb, inhale through the left nostril, close it with your ring finger, and exhale through the right. Repeat in reverse. Just 3–5 minutes of this can stabilise mental clarity and reduce pre-surgery anxiety.

- **Humming Bee Breath (*Bhramari*):** Inhale deeply through the nose, then exhale while making a soft humming sound, like a bee. Practising this between consultations can melt away micro-tensions in the face and orbital muscles, which are often strained from intense visual focus.

Eye Relaxation

Microscope work demands sustained near-focus, which strains the ciliary muscles and optic nerve. Rest breaks aren't just nice - they're essential for long-term eye health.

- **Palming Technique**:b Rub your palms together briskly until warm. Close your eyes and gently cup your palms over them without applying pressure. The warmth and darkness signal the optic nerve to relax, easing eye fatigue. Just two minutes can significantly improve visual comfort.

Mental Recovery

Precision surgery isn't only physically demanding - it taxes the nervous system. A brief mental reset helps sustain focus over the entire workday.

- **Quiet Sitting with Breath Awareness**: Sit in a comfortable position, close your eyes, and bring your attention to your natural breathing. Avoid controlling the breath; just observe it. Within five minutes, you'll notice both ocular muscles and mental tension releasing, preparing you for your next case with renewed focus.

- **Micro-Meditations:** 1–2 minutes of silent gratitude or mantra repetition before the next patient can shift mood and improve bedside manner.

Trataka - Stillness in Sight

If there is one yogic technique I would urge every ophthalmologist to explore, it is **Trataka.**

In simple terms, Trataka means "**to gaze steadily.**" Traditionally, it is a kriya (cleansing technique) described in the Hatha Yoga Pradipika as a way to purify the eyes and mind.

You sit in stillness and fix your gaze on a single object — often a candle flame. You hold this gaze without blinking until tears form, then close your eyes and visualise the flame in your mind.

Why it matters for you:

- Strengthens ocular muscles and the accommodation reflex.
- Encourages tear secretion in mild dry eyes.
- Improves convergence - useful for those long hours of close work.
- Sharpens concentration - a mental rehearsal for the unbroken focus surgery demands.

How to Practise:

1. Sit in a quiet, dim space. Place a candle at eye level, about 1 metre away.

2. Keep your spine upright, shoulders relaxed.
3. Gaze gently at the flame, allowing breath to flow naturally.
4. Hold until the urge to blink is strong, then close your eyes.
5. Picture the flame between your brows.
6. Repeat for 3–5 cycles.

Precautions:

Avoid during active eye infections, recent ocular surgery, or severe migraine. Start with short durations, building up slowly.

Micro-Practices for Clinic and OT

In reality, you won't roll out a yoga mat between patients. But you can:

- Between cases: Do a 30-second neck roll in each direction.
- At your desk: Shift your gaze from near to far every 20 minutes.
- Before starting surgery: Take five slow, alternate-nostril breaths.
- After screen sessions: Palm the eyes for one minute.

These are invisible to patients, yet powerful for your own endurance.

Yoga for Patient Eye Health

Without overstepping into medical territory, you can recommend:

- Blink awareness for screen users.
- Gentle palming for relaxation.
- Taking visual breaks with far-gazing.
- Consulting certified yoga therapists for guided practices like Trataka.

Vision Beyond Vision

In yoga, drishti means both "gaze" and "viewpoint." Your work preserves the physical gaze. Yoga, practised with understanding, preserves the inner one - the clarity of mind, the steadiness of hand, the calm in decision.

You do not need to choose between medicine and yoga. They are both, in their purest form, arts of healing — one with scalpel and light, the other with breath and stillness. If you can care for your own eyes and mind with the same precision you bring to your patients, you will not only extend your career, you will deepen the joy in it.

Dr. Yashwant Bhati

Qualifications:

- BHMS, BSc., NDDY, MA (Yogic Science)
- RYT 500-hour (Yoga Alliance USA)
- Certified National Yoga Coach

Professional Roles:

- Founder Director, Yoga Bhavan, Indore
- Director, Yogalife Indore
- Secretary, Indian Yoga Association (State Chapter)
- Secretary General, Yogalife Global
- Treasurer, Indore Yogalife Society
- Master Trainer, Satyadhara Yogalife Ashram
- Member, Madhya Pradesh Yog Aayog

Experience and Contributions:

Dr. Yashwant Bhati has been a dedicated practitioner and teacher of authentic, classical yoga since 2012. Over the years, he has conducted more than 500 yoga workshops, positively impacting the lives of over 10,000 yoga sadhakas (practitioners). His teaching style is joyful, simple, and impactful, guiding practitioners to explore the deeper dimensions of yoga with sincerity and clarity.

Dr. Bhati has taught yoga to enthusiasts not only across India but also in several other countries. He has successfully conducted workshops in various states of India. With a strong foundation in both medical science and yogic knowledge, he has gained significant recognition in the field of yoga therapy. He has treated many renowned personalities in India through yogic methods, helping them achieve better health and holistic well-being. His dedication and expertise have earned him a respected place in the field of therapeutic yoga.

THE BREATH YOU FORGOT

Unlocking Energy, Resilience, and Healing Through Nose and Navel

Surbhi Pandya
Life-Stylist, New York

In the rush of modern life, breathing has become something we rarely pay attention to-unless we're gasping for air. Yet, each breath we take is not just keeping us alive; it's a message to our nervous system, our cells, and our very sense of wellbeing. Breathing well is not automatic-it is a skill that, once regained, can dramatically impact our mental clarity, immunity, metabolism, and emotional balance.

Over the past decade, emerging science and ancient wisdom have come together to highlight something startling: the way we breathe is often dysfunctional-and it's costing us our health.

Why Nose Breathing is Non-Negotiable

Modern breathing expert Patrick McKeown, author of The Oxygen Advantage, has popularized what ancient yogis and healers always knew: mouth breathing is inefficient, and nasal breathing is nature's design. When we breathe through the nose, we filter, humidify, and pressurize the air. This slows our breathing, activates the diaphragm, and improves oxygen delivery to tissues.

But what really makes nasal breathing non-negotiable is a Nobel Prize-winning discovery: nitric oxide. Produced in the nasal cavity, nitric oxide acts as a miracle molecule-enhancing blood flow, supporting immune defense, and allowing better oxygen absorption in the lungs. This critical compound is entirely **absent when we breathe through the mouth.**

So every shallow mouth breath is a lost opportunity. Every slow nasal breath is a healing signal.

Dr. Buteyko's Legacy : Less Is More

In the 1950s, Russian physician **Dr. Konstantin Buteyko** discovered a disturbing link: patients with chronic illness almost always breathed too much. His work showed that **over-breathing reduces CO_2 levels**, which impairs oxygen release at the cellular level (known as the Bohr effect). His approach? Train the body to breathe less, not more. Reduce the breathing volume, switch to nasal breathing, and let the body restore its own rhythm.

This is where the BOLT score comes in-a simple but powerful way to assess your breathing health.

Try This: Test Your BOLT Score

The Body Oxygen Level Test (BOLT) gives you a window into how efficiently your body uses oxygen. Here's how to do it:

1. Sit comfortably and breathe normally for a minute.
2. Take a calm breath in and out through your nose.
3. Hold your nose and start a stopwatch.
4. Release your nose and breathe in only when you feel the first definite urge to breathe-not when you're gasping.

The number of seconds = your BOLT score.

- <10 seconds: Severely dysfunctional breathing
- 10–20 seconds: Low tolerance to CO_2 (common in anxiety, asthma, fatigue)
- 20–30 seconds: Moderate, but improvement needed
- >40 seconds: Excellent breathing efficiency and resilience

In our **Lifestyle Intelligence 100-day program**, most participants enter with a BOLT score below 20 and see dramatic improvement within weeks-moving closer to the optimal 40-second range as breath awareness deepens.

The Forgotten Power of Navel Awareness

One technique that has transformed participants' breath patterns naturally is **navel awareness.** This ancient yet intuitive method requires no forceful control-just conscious attention to your navel region throughout the day.

As attention is consistently brought to the center of the body, it gently activates the diaphragm, encourages upright posture, and subtly corrects dysfunctional upper-chest breathing.

With practice, this results in **slow, light, and deep breathing**—the kind associated with longevity, vitality, and emotional poise. Additionally, it activates the core muscles, improving posture and inner strength without requiring elaborate workouts.

At the exact center of the human body lies a powerful energetic point-your **navel center**, a core of stability, breath, and life force. To locate it, place your fingers about two inches below the navel and imagine a straight line extending inward, reaching the spine. Where this imaginary line intersects the body's midline is the true seat of your **energetic center.**

Now, gently draw your attention to this point. Visualize your awareness settling there. As you do, softly engage your belly—drawing it inward and slightly upward, as if lifting towards the crown of your head. This gentle "pull and lift" action naturally activates the **diaphragm,** stimulating deeper, slower breathing.

Navel awareness isn't about controlling the breath—it's about placing your consciousness at this subtle center. As your focus deepens, the breath begins to correct itself. Without forcing it, your respiration becomes slower, lighter, and more rhythmic. Posture improves, tension in the body melts away, and a feeling of inner balance begins to emerge.

This center is also considered the birthplace of **Chi or Prana**—the vital energy that animates all functions of the body. By cultivating awareness at the navel, you awaken a quiet intelligence that brings together body, breath, and mind.

Over time, regular practice of navel awareness has been known to deliver profound benefits—ranging from **better breathing patterns and improved posture**, to a **stronger core, relaxed nervous system**, and even greater **emotional grounding.** It is a simple practice, yet its impact unfolds in layers, restoring harmony where effort had once dominated.

Start small—just a few moments of quiet attention at your navel each day—and witness how something so subtle can create a profound shift from within.

Real Results: What Happens When You Breathe Right?

Over the course of the **100-day Lifestyle Intelligence program**, breath training is interwoven with weekly habit shifts-nutritional upgrades, hydration protocols, movement patterns, sleep rhythms, and emotional resilience practices.
Participants report the following measurable improvements:

- **VO_2 Max (maximum oxygen utilization)**: A key indicator of cardiovascular fitness, significantly improves as breath efficiency rises.
- **RHR (Resting Heart Rate)**: Often drops by 5–15 bpm, reflecting a more relaxed, efficient nervous system.
- **HRV (Heart Rate Variability)**: Increases, indicating better stress adaptation and emotional regulation.

What's striking is that these results are not achieved through supplements

or medications, but through the **art of retraining the breath,** rebalancing lifestyle rhythms, and gradually rewiring deeply ingrained habits.

Your Breath Is Your Teacher

Breath is the only system in your body that is both automatic and under your control. That's not an accident-it's an invitation. Every nasal breath is a chance to shift from stress to calm, from fatigue to clarity, from reaction to awareness.

If you've never paid attention to your breath before, start now. Start with the BOLT score. Bring your mind to your navel. Choose your nose over your mouth. And remember, the breath you forgot may just be the medicine you've been looking for.

For more on the 100-day Lifestyle Intelligence program and guided breath training, visit

https://AwakenNow.guru/life-style-intel-health

Surbhi Pandya

Speaker | Lifestyle Intelligence Mentor | Health Transformation Guide

Surbhi Pandya is a sought-after speaker and mentor in the field of **Lifestyle Intelligence** - a science-backed, soul-aligned approach to reversing lifestyle disorders like diabetes, blood pressure, thyroid, obesity, asthma **without medications or supplements,** by **activating the body's natural ability to heal, repair, and thrive.**

Drawing from the wisdom of **evolutionary biology,** she helps people understand that chronic disorders are not flaws of the body, but symptoms of living out of sync with our biological design. Her work bridges the latest in health sciences with timeless principles of **ancient medicine,** honoring the intelligence of the human system- **a system designed not just to survive, but to flourish** when the right conditions are restored.
Through her immersive programs, she guides seekers all around the world from New York over zoom meetings to awaken their internal regulation systems-including breath, energy, digestion, and emotional resilience - fostering **root-level healing** that goes far beyond symptom management.

Surbhi has been a featured speaker at prestigious platforms, including:

- **POWR, Chicago**, Parliament of world religions, Plenary speech on Consciousness. She has also created U2.0 workshop, an immersive 9-hour course leading to an extraordinary voyage of self exploration.
- **LBSNAA Mussoorie,** addressing IAS officers-in-training
- **National Highway Authority of India (NHAI)**, for over 1000 administrative officers
- **JAINA Convention 2025** in Chicago, **JITO** New York, Delhi, Dubai
- **BAPS**, community wellbeing forums
- **Vedic University, Chicago**, sharing the scientific and spiritual logic of the body's self-healing design
- **IPS and IRS Headquarters**, facilitating high-performance wellbeing sessions for officers

Surbhi with Dr. Anil Singhvi from Indore leads a Mind, Body & Soul Retreat which is an experiential based workshop that has been conducted in India, USA, Dubai and waiting debut in London in the month of September. Surbhi's presence is both grounded and illuminating - inviting people back into **deep listening with their bodies,** and into alignment with a way of living that is intelligent, regenerative, and true.

MENTAL HEALTH FOR DOCTORS: HEALING THE HEALERS

"Even the strongest among us need a place to rest."

Dr. Akanksha A. Singh
Senior Resident | Department of Psychiatry
MGM Medical College, Indore

For doctors, who hold the weight of lives in their hands, mental health is not a luxury—it is a necessity. When we talk about health, we do not just refer to the absence of disease or being physically well. The World Health Organization defines health as "a state of complete physical, mental, and social well-being." Yet, we find that mental well-being is often neglected-even among doctors, who are themselves guardians of health. Behind the white coats, the stethoscopes, and the steady hands are human beings. Doctors face sleepless nights, relentless emergencies, impossible decisions, and the silent burden of always being expected to remain strong. Naturally, distress and burnout hover around the corner. The irony is sobering: those entrusted to care for others often struggle to care for themselves.

The Silent Struggle : Why Doctors Are at Risk

Medicine is a noble calling, but it is also unforgiving. From the first day of MBBS, medical students are conditioned to endure pressure. Long study hours, competitive environments, and high expectations become part of life. By the time a young doctor enters clinical practice, exhaustion and emotional strain have often been normalized.

The risks are multifold:

High stakes: Every decision carries immense responsibility, sometimes with life-or-death consequences.

Workload: Long working hours, overnight shifts, and administrative burdens leave little time for recovery.
Emotional toll: Repeated exposure to trauma, grief, suffering, and sometimes anger from patients and families creates hidden scars.

Culture of stoicism: In medicine, vulnerability is often equated with weakness. This stigma silences conversations around mental health.

Studies show that doctors are at higher risk of burnout, depression, and even suicide than the general population. A Lancet article highlighted that physician suicide rates are almost twice that of the general population. Yet, these issues remain under-discussed, as if invisible.

Recognizing the Warning Signs

We cannot treat what we do not acknowledge. Awareness is the first step toward healing. Mental distress and burnout often creep in silently before fully manifesting.

Ask yourself:

- Do trivial matters irritate you more than they used to?
- Do you struggle to sleep even after an exhausting day?
- Do you find your concentration waning and tasks that once felt manageable now overwhelming?
- Does time with family and friends no longer bring joy?

If so, these may be early warning signs.

Manifestations of Mental Distress

The signs of mental distress can be broadly classified into physical, psychological, and behavioral categories.

Physical signs: Chronic fatigue, muscle tension, persistent headaches,

palpitations, gastrointestinal problems (diarrhoea, constipation), insomnia or disrupted sleep

Psychological signs: Feeling constantly overwhelmed, persistent pessimism about life and the future, detachment from work, patients, or loved ones, depression, anxiety, forgetfulness and poor concentration, difficulty making decisions

Behavioral signs: Irritability or aggression, declining work performance, loss of creativity and initiative, strained relationships, mood swings and low frustration tolerance, isolation and social withdrawal

These are not signs of weakness. They are signals-your mind and body calling for attention and care. Left unchecked, distress can escalate into clinical conditions requiring psychiatric intervention.

Seeking Help : An Act of Courage

For doctors, seeking help can feel counterintuitive. Trained to diagnose and treat, many fall into the trap of self-diagnosis or self-medication. Some fear judgment from colleagues or worry about professional consequences. But ignoring mental health is as dangerous as ignoring chest pain. Just as no doctor would tell a patient to endure untreated illness, doctors must learn to honor their own struggles. Seeking help is not defeat-it is courage. It is the same wisdom we advocate for our patients.

Practical ways to seek help include:

- **Talking to a trusted colleague or mentor.** Sometimes, a listening ear can lighten the burden.
- R**eaching out to a mental health professional**. Psychiatrists, psychologists, and counselors are allies, not adversaries.
- **Joining peer support groups**. Shared experiences reduce isolation and normalize conversations about distress.
- **Utilizing confidential helplines**. Many medical associations now offer safe platforms for doctors.

Remember: caring for your mental health does not make you less of a doctor—it makes you a better one. We, as doctors, take pride in being resilient but often fail to ask ourselves, "Am I resilient or just silent?"

Breaking the Culture of Silence

One of the greatest barriers to doctors' mental health is stigma. The medical profession often upholds unrealistic ideals: doctors must be tireless, selfless, and immune to struggle. This culture of stoicism prevents honest dialogue. But change is possible. Institutions can play a transformative role by:

- Promoting awareness campaigns on physician mental health
- Offering confidential access to counseling
- Encouraging open conversations in medical education and workplaces
- Normalizing rest and work-life balance rather than glorifying overwork

Breaking silence requires leadership. Senior doctors and institutions must model vulnerability, showing that mental health struggles do not diminish competence.

Prevention: Protecting the Mind Before It Breaks

As in medicine, prevention is better than cure. While stress is inevitable, burnout is not. Simple yet intentional lifestyle practices can safeguard mental well-being.

Strategies for Daily Self-Care

1. **Mindfulness and Reflection**: Even five minutes of deep breathing or meditation between shifts can reset the mind.
2. **Physical Activity:** Exercise is a proven antidepressant. Whether it's a morning jog, yoga, or a brisk walk, movement heals.
3. **Sleep Hygiene:** Guard sleep as fiercely as you guard patient safety. Limit caffeine late in the day, switch off screens, and respect bedtime routines.
4. **Nutrition**: Balanced meals stabilize energy and mood. Avoid reliance on fast food or stimulants.
5. **Boundaries**: Learn to say no. Protecting personal time is not selfish; it is essential.
6. **Connection**: Share laughter, meals, and memories with loved ones. Relationships are buffers against stress.
7. **Hobbies**: Engage in activities outside medicine - music, writing, gardening. These recharge creativity and joy.
8. **Spirituality or Purpose Practices**: Prayer, gratitude journaling, or volunteer work can bring grounding and perspective.

Organizational Support

Healthcare institutions also bear responsibility. Certain practical solutions to help prevent it's doctors from burnout could include- reasonable shift length, adequate staffing to reduce overload, peer mentorship programs, recognition of achievements beyond clinical performance.

Stories of Healing: Real-Life Inspirations

Many doctors worldwide have spoken openly about their struggles - and their healing journeys. Their stories remind us that vulnerability is a universal human experience, not a professional failure. One physician shared: "I was always the one telling my patients to take care of themselves. Yet, I ignored my own depression until it nearly cost me my career. Seeking therapy saved not only my practice but my life." Another remarked: "When I began to treat self-care as part of my professional responsibility, my compassion for patients grew deeper, not weaker." These narratives challenge the silence, reminding us that healing the healer is possible.

A Call to Self-Compassion

Doctors are trained to put others first, sometimes to their own detriment. Yet, selfcompassion is not indulgence - it is survival. As Dr. Brené Brown notes, *"Talk to yourself like you would to someone you love."* Caring for oneself is not in conflict with caring for others. It is, in fact, the foundation of sustainable compassion. By nurturing their own wellbeing, doctors preserve the clarity, empathy, and resilience needed to continue their noble work.

Conclusion: Filling the Cup

As the saying goes, *"You cannot pour from an empty cup."*

Doctors are healers, but they are also human. Acknowledging vulnerability, seeking help, and practicing self-care are not acts of selfishness—they are acts of responsibility. By healing themselves, doctors not only safeguard their own lives but also shine brighter for every patient they touch. The time has come to embrace a new culture in medicine: one where caring for the healer is as important as caring for the healed.

Dr. Akanksha Ayushi Singh

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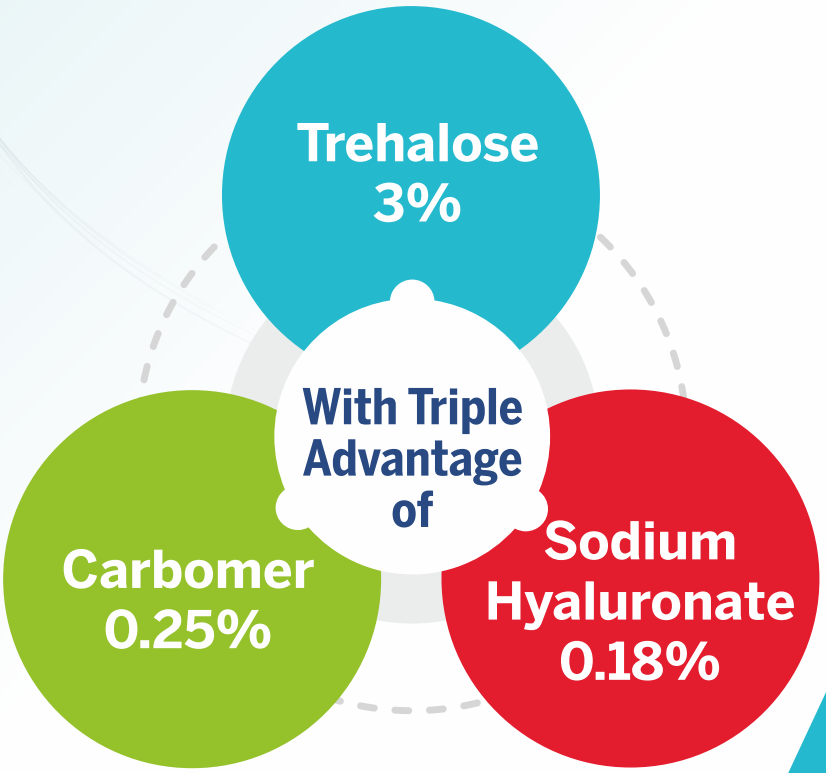

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