YOGA AND RIGHT NUTRITION

Essential for
The New Normal "Lifestyle"

YOGA AT HOME & YOGA WITH FAMILY
INTRODUCTION

Yoga as a therapy is used since 1400 BC scribed in Charak Samhita and has been popular in India since then.

Sage Patanjali defines yoga as a “complete cessation of mental modification”

Swami Vivekanand defines yoga as “Restraining the mind stuff”

Yoga affects physical, mental, intellectual & spiritual health

YOGIC DISCIPLINES IN UPANISHAD

• Karma Yoga (action)
• Bhakti Yoga (devotion)
• Gyana Yoga (to attain knowledge and wisdom about life)
• Hath Yoga (regarding yogic asanas)
• Raj Yoga (physical and mental purity)
• Mantra Yoga (enchanting a rhyme imparted by a guru to attain higher level of consciousness)
• Laya Yoga (singing by yourself or in a group to achieve amalgamation with the soul and achieve perfection)

It is believed that each one of them helps an individual in self-realization and self-actualization.

MECHANISM OF YOGA

Yoga practice

Behavioural changes

Psychological changes

Physiological changes

Physical activity adherence to diet and medicines

Quality of Life, Mood, Stress

Body weight, BP, heart rate, lipid profile, improvement in endothelial function, pancreatic regeneration, exercise tolerance

Immunomodulation

Changes in gene expression, cellular immunity, inflammatory response

Sympatho-adrenal & Hypothalamus-Pituitary Axis

Melatonin, endorphin GH, prolactin, cortisol, adrenaline

Insulin secretion, Insulin resistance

Improvement in cardiac autonomic function, coagulation profile, nerve conduction, cognition

Prevention and control of diabetes, control of body weight, BP, lipid profile, prevention of cardiovascular events & diabetic complications

One of the best way to reduce pathophysiology of NCD

Reference: Arkiath Veettil Raveendran et al; Therapeutic Role of Yoga in Type 2 Diabetes, Endocrinol Metab 2018;33:307-317 https://doi.org/10.3803/EnM.2018.33.3.307
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BENEFITS OF YOGA

INCREASES
- Flexibility
- Body strength & stamina
- Feeling of wellness
- Positive attitude
- Energy levels
- Memory power
- Concentration

REDUCES
- Anxiety & stress
- Depression & tension
- Weight
- Blood pressure
- Blood glucose levels
- Tension in muscles
- Pain in joints
Surya namaskar
Performed in an energetic way surges cellular requirements for glucose and oxygen and to meet these requirements, insulin production is stimulated by brain signaling.

Vaman dhauti
Reduces FBG and PPBG, decreases insulin resistance, increases glucose uptake, facilitates the function of insulin by reducing levels of free fatty acids.

Kapalbhati
Improves the efficiency of β-cells of the pancreas.

Shankhaprakshalana
Cleanses the intestinal tract, increases insulin production and helps in reducing blood glucose.

Yoga also helps reduce cardiovascular risk by acting through physiologic pathways of stimulation and activation.
## Various Yoga Techniques

### Yoga postures: Pranayama (regulated breathing)

<table>
<thead>
<tr>
<th>Type</th>
<th>Effects</th>
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</thead>
<tbody>
<tr>
<td>Slow pranayama, anulom vilom, chandrabhedan, sitkari, and bhramari</td>
<td>Enhance cerebral blood flow and oxygenation by improving neuronal activities in the brain centres, limbic areas, medulla and hypothalamus and improves sympathovagal balance</td>
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<tr>
<td>Anulom vilom (alternate nostril breathing)</td>
<td>Increases components of health-related fitness like cardiorespiratory endurance, body fat percentage and flexibility</td>
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<tr>
<td>Bhramari (humming bee breath)</td>
<td>Soothes and calms the mind, improves physical and mental health</td>
</tr>
<tr>
<td>Sheetali/Sitkari (cooling breath)</td>
<td>Lowers blood pressure, cooling effect</td>
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<tr>
<td>Chandra bhedan (left nostril breathing)</td>
<td>Parasympathetic stimulation</td>
</tr>
<tr>
<td>Surya bhedan (right nostril breathing)</td>
<td>Sympathetic stimulating effect; may be recommended in people with diabetes</td>
</tr>
<tr>
<td>Bhashrika (bellows breath)</td>
<td>Regulation of pineal, pituitary, and adrenaline glands, important role in the regulation of metabolism</td>
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### Yoga postures: Bandha, Mudra & Meditation

<table>
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<td><strong>Bandha</strong> (lock)</td>
<td>Re-directs the flow of blood and lymph to other body parts</td>
</tr>
<tr>
<td><strong>Uddiyana bandha</strong> (abdominal lock)</td>
<td>Negative pressure created in the abdominal cavity may improve pancreatic function</td>
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</table>
| **Hasta mudras** (hand gestures)                          | 1) Promote deep relaxation and eliminate stress  
| 1) **Apan mudra**, gyan mudra                            | 2) Boost metabolic rates, promote weight loss and reduce blood glucose levels |
| 2) **Linga mudra**, surya mudra, prana mudra              |                                                                           |
| **Dhyan** (meditation)                                   | Beneficial psychological effects, such as faster reactions to stimuli and being less prone to various forms of stress, anxiety reduction, and blood pressure control having positive effects on sugar levels |
| Meditation on the manipur chakra (solar plexus), visualization of pancreas during meditation |                                                                 |
| **Mindfulness**                                          | Better sleep, greater relaxation, more accepting approaches to illness and the illness experience in people with diabetes and coronary heart disease |
| **“Aum”** chanting                                        | Stabilizes the brain, removes negative thoughts, increases energy, improves mind and body relaxation within minutes of practice  
| Chanting in the supine posture produces an integrated relaxation response |                                                                 |
| **Yoga nidra** (yogic relaxation)                        | Improves symptom score, reduction of fasting blood glucose and postprandial blood glucose levels |

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CONTRAINDICATIONS

Few yoga asanas are contraindicated in certain comorbid conditions

- Sensible precautions should be taken – for example: avoiding advanced moves by beginners, not combining practice with psychoactive drug use and avoiding competitiveness

- Few yoga practitioners suffer physical injuries analogous to sports injuries

- Hyperextension or rotation of the neck, may be a precipitating factor in cervical artery dissection

- People with high blood pressure should avoid Shirshasana (headstand pose) or adho mukha vrksasana

- Heart Failure patients should avoid rigorous or continuous flow styles of yoga

Sattvic diet consists of pure food (not processed) that is light in potency, and rich in prana (life force).

Wait for some time before eating to develop reverence and appreciation for the food, eat slowly and consciously, chew well. Eat only when hungry and eat in a peaceful atmosphere.

Sattvic food increases vitality, strength, endurance and health; helps restore the harmony and balance of our body and mind. It energizes the body and mind.
### Sattvic Foods

- Goodness, Constructive, Harmonious

Sattvic food helps the body feel light & good, promotes a peaceful & clear mind.

- Whole Grains
- Beans & Legumes
- Nuts & Seeds
- Herbs
- Water

- Natural Sweeteners
- Human or dairy products or vegan substitutes
- Fruits & Vegetables
- Oils (cold - pressed)

### Rajasic Foods

- Hyperactivity, Restlessness, Anger, Irritability

Rajasic foods cause the mind & body to be restless & agitated, leading a person to seek external stimuli & relief.

- Refined white sugar
- Caffeine, coffee, soft drinks
- Tobacco & other stimulants
- Certain vegetables - egg
- Plant hot peppers, tomatoes, brinjal
- Onions

- Radish
- Heavily spiced, seasoned or salted foods junk food & fast food
- Foods that are too hot, bitter, sour or saline

### Tamasic Foods

- Darkness, Destructive, Chaotic

Tamasic foods depletes one energy & makes the mind dull and bring inertia, confusion and disorientation.

- Meat, fish, eggs
- Mushrooms & fungi
- Onions, garlic & potatoes
- Fermented foods including vinegar
- Intoxicants such as alcohol & drugs

- Food - stale, rotten, unripe, overripe
- Food - fried, burnt or reheated many times
- Frozen & canned foods
- Overeating

Reference : [https://www.artofliving.org/navratri/three-types-food](https://www.artofliving.org/navratri/three-types-food)  [https://theyogainstitute.org/](https://theyogainstitute.org/)
HOLISTIC APPROACH FOR A HEALTHIER FAMILY

Adopt Sattvic dietary practices – Need of the Hour!
*If the food is impure, the mind also becomes impure*

What to eat before and after yoga?

- Heavy meals should be avoided, Allow 3 – 4 hours to pass before starting yoga
- Start Yoga: 1 to 2 hours after a light meal & 30–45 minutes after having fresh fruits, juices, milk etc.
- After yoga: never eat immediately give your body around half an hour to re-acclimate itself
- Avoid drinking cold/very cold water

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Compiled & Contributed by Indian Dietetic Association (IDA), Nagpur Chapter

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